



# General Plan Amendment, Housing Element Update, and Associated Rezoning Draft EIR for the City of Cupertino

State Clearinghouse No. 2014032007

**PlaceWorks**

June 18, 2014 | Draft EIR Volume II



June 18, 2014 | Draft EIR Volume II

# General Plan Amendment, Housing Element Update, and Associated Rezoning Draft EIR

for the City of Cupertino

State Clearinghouse No. 2014032007

Prepared by



1625 Shattuck Avenue, Suite 300  
Berkeley, California 94709  
510.848.3815

In association with:

BKF Engineering  
Environmental Collaborative  
Hexagon Transportation Consultants  
Tom Origer & Associates

# Table of Contents Volume II

---

5.	ALTERNATIVES TO THE PROPOSED PROJECT .....	5-1
5.1	NO PROJECT ALTERNATIVE.....	5.1-1
5.2	LAND USE ALTERNATIVE A.....	5.2-1
5.3	LAND USE ALTERNATIVE B .....	5.3-1
6.	CEQA-REQUIRED ASSESSMENT CONCLUSIONS.....	6-1
6.1	IMPACTS FOUND NOT TO BE SIGNIFICANT .....	6-1
6.2	SIGNIFICANT UNAVOIDABLE EFFECTS .....	6-2
6.3	GROWTH-INDUCING IMPACTS.....	6-8
6.4	SIGNIFICANT IRREVERSIBLE CHANGES .....	6-10
7.	ORGANIZATIONS AND PERSONS CONSULTED .....	7-1

## LIST OF FIGURES

Figure 5.1-1	2040 Noise Contours – No Project Alternative .....	5.1-111
Figure 5.2-1	2040 Noise Contours – Land Use Alternative A.....	5.2-124
Figure 5.3-1	2040 Noise Contours – Land Use Alternative B .....	5.3-127

## LIST OF TABLES

Table 5-1	Alternatives Comparison Summary by Proposed New Development Allocations .....	5-2
Table 5-2	Alternatives Comparison Summary by Percentage Reduced from Proposed Project.....	5-3
Table 5-3	Alternatives Comparison Summary At 2040 Buildout .....	5-3
Table 5-4	Alternatives Comparison Summary Percentage Reduced from Proposed Project at Buildout.....	5-4
Table 5-5	Comparison of Impacts from Project Alternatives.....	5-7
Table 5.1-1	No Project Alternative Development Allocation & Projections Summary .....	5.1-1
Table 5.1-2	Special Centers/Other Areas – New Residential Unit Distribution.....	5.1-3
Table 5.1-3	Control Measures from the 2010 Bay Area Clean Air Plan.....	5.1-13
Table 5.1-4	Comparison of the Change in Service Population and VMT for the No Project Alternative.....	5.1-30
Table 5.1-5	Community-Wide Criteria Air Pollutants Generated by the No Project Alternative .....	5.1-32
Table 5.1-6	No Project Alternative Community Greenhouse Gas emissions Inventory.....	5.1-70
Table 5.1-7	Groundborne Vibration Levels for Construction Equipment .....	5.1-103
Table 5.1-8	Increases to Ambient Noise Levels Along Major Roadway Segments – No Project Alternative.....	5.1-107

**TABLE OF CONTENTS VOLUME II**

Table 5.1-9	CONSTRUCTION EQUIPMENT NOISE EMISSION LEVELS .....	5.1-114
Table 5.1-10	2040 No Project AM and PM Peak Hour Level of Service Results.....	5.1-128
Table 5.1-11	VMT Per Capita .....	5.1-133
Table 5.1-12	VMT By Trip Orientation .....	5.1-134
Table 5.1-13	Landfills Existing Capacity and Estimated Closure Date .....	5.1-148
Table 5.1-14	Projected Residents, Employment, and Waste Generation at 2040 Buildout – No Project Alternative .....	5.1-150
Table 5.1-15	Buildout and Regional Growth Comparison – No Project Alternative .....	5.1-151
Table 5.2-1	Land Use Alternative A Development Allocation & Projections Summary .....	5.2-1
Table 5.2-2	Control Measures from the 2010 Bay Area Clean Air Plan .....	5.2-22
Table 5.2-3	Comparison of the Change in Service Population and VMT for Land Use Alternative A .....	5.2-43
Table 5.2-4	Community-Wide Criteria Air Pollutants Generated by Land Use Alternative A .....	5.2-45
Table 5.2-5	Land Use Alternative A Community Greenhouse Gas emissions Inventory .....	5.2-79
Table 5.2-6	Groundborne Vibration Levels For Construction Equipment .....	5.2-116
Table 5.2-7	Increases to Ambient Noise Levels Along Major Roadway Segments – Land Use Alternative A ...	5.2-121
Table 5.2-8	Construction Equipment Noise Emission Levels .....	5.2-127
Table 5.2-9	Land Use Alternative A Estimated Population, Household, and Employment .....	5.2-132
Table 5.2-10	Land Use Alternative A Intersection Levels of Service Table .....	5.2-147
Table 5.2-11	Average Daily Traffic on Selected Roadway Segments Under Land Use Alternative A .....	5.2-152
Table 5.2-12	Daily Freeway Segment Impact Analysis under Land Use Alternative A .....	5.2-154
Table 5.2-13	VMT Per Capita .....	5.2-155
Table 5.2-14	VMT By Trip Orientation .....	5.2-156
Table 5.2-15	Proposed Development in Cal Water and SJWC Service Areas .....	5.2-161
Table 5.2-16	Projected Water Demand Cal Water LAS District + Land Use Alternative A (AFY) .....	5.2-162
Table 5.2-17	Demand and Supply Comparison – Normal Hydrologic Year: Cal Water LAS District + Land Use Alternative A (AFY) .....	5.2-163
Table 5.2-18	Demand and Supply Comparison - One Dry Year: Cal Water LAS District + Land Use Alternative A (AFY) .....	5.2-164
Table 5.2-19	Demand and Supply Comparison - Multiple Dry Year Period (4 Years): Cal Water LAS District + Land Use Alternative A (AFY) .....	5.2-165
Table 5.2-20	Current and Projected SJWC Water Supply – Including Conservation (AFY) .....	5.2-166
Table 5.2-21	SJWC 2035 Supply and Demand -- Normal, Single-Dry, and Multiple-Dry Years (acre feet) .....	5.2-167
Table 5.2-22	Landfills Existing Capacity and Estimated Closure Date .....	5.2-179
Table 5.2-23	Projected Residents, Employment, and Waste Generation at 2040 Buildout – Land Use Alternative A .....	5.2-180
Table 5.2-24	Buildout and Regional Growth Comparison – Land Use Alternative A .....	5.2-182
Table 5.3-1	Land Use Alternative B Development Allocation & Projections Summary .....	5.3-1
Table 5.3-2	Control Measures from the 2010 Bay Area Clean Air Plan .....	5.3-26
Table 5.3-3	Comparison of the Change in Service Population and VMT for Land Use Alternative B.....	5.3-47
Table 5.3-4	Community-Wide Criteria Air Pollutants Generated by Land Use Alternative B .....	5.3-49
Table 5.3-5	Land Use Alternative B Community GHG emissions Inventory .....	5.3-82
Table 5.3-6	Groundborne Vibration Levels For Construction Equipment .....	5.3-119

TABLE OF CONTENTS VOLUME II

Table 5.3-7	Increases to Ambient Noise Levels Along Major Roadway Segments – Land Use Alternative B .....	5.3-123
Table 5.3-8	Construction Equipment Noise Emission Levels .....	5.3-130
Table 5.3-9	Land Use Alternative B Estimated Population, Household, and Employment .....	5.3-135
Table 5.3-10	Land Use Alternative B Intersection Levels of Service Table.....	5.3-151
Table 5.3-11	Average Daily Traffic on Selected Roadway Segments – Land Use Alternative B.....	5.3-158
Table 5.3-12	Freeway Segment Impact Analysis under Land Use Alternative B.....	5.3-160
Table 5.3-13	VMT Per Capita .....	5.3-161
Table 5.3-14	VMT By Trip Orientation .....	5.3-162
Table 5.3-15	Proposed Development in Cal Water and SJWC Service Areas .....	5.3-167
Table 5.3-16	Projected Water Demand Cal Water LAS District +Land Use Alternative B (AFY).....	5.3-167
Table 5.3-17	Demand and Supply Comparison - Normal Hydrologic Year: Cal Water LAS District +Land Use Alternative B (afy).....	5.3-168
Table 5.3-18	Demand and Supply Comparison - One Dry Year: Cal Water LAS District +Land Use Alternative B (AFY).....	5.3-169
Table 5.3-19	Demand and Supply Comparison - Multiple Dry Year Period (4 Years): Cal Water LAS District + Land Use Alternative B (AFY).....	5.3-170
Table 5.3-20	Current and Projected SJWC Water Supply – Including Conservation (afy) .....	5.3-172
Table 5.3-21	SJWC 2035 Supply and Demand -- Normal, Single-Dry, and Multiple-Dry Years (acre feet) .....	5.3-173
Table 5.3-22	Landfills Existing Capacity and Estimated Closure Date .....	5.3-186
Table 5.3-23	Projected Residents, Employment, and Waste Generation at 2040 Buildout – Land Use Alternative B .....	5.3-187
Table 5.3-24	Buildout and Regional Growth Comparison – Land Use Alternative B.....	5.3-189

**TABLE OF CONTENTS VOLUME II**

## 5. *Alternatives to the Proposed Project*

---

### INTRODUCTION

The California Environmental Quality Act (CEQA) Guidelines set forth the intent and extent of alternatives analysis to be provided in an Environmental Impact Report (EIR). Section 15126.6(a) of the CEQA Guidelines states that:

*An EIR shall describe a range of reasonable alternatives to the project, or the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.*

The following discussion is intended to inform the public and decision makers of feasible alternatives to the proposed Project that would avoid or substantially lessen any of the significant effects of the project. This chapter describes the purpose of the alternatives discussion; provides a summary of the reasonable range of alternatives, including a summary of potentially significant impacts and the relationship of each alternative to the Project objectives; and identifies the environmentally superior alternative. This chapter of this Draft EIR also contains the following three sub-chapters:

- Chapter 5.1, No Project Alternative
- Chapter 5.2, General Plan Land Use Alternative A
- Chapter 5.3, General Plan Land Use Alternative B

Each sub-chapter provides a project description for each alternative, followed by an analysis of the potential direct, indirect and cumulative environmental impacts that could result from buildout under that alternative, including a determination of the level of significance of the potential environmental impacts that would occur based on the proposed Project Components under the specific alternative. In addition, each sub-chapter provides a discussion of how each alternative meets or fails to meet the project objectives. The existing baseline for each of these analyses would be the same as what is discussed throughout Chapter 3, Project Description, of this Draft EIR for the proposed Project. For existing conditions information, please refer to Chapter 3, Project Description, of this Draft EIR.

### SELECTION OF A REASONABLE RANGE OF ALTERNATIVES

As stated above, the range of potential alternatives to the proposed Project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or

## ALTERNATIVES TO THE PROPOSED PROJECT

more of the significant effects of the proposed Project. The following discussion describes the rationale for selecting the alternatives to be discussed in this chapter.

## OVERVIEW OF SELECTED ALTERNATIVES

Three project alternatives were evaluated in in this Draft EIR. As previously stated the alternatives were developed to provide a range of development scenarios reflecting differences in development type and density within the Project Component locations; thereby, potentially reducing identified significant impacts of the proposed Project. The first alternative discussed in Chapter 5.1 is the CEQA-required No Project Alternative. The second and third alternatives, discussed in Chapters 5.2 and 5.3, present reduced density and intensity growth scenarios compared to the proposed Project but within the same land use patterns.

The proposed development allocations under each alternative, as well as the proposed Project, are provided in Table 5-1. As shown in Table 5-1, under each alternative, the City would have adequate capacity to accommodate the Regional Housing Needs Allocation (RHNA) for the 2014–2022 planning period and meet its fair share housing obligation of 1,064 units under all of the alternatives. The estimated buildout of each alternative is provided in Table 5-2.

**TABLE 5-1 ALTERNATIVES COMPARISON SUMMARY BY PROPOSED NEW DEVELOPMENT ALLOCATIONS**

Category	Proposed Project <sup>a</sup>	No Project <sup>b</sup>	Land Use Alternative A	Land Use Alternative B
Office	4,040,231 sf	540,231 sf	1,040,231 sf	2,540,231 sf
Commercial	1,343,679 sf	701,413 sf	701,413 sf	1,343,679 sf
Hotel	1,339 rooms	339 rooms	600 rooms	839 rooms
Residential	4,421 units	1,895 units	1,895 units	3,316 units
Population	12,998 <sup>c</sup>	5,571 <sup>e</sup>	5,571 <sup>g</sup>	9,749 <sup>i</sup>
Jobs	16,855 <sup>d</sup>	3,461 <sup>f</sup>	5,206 <sup>h</sup>	11,705 <sup>j</sup>

Notes: sf = square feet

a. The proposed Project represents General Plan Land Use Alternative C that was presented at Planning Commission and City Council hearings during the planning process.

b. No Project represents remaining development allocation under the existing 2000-2020 General Plan.

c. Population is calculated by 4,421 units times 2.94 persons per household, which is the ABAG 2040 estimated generation rate.

d. Jobs are calculated applying the City's generation rates as follows; 4,040,231 square feet of office allocation divided by 300 square feet equals 13,467 jobs; 1,343,679 square feet of commercial allocation divided by 450 square feet equals 2,986 jobs; and 1,339 hotel rooms at .3 jobs per room equals 402 jobs for a total of 16,855 jobs.

e. Population is calculated by 1,895 units times 2.94 persons per household, which is the ABAG 2040 estimated generation rate.

f. Jobs are calculated applying the City's generation rates as follows; 540,231 square feet of office allocation divided by 300 square feet equals 1,801 jobs; 701,413 square feet of commercial allocation divided by 450 square feet equals 1,559 jobs; and 339 hotel rooms at .3 jobs per room equals 101 jobs for a total of 3,461 jobs.

g. Population is calculated by 1,895 units times 2.94 persons per household, which is the ABAG 2040 estimated generation rate.

h. Jobs are calculated applying the City's generation rates as follows; 1,040,231 square feet of office allocation divided by 300 square feet equals 3,467 jobs; 701,431 square feet of commercial allocation divided by 450 square feet equals 1,559 jobs; and 600 hotel rooms at .3 jobs per room equals 180 jobs for a total of 5,206 jobs.

i. Population is calculated by 3,316 units times 2.94 persons per household, which is the ABAG 2040 estimated generation rate.

j. Jobs are calculated applying the City's generation rates as follows; 2,540,231 square feet of office allocation divided by 300 square feet equals 8,467 jobs; 1,343,670 square feet of commercial allocation divided by 450 square feet equals 2,986 jobs; and 839 hotel rooms at .3 jobs per room equals 252 jobs for a total of 11,705 jobs.

Source: City of Cupertino, 2014.



**ALTERNATIVES TO THE PROPOSED PROJECT**

**TABLE 5-2 ALTERNATIVES COMPARISON SUMMARY BY PERCENTAGE REDUCED FROM PROPOSED PROJECT**

Category	Proposed Project <sup>a</sup>	No Project <sup>b</sup>	Land Use Alternative A	Land Use Alternative B
Office	4,040,231 sf	87% less	74% less	37% less
Commercial	1,343,679 sf	48% less	48% less	No Change
Hotel	1,339 rooms	75% less	55% less	37% less
Residential	4,421 units	57% less	57% less	25% less
Population	12,998	57% less	57% less	25% less
Jobs	16,855	79% less	69% less	30% less

Note: sf = square feet

a. The proposed Project represents General Plan Land Use Alternative C that was presented at Planning Commission and City Council hearings during the planning process.

b. No Project represents buildout scenario under current 2000-2020 General Plan.

Source: City of Cupertino, 2014.

As shown in Table 5-2, when compared to the proposed Project, the No Project Alternative represents substantially less overall development. Land Use Alternative A generally represents about half of the proposed Project development allocations with the exception of office space, which is 74 percent less. Population and jobs under the Land Use Alternative A are close to 60 and 70 percent less, respectively. Land Use Alternative B represents the second largest buildout scenario with only 37 percent less office space and hotel rooms, and the same amount of commercial development allocation as the proposed Project. Land Use Alternative B would result in 25 percent fewer new residential units and, a corresponding reduction in population growth. The 2040 buildout for each alternative is calculated by adding the total new development allocations, population, and jobs shown in Table 5-1 for each alternative to the existing 2013 conditions. The estimated 2040 buildout of each alternative is provided in Table 5-3. As shown, each alternative is incrementally reduced from the proposed Project.

**TABLE 5-3 ALTERNATIVES COMPARISON SUMMARY AT 2040 BUILDOUT**

Category	Existing 2013 Built/Approved	Proposed Project <sup>a</sup>	No Project <sup>b</sup>	Land Use Alternative A	Land Use Alternative B
Office	8,929,774 sf	12,970,005 sf	9,470,005 sf	9,970,005 sf	11,470,005 sf
Commercial	3,729,569 sf	5,073,248 sf	4,430,982 sf	4,430,982 sf	5,073,248 sf
Hotel	1,090 rooms	2,429 rooms	1,429 rooms	1,690 rooms	1,929 rooms
Residential	21,399 units	25,820 units	23,294 units	23,294 units	24,715 units
Population	58,302	71,300	63,873	63,873	68,051
Jobs	21,399	44,242	30,848	32,593	39,092

Note: sf = square feet

a. The proposed Project represents General Plan Land Use Alternative C that was presented at Planning Commission and City Council hearings during the planning process.

b. No Project represents buildout scenario under existing 2000-2020 General Plan.

Source: City of Cupertino, 2014.

## ALTERNATIVES TO THE PROPOSED PROJECT

Table 5-4 illustrates the relationship of each alternative in terms of percentage reduced when compared to the proposed Project at 2040 buildout. As shown, the No Project and Land Use A alternatives result in similar buildout reductions from the proposed Project, while Land Use B results in a slight reduction when compared to the proposed Project.

**TABLE 5-4 ALTERNATIVES COMPARISON SUMMARY PERCENTAGE REDUCED FROM PROPOSED PROJECT AT BUILDOUT**

Category	Proposed Project <sup>a</sup>	No Project <sup>b</sup>	Land Use Alternative A	Land Use Alternative B
Office	12,970,005 sf	27% less	23% less	12% less
Commercial	5,073,248 sf	13% less	13% less	No Change
Hotel	2,429 rooms	41% less	30% less	21% less
Residential	25,820 units	10% less	10% less	5% less
Population	71,300	10% less	10% less	5% less
Jobs	44,242	30% less	26% less	12% less

Note: sf = square feet

a. The proposed Project represents General Plan Land Use Alternative C that was presented at Planning Commission and City Council hearings during the planning process.

b. No Project represents buildout scenario under current 2000-2020 General Plan.

Source: City of Cupertino, 2014.

## NO PROJECT ALTERNATIVE

Pursuant to CEQA Guidelines Section 15126.6(e)(1), the No Project Alternative is required as part of the “reasonable range of alternatives” to allow decision makers to compare the impacts of approving the proposed Project with the impacts of taking no action or not approving the proposed Project. Under this Alternative, growth and development would continue to occur under the provisions of the current 2000-2020 General Plan, including the development allocations for office and commercial space, and hotel and residential unit allocations. Thus, no new development potential beyond what is currently permitted in the 2000-2020 General Plan would occur. As shown in Table 5-2, Compared to the proposed Project, development under the No Project Alternative would allocate 87 percent less office space, 48 percent less commercial space, 75 percent fewer hotel rooms, 57 percent fewer residential units resulting in lower population projections, 79 percent fewer new jobs compared to the proposed Project. As a result, as shown in Table 5-4, when compared to the proposed Project at 2040 buildout, the No Project Alternative would result in 27 percent less office space, 13 percent less commercial space, 41 percent fewer hotel rooms, 10 percent fewer residential units and new residents, and 30 percent fewer new jobs.

## LAND USE ALTERNATIVE A

This Alternative would reduce the total amount of the increased development allocations compared to the proposed Project. As shown in Table 5-1, the office and hotel allocations increases would be reduced compared to the proposed Project and no new commercial space or residential unit allocation would be permitted beyond what is currently approved in the current General Plan. In addition, no maximum height increases are proposed under this alternative. As shown in Table 5-2, Land Use Alternative A would allocate

## ALTERNATIVES TO THE PROPOSED PROJECT

74 percent less office space, 48 percent less commercial space, 55 percent fewer hotel rooms, and 57 percent fewer residential units resulting in lower population projections. As a result, as shown in Table 5-4, when compared to the proposed Project at 2040 buildout, Land Use Alternative A would result in 23 percent less office space, 13 percent less commercial space, 30 percent fewer hotel rooms, 10 percent fewer residential units and new population, and 26 percent fewer jobs.

### LAND USE ALTERNATIVE B

This Alternative would reduce the total amount of the increased development allocations compared to the proposed Project, but not to the same extent as Alternative A. As shown in Table 5-1, the office space, hotel rooms and residential units allocations increases would be reduced, and the increase in the commercial space allocation would be the same as the proposed Project. Under this Alternative, the proposed maximum height limits are lower than those of the proposed Project. As shown in Table 5-2, Land Use Alternative B would allocate 37 percent less office space, 37 percent fewer hotel rooms, 25 percent fewer residential units, and with no change in allocation for commercial space. There would be 25 percent fewer residential units resulting in lower population projections. As a result, as shown in Table 5-4, when compared to the proposed Project at 2040 buildout, Land Use Alternative B would result in 12 percent less office space, no change in commercial space, 21 percent fewer hotel rooms, 5 percent fewer residential units and new residents, and 12 percent fewer jobs.

## COMPARISON OF IMPACTS FROM PROJECT ALTERNATIVES

The analysis in the following sub-chapters (5.1 to 5.3) identifies the potential significant environmental impacts of the Alternatives for each of the environmental topics analyzed in detail in Chapter 4, Environmental Evaluation, of this Draft EIR. However, the Environmental Setting and Existing Conditions are cross-referenced but are not repeated in full in these sub-chapters.

Although shown as hard metrics, for comparative purposes the differences in growth and development between the proposed Project and the Alternatives would be gradual over the 26-year buildout horizon of the General Plan. Even if no action was taken, regional growth, and the associated environmental effects linked to this growth, would continue to occur under the provisions of the current 2000-2020 General Plan. Future growth under all of the land use alternatives would come incrementally over approximately 26 years and would be guided by a policy framework that is generally consistent with many of the principal goals and objectives established in regional planning initiatives for the Bay Area, which concentrates new development within infill sites and near major transportation corridors.

Each of the Alternatives were analyzed quantitatively independent of the proposed Project. As shown in Table 5-5, the impact significance conclusion associated with each of the four land use alternatives analyzed in this EIR would essentially be the same. This is because the recommended mitigation measures in this EIR would apply to all alternatives. Furthermore, compliance with mandatory federal, State and local regulations, including both existing and proposed General Plan policies, designed to reduce environmental impacts would also apply to all future development in Cupertino. However, as shown in Table 5-5, future

## ALTERNATIVES TO THE PROPOSED PROJECT

development under Land Use Alternative B would result in a less-than-significant conclusion under Impact AQ-1, whereas the other three alternatives were found to be significant and unavoidable.

Under Impact-AQ-1, Land Use Alternative B would be consistent with the Bay Area Air Quality Management District's (BAAQMD) 2010 Bay Area Clean Air Plan based on the outcome of the vehicles miles traveled (VMT) analysis.<sup>1</sup> Citywide VMT estimates derived from the assumed 2040 land use scenarios for each Alternative and the proposed Project were calculated by Hexagon Transportation Consultants, using the Santa Clara Valley Transportation Authority (VTA) model. As described under Section 4.13.2.1, Regulatory Setting, in Chapter 4.13, Transportation and Traffic, the VTA countywide travel demand model is used to help evaluate cumulative air quality, noise and transportation impacts of local land use decisions on the VTA Congestion Management Program system, which is a regional program that describes the strategies to reduce traffic congestion, and improve land use decision-making. The VMT estimates in the VTA model are sensitive to changes in land use. Generally, land uses that reflect a more balanced jobs-housing ratio in the VTA model result in lower per capita VMT. The VMT to air quality impacts are discussed in detail under Impact AQ-1 for the proposed Project and each alternative in their respective chapters. As outlined in these discussions, the BAAQMD's 2010 Bay Area Clean Air Plan requires that the VMT increase be less than or equal to the projected population increase and of the proposed Project. Under Land Use Alternative B, daily VMT in the Project Study Area would increase at a slower rate (22.3 percent) between 2013 and 2040 than would the service population of the Project Study Area (25.0 percent). Whereas in the Proposed Project, daily VMT would increase at a slightly greater rate (40.9 percent) between 2013 and 2040 than would the service population of the Project Study Area (34.8 percent). Under the No Project, daily VMT in the Project Study Area would increase at a greater rate (11.1 percent) between 2013 and 2040 than would the service population of the Project Study Area (10.5 percent). Under Land Use Alternative A, the daily VMT in the Project Study Area would increase at a greater rate (18.5 percent) between 2013 and 2040 than would the service population of the Project Study Area (12.6 percent).

In comparing the three Alternatives to the proposed Project, differences vary with each alternative. The potential impacts of future development under as the No Project Alternative are substantially less than the proposed Project. Land Use Alternative A are slightly less and impacts from Land Use Alternative B are moderately less than impacts from the proposed Project. This is because each alternative represents an incremental reduction in development allocations, population and jobs when compared to the proposed Project, which represents the greatest amount of development resulting in higher consumption of non-renewable resources, generating the greatest amount of waste and pollutants, and increasing the demand of public facilities and infrastructure.

---

<sup>1</sup> The vehicles miles traveled (VMT) refers to Cupertino trips multiplied by the trip distances. See Section 4.13.4.9 in Chapter 4.13, Transportation and Traffic, of this Draft EIR.

**ALTERNATIVES TO THE PROPOSED PROJECT**

**TABLE 5-5 COMPARISON OF IMPACTS FROM PROJECT ALTERNATIVES**

Topic	Proposed Project	No Project	Land Use Alternative A	Land Use Alternative B
<b>AESTHETICS</b>				
<b>AES-1:</b> Have a substantial adverse effect on a scenic vista.	LTS	LTS	LTS	LTS
<b>AES-2:</b> Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	LTS	LTS	LTS	LTS
<b>AES-3:</b> Substantially degrade the existing visual character or quality of the site and its surroundings.	LTS	LTS	LTS	LTS
<b>AES-4:</b> Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	LTS	LTS	LTS	LTS
<b>AES-5:</b> Result in significant cumulative impacts with respect to visual resources.	LTS	LTS	LTS	LTS
<b>AIR QUALITY</b>				
<b>AQ-1:</b> Conflict with or obstruct implementation of the applicable air quality plan.	SU	SU	SU	<b>LTS</b>
<b>AQ-2:</b> Violate any air quality standard or contribute substantially to an existing or projected air quality violation.	SU	SU	SU	SU
<b>AQ-3:</b> Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	SU	SU	SU	SU
<b>AQ-4:</b> Expose sensitive receptors to substantial pollutant concentrations.	LTS/M	LTS/M	LTS/M	LTS/M
<b>AQ-5:</b> Create objectionable odors affecting a substantial number of people.	LTS	LTS	LTS	LTS
<b>AQ-6:</b> Result in significant cumulative impacts with respect to air quality.	SU	SU	SU	SU

LTS  
LTS/M  
SU  
Bold Highlight

Less Than Significant  
Less Than Significant With Mitigation  
Significant and Unavoidable  
Indicates difference in significance finding.

**ALTERNATIVES TO THE PROPOSED PROJECT**

**TABLE 5-5 COMPARISON OF IMPACTS FROM PROJECT ALTERNATIVES**

Topic	Proposed Project	No Project	Land Use Alternative A	Land Use Alternative B
<b>BIOLOGICAL RESOURCES</b>				
<b>BIO-1:</b> Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	LTS/M	LTS/M	LTS/M	LTS/M
<b>BIO-2:</b> Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	No impact	No impact	No impact	No impact
<b>BIO-3:</b> Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	LTS	LTS	LTS	LTS
<b>BIO-4:</b> Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	LTS	LTS	LTS	LTS
<b>BIO-5:</b> Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	LTS	LTS	LTS	LTS
<b>BIO-6:</b> Result in significant cumulative impacts with respect to biological resources.	LTS/M	LTS/M	LTS/M	LTS/M
<b>CULTURAL RESOURCES</b>				
<b>CULT-1:</b> Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.	LTS	LTS	LTS	LTS
<b>CULT-2:</b> Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	LTS	LTS	LTS	LTS
<b>CULT-3:</b> Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	LTS	LTS	LTS	LTS
<b>CULT-4:</b> Disturb any human remains, including those interred outside of formal cemeteries.	LTS	LTS	LTS	LTS

LTS                      Less Than Significant  
LTS/M                 Less Than Significant With Mitigation  
SU                        Significant and Unavoidable

**ALTERNATIVES TO THE PROPOSED PROJECT**

**TABLE 5-5 COMPARISON OF IMPACTS FROM PROJECT ALTERNATIVES**

Topic	Proposed Project	No Project	Land Use Alternative A	Land Use Alternative B
<b>CULT-5:</b> Result in significant cumulative impacts with respect to cultural resources.	LTS	LTS	LTS	LTS
<b>GEOLOGY, SOILS, AND MINERAL RESOURCES</b>				
<b>GEO-1:</b> Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42. ii) Strong seismic ground shaking. iii) Seismic-related ground failure, including liquefaction. iv) Landslides.	LTS	LTS	LTS	LTS
<b>GEO-2:</b> Result in substantial soil erosion or the loss of topsoil.	LTS	LTS	LTS	LTS
<b>GEO-3:</b> Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.	LTS	LTS	LTS	LTS
<b>GEO-4:</b> Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2010), creating substantial risks to life or property.	LTS	LTS	LTS	LTS
<b>GEO-5:</b> Result in significant cumulative impacts with respect to geological resources.	LTS	LTS	LTS	LTS
<b>GREENHOUSE GAS EMISSIONS</b>				
<b>GHG-1:</b> Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	LTS	LTS	LTS	LTS
<b>GHG-2:</b> Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	LTS	LTS	LTS	LTS
<b>GHG-3:</b> Result in significant cumulative impacts with respect to greenhouse gas emissions.	LTS	LTS	LTS	LTS

LTS  
LTS/M  
SU  
Bold Highlight

Less Than Significant  
Less Than Significant With Mitigation  
Significant and Unavoidable  
Indicates difference in significance finding.

## ALTERNATIVES TO THE PROPOSED PROJECT

TABLE 5-5 COMPARISON OF IMPACTS FROM PROJECT ALTERNATIVES

Topic	Proposed Project	No Project	Land Use Alternative A	Land Use Alternative B
<b>HAZARDS AND HAZARDOUS MATERIALS</b>				
<b>HAZ-1:</b> Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	LTS	LTS	LTS	LTS
<b>HAZ-2:</b> Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	LTS	LTS	LTS	LTS
<b>HAZ-3:</b> Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	LTS	LTS	LTS	LTS
<b>HAZ-4:</b> Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.	LTS/M	LTS/M	LTS/M	LTS/M
<b>HAZ-5:</b> Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	LTS	LTS	LTS	LTS
<b>HAZ-6:</b> Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.	LTS	LTS	LTS	LTS
<b>HAZ-7:</b> Result in significant cumulative impacts with respect to hazards and hazardous materials.	LTS/M	LTS/M	LTS/M	LTS/M
<b>HYDROLOGY AND WATER QUALITY</b>				
<b>HYDRO-1:</b> Violate any water quality standards or waste discharge requirements.	LTS	LTS	LTS	LTS
<b>HYDRO-2:</b> Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).	LTS	LTS	LTS	LTS

LTS  
LTS/M  
SU

Less Than Significant  
Less Than Significant With Mitigation  
Significant and Unavoidable



**ALTERNATIVES TO THE PROPOSED PROJECT**

**TABLE 5-5 COMPARISON OF IMPACTS FROM PROJECT ALTERNATIVES**

Topic	Proposed Project	No Project	Land Use Alternative A	Land Use Alternative B
<b>HYDRO-3:</b> Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.	LTS	LTS	LTS	LTS
<b>HYDRO-4:</b> Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	LTS	LTS	LTS	LTS
<b>HYDRO-5:</b> Otherwise substantially degrade water quality.	LTS	LTS	LTS	LTS
<b>HYDRO-6:</b> Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.	LTS	LTS	LTS	LTS
<b>HYDRO-7:</b> Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.	LTS	LTS	LTS	LTS
<b>HYDRO-8:</b> Inundation by seiche, tsunami, or mudflow.	LTS	LTS	LTS	LTS
<b>HYDRO-9:</b> Result in significant cumulative impacts with respect to hydrology and water quality.	LTS	LTS	LTS	LTS
<b>LAND USE AND PLANNING</b>				
<b>LU-1:</b> Physically divide an established community.	LTS	LTS	LTS	LTS
<b>LU-2:</b> Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.	LTS	LTS	LTS	LTS
<b>LU-3:</b> Result in significant cumulative impacts with respect to land use and planning.	LTS	LTS	LTS	LTS
<b>NOISE</b>				
<b>NOISE-1:</b> Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	LTS	LTS	LTS	LTS

LTS Less Than Significant  
LTS/M Less Than Significant With Mitigation  
SU Significant and Unavoidable  
**Bold Highlight** Indicates difference in significance finding.

## ALTERNATIVES TO THE PROPOSED PROJECT

TABLE 5-5 COMPARISON OF IMPACTS FROM PROJECT ALTERNATIVES

Topic	Proposed Project	No Project	Land Use Alternative A	Land Use Alternative B
<b>NOISE-2:</b> Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.	LTS	LTS	LTS	LTS
<b>NOISE-3:</b> A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.	SU	SU	SU	SU
<b>NOISE-4:</b> A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.	LTS	LTS	LTS	LTS
<b>NOISE-5:</b> Result in significant cumulative impacts with respect to noise.	SU	SU	SU	SU
<b>POPULATION AND HOUSING</b>				
<b>POP-1:</b> Induce substantial unexpected population growth, or growth for which inadequate planning has occurred, either directly or indirectly.	LTS	LTS	LTS	LTS
<b>POP-2:</b> Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.	LTS	LTS	LTS	LTS
<b>POP-3:</b> Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.	LTS	LTS	LTS	LTS
<b>POP-4:</b> Result in significant cumulative impacts with respect to population and housing.	LTS	LTS	LTS	LTS
<b>PUBLIC SERVICES AND RECREATION</b>				
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
<b>PS-1:</b> Fire protection	LTS	LTS	LTS	LTS
<b>PS-2:</b> Fire protection (cumulative)	LTS	LTS	LTS	LTS
<b>PS-3:</b> Police protection	LTS	LTS	LTS	LTS
<b>PS-4:</b> Police protection (cumulative)	LTS	LTS	LTS	LTS
<b>PS-5:</b> Schools	LTS	LTS	LTS	LTS

LTS  
LTS/M  
SU

Less Than Significant  
Less Than Significant With Mitigation  
Significant and Unavoidable

**ALTERNATIVES TO THE PROPOSED PROJECT**

**TABLE 5-5 COMPARISON OF IMPACTS FROM PROJECT ALTERNATIVES**

Topic	Proposed Project	No Project	Land Use Alternative A	Land Use Alternative B
<b>PS-6:</b> Schools (cumulative)	LTS	LTS	LTS	LTS
<b>PS-7:</b> Libraries	LTS	LTS	LTS	LTS
<b>PS-8:</b> Libraries (cumulative)	LTS	LTS	LTS	LTS
<b>PS-9:</b> Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur, or be accelerated	LTS	LTS	LTS	LTS
<b>PS-10:</b> Include or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.	LTS	LTS	LTS	LTS
<b>PS-11:</b> Result in significant cumulative impacts with respect to parks and recreation.	LTS	LTS	LTS	LTS
<b>TRANSPORTATION AND TRAFFIC</b>				
<b>TRAF-1:</b> Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.	SU	SU	SU	SU
<b>TRAF-2:</b> Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.	SU	SU	SU	SU
<b>TRAF-3:</b> Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment).	LTS	LTS	LTS	LTS
<b>TRAF-4:</b> Result in inadequate emergency access.	LTS	LTS	LTS	LTS
<b>TRAF-5:</b> Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.	LTS	LTS	LTS	LTS

LTS  
LTS/M  
SU  
Bold Highlight

Less Than Significant  
Less Than Significant With Mitigation  
Significant and Unavoidable  
Indicates difference in significance finding.

## ALTERNATIVES TO THE PROPOSED PROJECT

TABLE 5-5 COMPARISON OF IMPACTS FROM PROJECT ALTERNATIVES

Topic	Proposed Project	No Project	Land Use Alternative A	Land Use Alternative B
<b>TRAF-6:</b> Result in significant cumulative impacts with respect to traffic and circulation.	SU	SU	SU	SU
<b>UTILITIES AND INFRASTRUCTURE</b>				
<b>Water Supply</b>				
<b>UTIL-1:</b> Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed	LTS	LTS	LTS	LTS
<b>UTIL-2:</b> Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	LTS	LTS	LTS	LTS
<b>UTIL-3:</b> Result in cumulative impacts with respect to water supply.	LTS	LTS	LTS	LTS
<b>Wastewater</b>				
<b>UTIL-4:</b> Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.	LTS	LTS	LTS	LTS
<b>UTIL-5:</b> Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	LTS	LTS	LTS	LTS
<b>UTIL-6:</b> Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the providers existing commitments.	LTS/M	LTS	LTS	LTS/M
<b>UTIL-7:</b> Result in cumulative impacts with respect to wastewater.	LTS/M	LTS	LTS	LTS/M
<b>Solid Waste</b>				
<b>UTIL-8:</b> Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.	LTS/M	LTS/M	LTS/M	LTS/M
<b>UTIL-9:</b> Comply with federal, state, and local statutes and regulations related to solid waste.	LTS	LTS	LTS	LTS
<b>UTIL 10:</b> Result in cumulative impacts with respect to solid waste	LTS/M	LTS/M	LTS/M	LTS/M

LTS  
LTS/M  
SU

Less Than Significant  
Less Than Significant With Mitigation  
Significant and Unavoidable

**ALTERNATIVES TO THE PROPOSED PROJECT**

**TABLE 5-5 COMPARISON OF IMPACTS FROM PROJECT ALTERNATIVES**

Topic	Proposed Project	No Project	Land Use Alternative A	Land Use Alternative B
<b>Energy Conservation</b>				
<b>UTIL-11:</b> Result in a substantial increase in natural gas and electrical service demands, which would require new energy supply facilities and distribution infrastructure or capacity enhancing alterations to existing facilities.	LTS	LTS	LTS	LTS

LTS  
LTS/M  
SU  
**Bold Highlight**

Less Than Significant  
Less Than Significant With Mitigation  
Significant and Unavoidable  
Indicates difference in significance finding.

## ALTERNATIVES TO THE PROPOSED PROJECT

### PROJECT OBJECTIVES

As stated above, the range of potential alternatives to the Project shall include those that could feasibly accomplish most of the basic objectives of the proposed Project. The primary purposes of the proposed Project include: 1) replenishing, re-allocating, and increasing citywide office, commercial, hotel, and residential development allocations in order to plan for anticipated future growth while sustaining the community's character, goals, and objectives; 2) consolidating development requests by several property owners for amendments to the General Plan, by reviewing seven Study Areas; and 3) providing a full range of housing to meet the needs of all segments of the city's population. To achieve the primary purposes, the Project will seek to accomplish the following objectives.

- Emphasize employment and a mix of economic development opportunities by replenishing, re-allocating, and increasing city-wide office, commercial, and hotel, allocations in order to capture:
  - A share of the regional demand for office and hotel development, and
  - Retail sales tax leakage in the trade area.
- Address local needs and regional requirements for new housing, including affordable housing, in Cupertino by replenishing, re-allocating and increasing city-wide residential allocations to be consistent with 2040 Bay Area Plan projections to allow flexibility for the city when future state-mandated updates are required to the Housing Element.
- Update the Housing Element as required by State law.
- Creating opportunities for mixed-use development consistent with Regional Sustainable Communities Strategies for greenhouse gas emissions reductions as required by Senate Bill 375.
- Investing in improvement to adapt to climate change over time.
- Consider increased heights in key nodes and gateways, if proposed development provides retail development and benefits directly to the community.
- Update General Plan policies to implement multi-modal traffic standards as opposed to LOS thresholds currently identified. Balancing development objectives with transportation constraints and opportunities.
- Revitalize the Vallco Shopping District by adopting policies to support its redevelopment, so it becomes a cohesive, vibrant shopping and entertainment destination that serves both the region and the local community.

As discussed in Chapters 5.1, No Project Alternative, this alternative would not meet the overall intent of the proposed Project, which is to replenish development allocations and update the Housing Element as required by State Law. However, as shown in Chapter 5.2 Land Use Alternative A, and 5.3, Land Use Alternative B, each of these alternatives would meet the intent of the proposed Project, but not at the same level because development allocations would be incrementally less when compared to the proposed Project. However, the Housing Element would be updated and other General Plan, Land Use Map, and Zoning

## ALTERNATIVES TO THE PROPOSED PROJECT

Ordinance and Zoning Map amendments would occur the same as the proposed Project. Therefore, both Land Use Alternative A and B would generally meet the overall project objectives.

### ENVIRONMENTALLY SUPERIOR ALTERNATIVE

In addition to the discussion and comparison of impacts of the proposed Project and the Alternatives, Section 15126.6 of the CEQA Guidelines requires that an “environmentally superior” alternative be selected and the reasons for such a selection be disclosed. The environmentally superior alternative is the alternative that would be expected to generate the least amount of significant impacts. Identification of the environmentally superior alternative is an informational procedure and the alternative selected may not be the alternative that best meets the goals or needs of Cupertino.

As shown in Table 5-5, the impacts associated with each of the four land use scenarios analyzed in this EIR would essentially be the same. As previously stated, this is because the recommended mitigation measures would apply to all the alternatives, and compliance with the General Plan policies designed to reduce environmental impacts would also apply to all future development in Cupertino. However, as shown in Table 5-5, Land Use Alternative B would reduce air quality impacts under Impact AQ-1.

While Land Use Alternative B would reduce air quality impacts as described above, the No Project Alternative would ultimately be the environmentally superior alternative because it would not allow for new development to occur beyond what is currently planned for in the 2000-2020 General Plan, which would result in the least amount of development in the City and thereby reduce the consumption of renewable resources (e.g. lumber and water) and nonrenewable resources (e.g. fossil fuels, natural gas, and gasoline). Less development would place fewer demands on public service providers (which could require new facilities), would require fewer road, sewer, water and energy infrastructure improvements, and would generate less waste, which would overall reduce impacts on the environment.

However, in accordance with State CEQA Guidelines Section 15126.6(e)(2), if the environmentally superior alternative is the CEQA-required No Project alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. Accordingly, the next environmentally superior alternative would be Land Use Alternative A, because less development would occur compared to both the proposed Project and Land Use Alternative B. Under Land Use Alternative A, no new commercial space or residential units would be permitted beyond what is approved in the current General Plan. Therefore, Alternative A is considered the environmentally superior alternative.

## **ALTERNATIVES TO THE PROPOSED PROJECT**



**NO PROJECT ALTERNATIVE**

**5.1 NO PROJECT ALTERNATIVE**

Pursuant to CEQA Guidelines Section 15126.6(e)(1), the No Project Alternative is required as part of the “reasonable range of alternatives” to allow decision makers to compare the impacts of approving the proposed Project with the impacts of taking no action or not approving the proposed Project. Consistent with CEQA Guidelines Section 15126.6(e)(3)(A), when the project is the revision of a plan, as in this case, the no project alternative will be the continuation of the existing plan. Per CEQA Guidelines Section 15126.6(e)(3)(C), the City of Cupertino, acting as the lead agency, should analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future if the proposed Project were not approved, based on current plans and consistent with available infrastructure and community services. Implementation of the No Project Alternative assumes that the development allocation throughout the city would remain unchanged until the buildout horizon year 2040, which is the same horizon year of the proposed Project. Table 5.1-1 shows the remaining development allocation in the current General Plan, which as shown, represents the buildout projections for this Alternative, and the total buildout that would occur under this Alternative.

**TABLE 5.1-1 NO PROJECT ALTERNATIVE DEVELOPMENT ALLOCATION & PROJECTIONS SUMMARY**

Category	Existing (2013) <sup>a</sup>	Remaining	Net New Proposed	No Project <sup>b</sup>	Buildout (2040) <sup>c</sup>
Office	8,929,774 sf	540,231 sf	0 sf	540,231 sf	9,470,005 sf
Commercial	3,729,569 sf	701,413 sf	0 sf	701,413 sf	4,430,982 sf
Hotel	1,090 rooms	339 rooms	0 rooms	339 rooms	1,429 rooms
Residential	21,399 units	1,895 units	0 units	1,895 units	23,294 units
Population	58,302	5,571 <sup>d</sup>	0	5,571 <sup>d</sup>	63,873
Jobs	21,399	3,461 <sup>e</sup>	0	3,461 <sup>e</sup>	30,848

Note: sf = square feet

a. The amount of development that is built and approved in the city and the population and jobs accounted for in 2013.

b. The “remaining” development allocation plus the “net new proposed” equals the total new development potential under the No Project Alternative.

c. The “existing” (i.e. built/approved 2013 baseline) plus the “No Project” alternative equals the total 2040 buildout projections.

d. Population is calculated by 1,895 units times 2.94 persons per household, which is the ABAG 2040 estimated generation rate.

e. Jobs are calculated applying the City’s generation rates as follows; 540,231 square feet of office allocation divided by 300 square feet equals 1,801 jobs; 701,413 square feet of commercial allocation divided by 450 square feet equals 1,559 jobs; and 339 hotel rooms at .3 jobs per room equals 101 jobs for a total of 3,461 jobs.

Source: City of Cupertino, 2014.

The potential future development permitted under the No Project Alternative would not increase development potential in Cupertino beyond what was considered in the current General Plan and analyzed in the General Plan EIR, but rather would allow development of the remaining development allocation shown in Table 5.1-1. No General Plan land use or Zoning designation changes would be required to accommodate these uses.

## **NO PROJECT ALTERNATIVE**

As shown in Table 5-2, in Chapter 5, Alternatives to the Proposed Project, of this Draft EIR, the No Project Alternative would allocate 87 percent less office space, 48 percent less commercial space, 75 percent fewer hotel rooms, 57 percent fewer residential units and new residents, 79 percent fewer new jobs. When comparing the 2040 buildout of the No Project to the proposed Project, as shown in Table 5-4, the No Project Alternative would result in 27 percent less office space, 13 percent less commercial space, 41 percent fewer hotel rooms, 10 percent fewer residential units and new residents, and 30 percent fewer new jobs.

The differences between the proposed Project and the No Project Alternative would be incremental and even if no action was taken, regional growth, and the associated environmental effects linked to this growth, would continue to occur under the provisions of the current 2000-2020 General Plan.

### **5.1.1 OFFICE DEVELOPMENT ALLOCATION**

Under this alternative, the areas within the city that have remaining office space allocation are the Heart of the City Specific Plan area and the Major Employers, a geographically non-specific allocation category, but is instead reserved for companies with sales offices and corporate headquarters in Cupertino. The Heart of the City Specific Plan area has a remaining office allocation of 17,113 square feet and the Major Employers category has a remaining office space allocation of 523,118 square feet. The remaining office development allocation does not include the Apple Campus 2 project.

### **5.1.2 COMMERCIAL DEVELOPMENT ALLOCATION**

The remaining commercial space allocation is located within the Heart of the City Specific Plan area and the Monta Vista Special Center, at 695,629 square feet and 5,784 square feet, respectively.

### **5.1.3 HOTEL DEVELOPMENT ALLOCATION**

Under this Alternative, the Heart of the City Specific Plan holds the only remaining hotel room allocation at 339 rooms.

### **5.1.4 HOUSING DEVELOPMENT ALLOCATION**

The residential unit development allocation under this Alternative would accommodate the Regional Housing Needs Allocation (RHNA) for the 2014-2022 planning period and allow the city to meet its fair-share housing obligation of 1,064 units. As shown in Table 5.1-2, the residential allocation would allow for the construction of up to 1,895 units, which represents 831 units above the Cupertino's fair share housing obligation. Under this alternative, new residential units would be distributed in the Special Centers/Other Areas outlined in the current General Plan, as shown below in Table 5.1-2.

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-2 SPECIAL CENTERS/OTHER AREAS – NEW RESIDENTIAL UNIT DISTRIBUTION**

Special Centers/Other Areas	New Residential Units
Homestead Road Employment Center	184
Vallco Park North Employment Center	297
Heart of the City Specific Plan Employment Center	608
North De Anza Boulevard Employment Center	97
South De Anza Boulevard Employment Center	230
Bubb Road Employment Center	94
Monta Vista Neighborhood Center	74
Other Commercial	70
Other Neighborhoods	241
<b>Total</b>	<b>1,895</b>

Source: City of Cupertino, 2014.

## 5.1.5 DEVELOPMENT STANDARDS

There would be no height or density increases under the No Project Alternative. Overall, future development of the areas mapped as Special Areas along major transportation corridors, including Gateways/Nodes, Study Areas, and Other Areas identified in Chapter 3, Project Description, of this Draft EIR, would continue to develop and function under existing conditions, as described in detail for each Project Component in Section 3.7, Project Components, in Chapter 3, Project Description, of this Draft EIR.

## 5.1.6 NO PROJECT ALTERNATIVE ANALYSIS

### 5.1.6.1 AESTHETICS

---

**AES-1 Implementation of the No Project Alternative would not have a substantial adverse effect on a scenic vista.**

---

Future development under the No Project Alternative would have the potential to affect scenic vistas and/or scenic corridors if new or intensified development blocked views of areas that provide or contribute to such vistas. Under this alternative, development allocations for commercial, office, hotel, and residential would not be replenished. Therefore, future development would occur under the existing remaining development allocations, as shown in Table 5.1-1. Potential effects could include blocking views of a scenic vista/corridor from specific publically accessible vantage points or the alteration of the overall scenic vista/corridor itself.

## NO PROJECT ALTERNATIVE

Such alterations could be positive or negative, depending on the characteristics of individual future developments and the subjective perception of observers.

Public views of scenic corridors are considered those views as seen along a linear transportation route and public views of scenic vistas are those views a specific scenic feature. Scenic vistas are generally interpreted as long-range views, while scenic corridors are comprised of short-, middle-, and long-range views. As stated in Section 4.1.1, Environmental Setting, of Chapter 4.1, Aesthetics, of this Draft EIR, the current General Plan does not have designated scenic corridors or vistas. However, for this analysis the westward views of the foothills and ridgelines of the Santa Cruz Mountains are considered scenic vistas and the segment of I-280 from Santa Clara County line on the west I-880 on the east which Caltrans has designated as an “eligible” State Scenic Highway is considered a scenic corridor. The impacts are discussed below under Impact AES-2.

Potential future development would be concentrated on a limited number of vacant parcels and in the form of infill/intensification on sites either already developed and/or underutilized, and/or in close proximity to existing commercial and residential development, where future development would have a lesser impact on scenic vistas. Under this alternative, there would be no changes or replenishment of development allocations and this alternative would continue to function under existing conditions.

Because there would be no increase in building heights under the No Project Alternative, potential new development under this alternative is not anticipated to block the far-field views of the Santa Cruz Mountain Range and foothills throughout the city. In addition, provided that the topography in Cupertino is essentially flat, the views from street-level public viewing to the scenic resources are currently inhibited by existing conditions such as buildings, structures, and mature trees/vegetation, the maximum heights currently permitted limit the opportunity for these views from street-level public viewing, and the distributed nature of future development under this alternative, it is not anticipated that future development under the existing standards would further obstruct public views of scenic resources from within the city. Similar views would continue to be visible between projects and over lower density areas. Considering this and the fact that the future development areas within Cupertino are not considered destination public viewing points nor are they visible from scenic vistas, overall impacts to scenic vistas would be *less than significant*.

Furthermore, potential future development would, if necessary, be subject to the Architectural and Site Review process, in accordance with Section 19.168, Architectural and Site Review, of the Zoning Ordinance or would be required to comply with Design Standards outlined in the Heart of the City Specific Plan, the Monta Vista Design Guidelines, the Vallco Master Plan and other Conceptual Plans discussed in Section 4.1.1.1, Regulatory Framework, in Chapter 4.1, Aesthetics, of this Draft EIR.

Current General Plan policies would ensure future development in the Cupertino would conceivably reduce potential aesthetic impacts of future development under the No Project Alternative. Within the current Land Use/Community Design Element, Policy 2-1, Concentrated Development in Urban Centers, requires the City to concentrate development in urban nodes and selectively include housing with office and commercial uses where appropriate in designated centers. Policy 2-6, Neighborhood Protection, requires the City to protect residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, activity, limitations, site

**NO PROJECT ALTERNATIVE**

design and other appropriate measures. Policy 2-13, Urban Building Forms, requires the City to concentrate urban building forms in Vallco Park, City Center and Crossroads/ Heart of the City planning areas. Policy 2-14, Attractive Building and Site Design, requires the City to emphasize attractive building and site design during the development review process by giving careful attention to building scale, mass and placement, architecture, materials, landscaping, screening of equipment and loading areas, and related design considerations. Policy 2-15, Multi-Family Residential Design, requires the City to maintain a superior living environment for multi-family dwellings. Policy 2-16, Single-Family Residential Design, requires the City to preserve the character of residential neighborhoods by requiring new development to be compatible with the existing neighborhood. Policy 2-17, Streetscape Design, requires the City to consider unique streetscape choices for different parts of Cupertino. Policy 2-18, Context of Streetscape Landscaping, requires the City to, in public and private landscaping projects subject to City review, select landscaping designs that reflect the development context. Policy 2-21, Unique Neighborhood Character, requires the City to identify neighborhoods that have an architectural style, historical background or location that contribute to a unique neighborhood, and develop plans that preserve and enhance their unique qualities. Policy 2-23, Compatibility of Lot Sizes, requires the City to ensure that zoning, subdivision and lot line adjustment requests related to lot size or lot design consider the need to preserve neighborhood lot patterns. Policy 2-27, Heart of the City, requires the City to create a positive and memorable image along Stevens Creek Boulevard of mixed use development, enhanced activity nodes, and safe and efficient circulation and access for all modes of transportation. Policy 2-28, Crossroads Area, requires the City to create an active, pedestrian-oriented shopping district along Stevens Creek Boulevard, between De Anza Boulevard and Stelling Road. Policy 2-29, Stevens Creek Boulevard, requires the City to retain and enhance Stevens Creek Boulevard as a mixed commercial, office and residential corridor connecting De Anza College, Crossroads, City Center and Vallco Fashion Mall. This corridor extends from SR 85 to the eastern city limits and is split into three segments: “West,” “Central” and “East.” The Crossroads Planning Area is between the Western and Central sections of the Stevens Creek Boulevard Planning Area. Policy 2-30, Vallco Park South, requires the City to retain and enhance Vallco Park South as a large-scale commercial area that is a regional commercial (including hotel), office and entertainment center with supporting residential development. Policy 2-31, Homestead Road, requires the City to create an integrated, mixed-use commercial and housing village along Homestead Road, consisting of three integrated areas. Each area will be master planned, with special attention to the interconnectivity of these areas. Policy 2-33, North De Anza Boulevard, requires the City to maintain and enhance North De Anza Boulevard as a regional employment center with supporting commercial and residential land uses. Policy 2-34, City Center, requires the City to maintain and enhance City Center as a moderate-scale, medium density, mixed use district that will provide community identity and activity and will support retail uses in the Crossroads Area. Policy 2-35, Vallco Park North, requires the City to retain Vallco Park North as an employment area of predominately office and light industrial activities, with neighborhood commercial uses. Policy 2-36, Bubb Road, requires the City to retain the Bubb Road area primarily as a low-rise industrial and research and development area. Policy 2-45, Vallco Redevelopment Area, requires the City to facilitate redevelopment in the Vallco Redevelopment Area as a distinctive, regional shopping, residential and entertainment center, with hotel uses. Policy 2-48, Hillside Development Standards, requires the City to establish building and development standards for the hillsides that ensure hillside protection. Policy 2-49, Previously Designated Very Low Density Semi-Rural 5-Acre, requires the City to allow certain hillside properties to develop using a previous General Plan Designation. Policy 2-52, Rural Improvement Standards in Hillside Areas, calls for the City to require rural improvement standards in hillside areas to preserve the rural character of the hillsides. Policy 2-53, Views for Public

## NO PROJECT ALTERNATIVE

Facilities, requires the City to design and lay out public facilities, particularly public open spaces, so they include views of the foothills or other nearby natural features, and plan hillside developments to minimize visual and other impacts on adjacent public open space. Policy 2-62A, Historic Sites, calls for the City to require projects on Historic Sites to meet the Secretary of the Interior's Standard for Treatment of Historic Properties and provide a plaque, reader board and/or other educational tools on the site to explain the historic significance of the resource(s). The plaque shall include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. For public and quasi-public sites, coordinate with property owner to allow public access of the historical site to foster public awareness and provide educational opportunities. For privately-owned sites, property owners would be encouraged, but in no way required, to provide access to the public. Policy 2-62B, Commemorative Sites, calls for the City to require projects on Commemorative Sites to provide a plaque, reader board and/or other educational tool on the site to explain the historic significance of the resource. The plaque shall include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. For public and quasi-public sites, coordinate with property owner to allow public access to the historical site to foster public awareness and provide educational opportunities. For privately-owned sites, property owners would be encouraged, but not in no way required, to provide access to the public. Policy 2-62C, Community Landmarks, calls for the City to require projects on Landmark Sites shall provide a plaque, reader board and/or other educational tools on the site to explain the historic significance of the resource. The plaque shall include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. Policy 2-62D, Historic Mention/Interest Sites, requires the City to encourage agencies that have jurisdiction over the historical resource to encourage rehabilitation of the resource and provide public access to foster public awareness and provide educational opportunities. These are sites outside the City's jurisdictions, but have contributed to the City's historic past. Policy 2-62E, Incentives for Preservation of Historic Resources, states that the City should utilize a variety of techniques to serve as incentives toward fostering the preservation and rehabilitation of Historic Sites including: allowing flexible interpretation of zoning ordinance not essential to public health and safety (this could include flexibility as to use, parking requirements and/or setback requirements); using the California Historical Building Code for rehabilitation of historic structures; tax rebates (Mills Act or Local tax rebates); financial incentives such as grants/loans to assist rehabilitation efforts. Policy 2-62F, Recognizing Historical Resources, requires the City to maintain an inventory of historically significant structures and periodically update it in order to promote awareness of these community resources. Policy 2-65, Heritage Trees, requires the City to protect and maintain heritage trees in a healthy state. Policy 2-79, Park Design, requires the City to design parks to utilize the natural features and topography of the site and to keep long-term maintenance costs low. Policy 2-88, New Residential Development in Urban Core Areas, requires the City to provide park and recreational space and facilities for new residential development in the urban core. The need for dedication of public parkland and the provision of private recreational space and facilities shall be determined when a master plan is submitted for the development, based on the following criteria:

1. Where feasible, public park space, as opposed to private, should be provided. Active park areas are encouraged that will serve the community need. Passive areas are acceptable, when appropriate to an urban setting. Features could include paths, benches, water features, picnic tables, public art, trees and gardens. They should be oriented toward the street or an activity area where it is easily accessible to the

**NO PROJECT ALTERNATIVE**

public. Passive areas deemed inaccessible or unlikely to be used by the public should not be credited toward park dedication. Providing public trail connections may be given partial credit toward park dedication.

2. Where feasible, public park and recreational facilities should be provided for those who live and work in Cupertino.
3. New residential developments should be encouraged to blend their recreational facilities into the community at large.
4. Park fees should be collected based on a formula that considers the extent to which the public and/or private park space and facilities meet the park need.

Within the current Circulation Element Policy 4-8, Roadway Plans that Complement the Needs of Adjacent Land Use, requires the City to design roadways based on efficient alignments, appropriate number and widths of traffic lanes, inclusion of medians, parking and bicycle lanes and the suitable width and location of sidewalks as needed to support the adjacent properties. In addition, design the local streets to satisfy the aesthetic requirements of the area served. In general, the aesthetics of a street will be improved if it can be narrower rather than wider, include significant landscaping with shade trees, and provide safe and convenient places for people to bicycle and walk. Details of design, such as provision of vertical curbs and minimum corner radii, are to be considered desirable. Design details should be developed in the City's road improvement standards. Policy 4-10, Street Improvement Planning, requires the City to plan street improvements such as curb cuts, sidewalks, bus stop turnouts, bus shelters, light poles, benches and trash containers as an integral part of a project to ensure an enhanced streetscape and the safe movement of people and vehicles with the least possible disruption to the streetscape.

Within the current Environmental Resources/Sustainability Element Policy 5-9, Development Near Sensitive Areas, Encourage the clustering of new development away from sensitive areas such as riparian corridors, wildlife habitat and corridors, public open space preserves and ridgelines. New developments in these areas must have a harmonious landscaping plans approved prior to development.

**Significance Without Mitigation:** Less than significant.

---

<b>AES-2</b>	<b>Implementation of the No Project Alternative would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway.</b>
--------------	--

---

As previously discussed under Impact AES-1, the segment of I-280 which crosses Cupertino is not an officially designated State Scenic Highway, but is considered to be an eligible State Scenic Highway. Development in the Heart of the City Special Area could be within the viewshed of I-280. However, as described below, these Major Mixed-Use Special Areas are currently developed. Under the No Project Alternative, future development would continue to occur and function under existing conditions, as described in detail for each Project Component in Section 3.7, Project Components, in Chapter 3, Project Description, of this Draft EIR.

## NO PROJECT ALTERNATIVE

Therefore, would not result in height or density increases and future development under this alternative would not represent a substantial reimagining of the character of the Project Component locations in the I-280 viewshed given the existing viewshed within this area is largely urbanized and built out. The potential future development under this alternative would not involve changes in development intensity along the I-280 viewshed, similar to existing buildings. Future development, as result of the No Project Alternative, would be dispersed within the areas that have remaining development allocation and would not fully obstruct views of far-field scenic resources (e.g. Santa Cruz Mountains) from I-280.

Furthermore, potential future development would, if necessary, be subject to the Architectural and Site Review process, in accordance with Section 19.168 of the Zoning Ordinance. Future development would also would be required to comply with Design Standards outlined in the Heart of the City Specific Plan, the Vallco Master Plan and other Conceptual Plans as described in Section 4.1.1.1, Regulatory Framework, in Chapter 4.1, Aesthetics, of this Draft EIR, and the General Plan policies outlined in impact discussion AES-1, that limit the height and bulk of buildings. Accordingly, impacts related to scenic resources in the I-280 viewshed would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>AES-3</b>	<b>Implementation of the No Project Alternative would not substantially degrade the existing visual character or quality of the site and its surroundings.</b>
--------------	--

---

Under the No Project Alternative, the remaining development allocations for office, commercial, and hotel would be limited to the Heart of the City Special Area and the Monta Vista Neighborhood Center, and the Major Employers category (a non-geographically specific area). In addition, housing could occur on the identified Housing Element Sites distributed though out the city as well as the Monta Vista Neighborhood Center, the Bubba Road Special Area, and the Other Neighborhood and Other Non-residential/Mixed Use Special Areas. These locations are concentrated on areas either already developed and/or underutilized, and/or in close proximity to existing commercial, residential and residential-serving development. Future building form and massing, under the No Project Alternative, would remain similar to existing conditions (e.g. no building height increases would occur); therefore, would not degrade the existing surrounding character.

Implementation of this alternative would allow continued development and redevelopment throughout the city similar to existing conditions, and would not result in the replenishing of development allocation. As discussed above, future development under the No Project Alternative would not result in a substantial change to the existing visual character of the development areas or their surroundings.

Furthermore, potential future development would, if necessary, be subject to the City's discretionary review processes, including the Development Permit and Architectural and Site Approval Review, in accordance with Chapter 19.168 of the Zoning Ordinance. Future development would also would be required to comply with Design Standards outlined in the Heart of the City Specific Plan and the Vallco Master Plan as described in Section 4.1.1.1, Regulatory Framework, in Chapter 4.1, Aesthetics, of this Draft EIR, and the General Plan policies outlined in impact discussion AES-1, that limit the height and bulk of buildings.



**NO PROJECT ALTERNATIVE**

Accordingly, potential impacts to visual character from future development under the No Project Alternative would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**AES-4                      Implementation of the No Project Alternative would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**

---

Nighttime illumination and glare impacts are the effects of a project's exterior lighting upon adjoining uses and areas. Light and glare impacts are determined through a comparison of the existing light sources with the proposed lighting plan or policies of future development projects.

Currently, the Project Study Area contains many existing sources of nighttime illumination. These include street and parking area lights, security lighting, and exterior lighting on existing residential, commercial, and institutional buildings. Additional onsite light and glare is caused by surrounding land uses and traffic on State Route 85 (SR 85) and I-280.

Although the No Project Alternative would not result in the modification of land uses, zoning, density, or heights, future development allowed under the remaining development allocation would still intensify related lighting sources. In addition to new building, security, and lighting for parking, buildout of the Project Study Area under this alternative would also include lighting aimed at properly illuminating the Project Component locations. Because the No Project Alternative would allow development throughout the Project Study Area, its implementation would likely result in some new buildings with more exterior glazing (i.e. windows and doors) that could result in new sources of glare. Despite the new and expanded sources of nighttime illumination and glare, implementation of the No Project Alternative is not expected to generate a substantial increase in light and glare.

New development would have to comply with the General Plan policies and Municipal Code provisions that ensure new construction does not generate excessive light levels. The City's General Plan policies require reduced light and glare spillover from future development to surrounding land uses by buffering new development with landscaping and trees. The preservation of mature trees with substantial tree canopies would diffuse the overall amount of light generated by new development and glare generated by windows of multistory buildings. Furthermore, because the Project Component locations and surrounding area are largely developed, the lighting associated with the No Project Alternative would not substantially increase nighttime light and glare within the Project Study Area or its surroundings. Therefore, impacts relating to light and glare would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

## NO PROJECT ALTERNATIVE

---

**AES-5                    Implementation of the No Project Alternative, in combination with past, present and reasonably foreseeable projects would not result in a significant cumulative impacts with respect to aesthetics.**

---

This discussion takes into account growth projected under the No Project Alternative within the Cupertino city boundary and Sphere of Influence (SOI), in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). The cumulative setting for visual impacts includes potential future development under the proposed General Plan combined with effects of development on lands adjacent to the city within Los Altos and Sunnyvale to the north, Santa Clara and San Jose to the east, and Saratoga to the south, and the unincorporated areas of Santa Clara County to the west and south.

Significant impacts, including those associated with scenic resources, visual character, and increased light and glare would generally be site-specific and would not contribute to cumulative impacts after implementation of the General Plan policies and the provisions stated in the Municipal Code. Because future development would occur and function under existing conditions within the designated growth areas, it is unlikely that future development under this alternative would drastically alter the City's vertical landscape and urban form over time, as new development is proposed.

Because of the developed nature of the Project Study Area, future development under the General Plan Amendment, Housing Element Update, and associated Rezoning, in combination with other new development, would not negatively impact the visual character of the City. Furthermore, implementation of the No Project Alternative would not constitute a significant adverse impact because redevelopment of the area is also anticipated in the current specific plans and the City's General Plan policies.

Moreover, potential new development under this alternative would be subject to entitlement review, including environmental review, as necessary and architectural and site design review, to ensure that the development is aesthetically pleasing and compatible with adjoining land uses. With the development review mechanisms in place, approved future development under the No Project Alternative is not anticipated to create substantial impacts to visual resources. Therefore, the No Project Alternative would result in a cumulatively *less than significant* contribution to aesthetic impacts.

**Significance Without Mitigation:** Less than significant.

### 5.1.6.2 AIR QUALITY

---

**AQ-1                    Implementation of the No Project Alternative would conflict with or obstruct implementation of the applicable air quality plan.**

---

## 2010 Bay Area Clean Air Plan

The current Air Quality Management Plan (AQMP) is the 2010 Bay Area Clean Air Plan. The primary goals of the 2010 Bay Area Clean Air Plan are to attain the State and Federal AAQS, reduce population exposure and protect public health in the Bay Area, and reduce GHG emissions and protect the climate. Bay Area Air

**NO PROJECT ALTERNATIVE**

Quality Management District (BAAQMD) considers the Plan consistent with the AQMP in accordance with the following:

*Attain Air Quality Standards*

BAAQMD's 2010 Bay Area Clean Air Plan strategy is based on regional population and employment projections within the Bay Area compiled by ABAG. Demographic trends incorporated into the Plan Bay Area determine vehicle miles traveled (VMT) within the Bay Area, which BAAQMD utilizes to forecast future air quality trends. The San Francisco Bay Area Air Basin (SFBAAB) is designated as a nonattainment area for Ozone (O<sub>3</sub>), fine inhalable particulate matter (PM<sub>2.5</sub>), and coarse inhalable particulate matter (PM<sub>10</sub>) (State ambient air quality standards (AAQS) only). As discussed in Chapter 4.11, Population and Housing, of this Draft EIR, the growth projections for the City of Cupertino would exceed the employment projections identified by ABAG. ABAG forecasts the population in Cupertino could grow to 71,700 by 2040.<sup>1</sup> The buildout projections resulting from future development under the No Project Alternative estimates that the residential population could grow to 63,873 by 2040. Therefore, additional residential population resulting from implementation of the No Project Alternative would not exceed regional projections (7,827 fewer residents). With respect to employment, ABAG forecasts 33,260 employees in the City of Cupertino in 2040.<sup>2</sup> Buildout of the No Project Alternative would not exceed the regional projections (2,412 fewer employees). Growth under the No Project Alternative would come incrementally over approximately 26 years and would be guided by a policy framework that is generally consistent with many of the principal goals and objectives established in regional planning initiatives for the Bay Area. The General Plan includes policies and strategies that, once adopted, would ensure coordination with regional agencies on regional planning initiatives. Policy 5-4, Air Pollution Effects of New Development, requires the City to minimize the air quality impacts of new development projects and the impacts affecting new development. Supporting Strategy 3 would require the City to assess the potential for air pollution effects of future land use and transportation planning, to ensure that planning decisions support regional goals of improving air quality. The Circulation Element also includes policies regarding coordination with regional transportation planning agencies. Policy 4-1, City Participation in Regional Transportation Planning, would ensure that the City actively participate in developing regional approaches to meeting the transportation needs of the residents of the Santa Clara Valley. Growth under the No Project Alternative would be consistent with the regional planning objectives established for the Bay Area. Consequently, emissions within the City of Cupertino are included in BAAQMD's projections, and future development under the No Project Alternative through horizon year 2040 would not hinder BAAQMD's ability to attain the California or National AAQS. Accordingly, impacts would be *less than significant*.

*Reduce Population Exposure and Protect Public Health*

The City of Cupertino is already largely developed. Future growth under the No Project Alternative would be accommodated through redevelopment of infill sites. As identified in the discussion of community risk and hazards (see Impact AQ-4 below), new sensitive land uses could be proximate to major sources of Toxic Air Contaminants (TACs), and new industrial/commercial land uses could generate an increase in TACs.

<sup>1</sup> Association of Bay Area Governments (ABAG), 2014, Plan Bay Area Projections 2013.

<sup>2</sup> Association of Bay Area Governments (ABAG), 2014, Plan Bay Area Projections 2013.

## NO PROJECT ALTERNATIVE

Adherence to BAAQMD regulations would ensure new sources of TACs do not expose populations to significant health risk; however, siting of land uses proximate to major sources of air pollution is outside the control of BAAQMD. These impacts are addressed under Impact AQ-4, below. Implementation of current and amended General Plan policies, and strategies, and mitigation to reduce community risk and hazards listed in AQ-4 below would ensure these impacts are would be *less than significant*.

### *Reduce GHG Emissions and Protect the Climate*

The Greenhouse Gas (GHG) emissions impacts of the No Project Alternative are discussed in Chapter 4.6, Greenhouse Gas Emissions, of this Draft EIR. Goals and policies have been incorporated within the No Project Alternative, as identified in Chapter 4.6, Greenhouse Gas Emissions, of this Draft EIR, to reduce Vehicle Miles Traveled (VMT) and associated GHG emissions. In addition, the City of Cupertino is also preparing a Climate Action Plan (CAP) to reduce community-wide GHG emissions.

The current and amended General Plan policies and strategies would also reduce GHG emissions, as described in more detail in Chapter 4.6, Greenhouse Gas Emissions, of this Draft EIR. Future development under the No Project Alternative would be required to adhere to statewide measures that have been adopted to achieve the GHG reduction targets of Assembly Bill 32. In addition, the No Project Alternative is consistent with regional strategies for infill development identified by the Metropolitan Transportation Commission (MTC)/ABAG in the Plan Bay Area. Consequently, the No Project Alternative is consistent with the goals of the 2010 Bay Area Clean Air Plan to reduce GHG emissions and protect the climate. As identified above, the No Project Alternative would support the goals of the 2010 Bay Area Clean Air Plan. New policies would be introduced as part of the No Project Alternative to minimize impacts. Impacts would be *less than significant*.

### Include applicable control measures from the AQMP

Table 5.1-3 identifies the control measures included in the 2010 Bay Area Clean Air Plan, and, as shown, implementation of the No Project Alternative goals, policies, and actions in Table 5.1-3 would ensure that the No Project Alternative would be consistent with the 2010 Bay Area Clean Air Plan and that the impacts due to inconsistency would be *less than significant*.

### Disrupt or hinder implementation of any AQMP control measures

Table 5.1-3 identifies the control measures included in the 2010 Bay Area Clean Air Plan. As identified in the table, the No Project Alternative would not hinder BAAQMD from implementing the control measures in the 2010 Bay Area Clean Air Plan. Impacts are *less than significant*.

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-3 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
Stationary and Area Sources Control Measures	<ul style="list-style-type: none"> <li>▪ SSM 1 – Metal Melting Facilities</li> <li>▪ SSM 2 – Digital Printing</li> <li>▪ SSM 3 – Livestock Waste</li> <li>▪ SSM 4 – Natural Gas Processing and Distribution</li> <li>▪ SSM 5 – Vacuum Trucks</li> <li>▪ SSM 6 – General Particulate Matter Weight Rate Limitations</li> <li>▪ SSM 7 – Open Burning</li> <li>▪ SSM 8 – Cole Calcining</li> <li>▪ SSM 9 – Cement Kilns</li> <li>▪ SSM 10 – Refinery Boilers and Heaters</li> <li>▪ SSM 11 – Residential Fan Type Furnaces</li> <li>▪ SSM 12 – Space Heating</li> <li>▪ SSM 13 – Dryers, Ovens, Kilns</li> <li>▪ SSM 14 – Glass Furnaces</li> <li>▪ SSM 15 – Greenhouse Gases in Permitting Energy Efficiency</li> <li>▪ SSM 16 – Revise Regulation 2, Rule 2: New Source Review</li> <li>▪ SSM 17 – Revise Regulation 2, Rule 5 New Source Review for Air Toxics</li> <li>▪ SSM 18 – Revise Air Toxics “Hot Spot” Program</li> </ul>	<p>Stationary and area source control measures are sources regulated directly by BAAQMD. To implement the stationary and area source control measures, BAAQMD adopts/revises rules or regulations to implement the control measures and reduce emissions from stationary and area sources. Because BAAQMD is the implementing agency, new and existing sources of stationary and area sources in the City would be required to comply with these control measures in the 2010 Bay Area Clean Air Plan.</p>
Mobile Source Control Measures	<ul style="list-style-type: none"> <li>▪ MSM A-1 – Promote Clean, fuel Efficient Light &amp; Medium-Duty Vehicles</li> <li>▪ MSM A-2 – Zero Emission Vehicle and Plug-in Hybrids</li> <li>▪ MSM A-3 – Green Fleets (Light Medium &amp; Heavy-Duty Vehicles)</li> <li>▪ MSM A-4 – Replacement or Repair of High Emitting Vehicles</li> <li>▪ MSM B-1 – HDV Fleet Modernization</li> <li>▪ MSM B-2 – Low NO<sub>x</sub> Retrofits for In-Use Engines</li> <li>▪ MSM B-3 – Efficient Drive Trains</li> <li>▪ MSM C-1 – Construction and Farming Equipment</li> <li>▪ MSM C-2 – Lawn &amp; Garden Equipment</li> <li>▪ MSM C-3 – Recreational Vessels</li> </ul>	<p>Mobile Source Control Measures that would reduce emissions by accelerating the replacement of older, dirtier vehicles and equipment, through programs such as the BAAQMD’s Vehicle Buy-Back and Smoking Vehicle Programs, and promoting advanced technology vehicles that reduce emissions. The implementation of these measures rely heavily upon incentive programs, such as the Carl Moyer Program and the Transportation Fund for Clean Air, to achieve voluntary emission reductions in advance of, or in addition to, CARB requirements. CARB has new regulations that require the replacement or retrofit of on-road trucks, construction equipment, and other specific equipment that is diesel powered. The No Project Alternative would not hinder the ability of BAAQMD to implement these regional programs.</p>
Transportation Control Measures	<ul style="list-style-type: none"> <li>▪ TCM A-1 – Improve Local and Regional Rail Service</li> <li>▪ TCM A-2 – Improve Local and Regional Rail Service</li> <li>▪ TCM B-1 – Implement Freeway Performance Initiative</li> <li>▪ TCM B-2 – Improve Transit Efficiency and Use</li> <li>▪ TCM B-3 – Bay Area Express Land Network</li> </ul>	<p>Transportation Control Measures (TCM) are strategies to reduce vehicle trips, vehicle use, VMT, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions. While most of the TCMs are implemented at the regional level—that is, by the MTC or Caltrans—there are measures for which the 2010 Bay Area Clean Air Plan relies upon local communities to assist with implementation.</p>

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-3 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
	<ul style="list-style-type: none"> <li>▪ TCM B-4 – Goods Movement Improvements and Emission Reduction Strategies</li> <li>▪ TCM C-1 – Support Voluntary Employer-Based Trip Reduction Program</li> <li>▪ TCM C-2 – Implement Safe Routes to Schools and Safe Routes to Transit</li> <li>▪ TCM C-3 – Promote Rideshare Service and Incentives</li> <li>▪ TCM C-4 – Conduct Public Outreach and Education</li> <li>▪ TCM C-5 – Promote Smart Driving/Speed Moderation</li> <li>▪ TCM D-1 – Improve Bicycle Access and Facilities</li> <li>▪ TCM D-2 – Improve Pedestrian Access and Facilities</li> <li>▪ TCM D-3 – Support Local Land Use Strategies</li> <li>▪ TCM E-1 – Value Pricing Strategies</li> <li>▪ TCM E-2 Parking Pricing and Management</li> <li>▪ TCM E-3 – Implement Transportation Pricing Reform</li> </ul>	<p>The No Project Alternative includes policies and strategies related to transportation and land use that would assist BAAQMD in meeting the regional goals of the 2010 Bay Area Clean Air Plan, including:</p> <ul style="list-style-type: none"> <li>▪ Policy 2-1: Focused Development in Major Mixed-Use Special Areas. In the major mixed-use Special Areas where office, commercial, and residential uses are allowed, focus higher intensity development and increased building heights where appropriate in designated Special Areas, gateways, sub areas and nodes.</li> <li>▪ Policy 2-2: Connections Between Major Mixed-Use Special Areas, Employment Centers and the Community. Provide strong connections between the major mixed-use Special Areas, employment centers, and the surrounding community.                             <ul style="list-style-type: none"> <li>Strategy 2-2.1. Neighborhood Connections. Enhance pedestrian and bicycle connections from the major mixed-use Special Areas and employment centers to surrounding neighborhoods.</li> <li>Strategy 2-2.2. Public Access. Provide pedestrian and bicycle paths through new and redevelopment projects to enhance public access to and through the development.</li> </ul> </li> <li>▪ Policy 2-19: Jobs/Housing Balance. Strive for a more balanced ratio of jobs and housing units.                             <ul style="list-style-type: none"> <li>Strategy 2-19.1. Housing and Mixed-Use. Strive to achieve a balanced jobs/housing ratio based on the policies and strategies contained in the Housing Element.</li> <li>Strategy 2-19.2. Housing Impact on Local Schools. Since the quality of Cupertino schools (elementary and high school) is a primary asset of the City, care shall be taken to ensure any new housing will not adversely impact these systems.</li> </ul> </li> <li>▪ Policy 2-26: Heart of the City Special Area. Create a positive and memorable image along Stevens Creek Boulevard of mixed-use development; enhanced activity gateways and nodes; and safe and efficient circulation and access for all modes of transportation.                             <ul style="list-style-type: none"> <li>Strategy 2-26.1. Heart of the City Specific Plan. Maintain the Heart of the City Specific Plan as the primary implementation tool for the City to use for this area.</li> <li>Strategy 2-26.2. Traffic Calming. Evaluate options on Stevens Creek Boulevard to improve the pedestrian environment by proactively managing speed limits and traffic signal synchronization.</li> </ul> </li> <li>▪ Policy 2-57: Pedestrian Access. Create pedestrian access between new subdivisions and school sites. Review existing neighborhood circulation plans to improve safety and access for pedestrians and bicyclists to school sites, including</li> </ul>

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-3 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>completing accessible network of sidewalks and paths.</p> <p>Strategy 2-57.1. Cupertino Pedestrian Transportation Guidelines. Implement the recommendations of the Cupertino Pedestrian Transportation Plan to develop a City trail/pedestrian linkage between major mixed-use Special Areas, employment centers, neighborhoods, and major open space areas.</p> <p>Strategy 2-57.2. Trail Projects. Implement the trail projects described in this element. Evaluate any safety, security and privacy impacts and mitigations associated with trail development. Work with affected neighborhoods in locating trails.</p> <p>Strategy 2-57.3. Dedicated Trails or Easements. Require dedication or easements for trails, as well as their implementation, as part of the development process, where appropriate.</p> <ul style="list-style-type: none"> <li>▪ Policy 4-1: City Participation in Regional Transportation Planning Participate actively in developing regional approaches to meeting the transportation needs of the residents of the Santa Clara Valley. Work closely with neighboring jurisdictions and agencies responsible for roadways, transit facilities and transit services in Cupertino.</li> </ul> <p>Strategy 4-1.1. Regional Transportation Planning. Participate in regional transportation planning in order to minimize adverse impacts on Cupertino’s circulation system. Work with all regional transportation with the goals and policies of Cupertino’s General Plan. Work with neighboring cities to address regional transportation and land use issues of mutual interest.</p> <p>Strategy 4-1.2. Jobs–Housing Balance. Minimize regional traffic impacts on Cupertino by supporting regional planning programs to manage the jobs-housing balance throughout Santa Clara County and the Silicon Valley.</p> <p>Strategy 4-1.3. Interchange Improvements. Identify potential interchange improvements, such as I-280 with the Lawrence Expressway and Stevens Creek Boulevard, that would encourage the use of the freeway and reduce the use of local streets.</p> <p>Strategy 4-1.4. Congestion Management Plan (CMP). Actively participate in the preparation of the CMP and other regional efforts to control traffic congestion and limit air pollution.</p> <p>Strategy 4-1.5. Traffic Impact Analysis (TIA). Require TIA reports that meet the requirements of the VTA for all developments projected to generate more than 100 trips in the morning or afternoon peak hour.</p> <p>Strategy 4-1.6. Multi-modal Transportation. Ensure that connections are provided</p>

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-3 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>to enable travelers to transition from one mode of transportation to another, e.g. bicycle to bus.</p> <p>Strategy 4-1.7. Regional Bus and Rapid Transit Service. Support the expansion of the VTA’s regional bus transit system and extension of bus and/or light rail rapid transit into the Stevens Creek and De Anza Special Areas to fulfill the “spoke and wheel” transit system designed to serve all of Santa Clara County. Specific actions to implement this strategy are:</p> <ul style="list-style-type: none"> <li>▪ Review all right-of-way improvement projects for potential opportunities and constraints to rapid transit development.</li> <li>▪ Encourage higher density and mixed-use development in rapid transit corridors and ensure developments are designed to enhance the use of transit.</li> <li>▪ Seek the cooperative support of residents, property owners and businesses in planning rapid transit extensions.</li> <li>▪ Actively seek to have Cupertino represent West Valley cities and ultimately chair the VTA Board of Directors to promote the above policy.</li> <li>▪ Circulation Element Policy 4-2: Reduced Reliance on the Use of Single-Occupant Vehicles Promote a general decrease in reliance on private, mostly single-occupant vehicles (SOV) by encouraging attractive alternatives.</li> </ul> <p>Strategy 4-2.1. Alternatives to the SOV. Encourage the use of alternatives to the SOV including increased car-pooling, use of public transit, bicycling and walking.</p> <p>Strategy 4-2.2. TSM Programs. Encourage TSM programs for employees in both the public and private sectors by including preferred parking for carpools, providing bus passes, encouraging compressed workweeks, and providing incentives and rewards for bicycling and walking.</p> <p>Strategy 4-2.3. Telecommuting, Teleconferencing and Other Electronic Communication. Encourage employers to use the internet to reduce commute travel. Encourage schools, particularly at the college and high school levels, to make maximum use of the internet to limit the need to travel to and from the campus.</p> <p>Strategy 4-2.4. Design of New Developments. Encourage new commercial developments to provide shared office facilities, cafeterias, day-care facilities, lunchrooms, showers, bicycle parking, home offices, shuttle buses to transit facilities and other amenities that encourage the use of transit, bicycling, walking or telecommuting as commute modes to work. Provide pedestrian pathways and orient buildings to the street to encourage pedestrian activity.</p>



**NO PROJECT ALTERNATIVE**

**TABLE 5.1-3 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>Strategy 4-2.5. Street Space for Alternative Transportation. Provide space on appropriate streets for bus turnouts, or safe and accessible bike lanes or pedestrian paths.</p> <p>Strategy 4-2.6. Alternative Transportation Information. Use the Cupertino Scene and other media to provide educational material on alternatives to the SOV.</p> <p>Strategy 4-2.7. Citizen Participation. Continue to work with the City Bicycle/Pedestrian Advisory Committee, community groups and residents to eliminate hazards and barriers to bicycle and pedestrian transportation.</p> <ul style="list-style-type: none"> <li>▪ Policy 4-3: Cupertino Pedestrian Transportation Guidelines and the Cupertino Bicycle Transportation Plan. Implement the programs and projects recommended in the Cupertino Pedestrian Transportation Guidelines and in the Cupertino Bicycle Transportation Plan, as well as other programs that promote this goal.</li> </ul> <p>Strategy 4-3.1. The Pedestrian Guidelines. Implement the projects recommended in the Pedestrian Guidelines including:</p> <ul style="list-style-type: none"> <li>▪ After engineering review, and where found to be feasible, improve safety at selected intersections by one or more of the following: prohibit right turn- on-red, add time to the pedestrian signal phase, construct a median and/or reduce corner radii.</li> <li>▪ Where feasible provide missing sidewalks on arterial and collector streets and on neighborhood streets as desired by residents.</li> <li>▪ Identify a citywide pedestrian circulation grid including shortcuts, pathways and bridges, where needed, to close gaps in the pedestrian circulation system.</li> </ul> <p>Strategy 4-3.2. Pedestrian Grid. Consider developing a quarter-mile grid of safe, walk-able sidewalks and paths to provide pedestrian access among residential, shopping, recreation and business locations.</p> <p>Strategy 4-3.3. Safe Routes to School. Work with the School Districts to promote the Safe Route to Schools program.</p> <p>Strategy 4-3.4. Pedestrian Time on Traffic Signals. With engineering review, provide additional time for pedestrians to cross streets at appropriate intersections. Added time would be most appropriate near shopping districts, schools and senior citizen developments. This strategy should be considered even if it could reduce the Level of Service (LOS) for automobile traffic.</p> <p>Strategy 4-3.5. Pedestrian Improvements. To enhance walking, consider various improvements to roadways to make them more pedestrian friendly and less auto-centric. Where a median is provided, it should be wide enough to safely</p>

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-3 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>accommodate pedestrians. Streets such as Homestead, Bollinger, Rainbow, Prospect or Stelling should be evaluated for potential improvements for pedestrians. Working with the neighborhood, consider reducing residential street widths to promote slower traffic and less pervious surface.</p> <p>Strategy 4-3.6. Crosswalk Marking, Medians, and “Chokers.” Following engineering review, mark crosswalks with pavement treatment scaled to the speed of traffic. Use medians and “chokers” to narrow the width of the street where feasible and appropriate.</p> <p>Strategy 4-3.7. Pedestrian/Bicycle Impact Statement (PBIS). Encourage all public construction and private development projects to submit a PBIS. For projects that require a TIA, the PBIS may be incorporated into the TIA. The impact of the project on pedestrians and bicycles shall be reported in terms of safety, route connectivity, loss of existing facilities, adequacy of proposed facilities, and potential adverse impact of proposed pedestrian/bicycle programs on automobile traffic and vice versa.</p> <p>Strategy 4-3.8. Implementation of the Bicycle Plan. Implement the Bikeway Network as recommended in the Bicycle Plan. The Network is shown in Figure 4B [of the General Plan].</p> <p>Strategy 4-3.9. Bicycle Facilities in New Developments. Encourage the developers of major new or remodeled buildings to include secure interior and/or fully weather protected bicycle parking.</p> <p>Strategy 4-3.10. Traffic Calming on Bicycle Routes. Where feasible and appropriate, implement traffic calming on those bicycle routes where automobile traffic volumes are low. Bicycle traffic flows best where automobile traffic volume and speeds are low and where there are no stop signs or traffic signals to hinder through traffic flow.</p> <p>Strategy 4-3.11. Bicycle Parking. Provide bicycle parking in multi-family residential developments and in commercial districts as required under Section 19.100.040 of the City code.</p> <ul style="list-style-type: none"> <li>▪ Policy 4-4: Regional Trail Development Continue to plan and provide for a comprehensive system of trails and pathways consistent with regional systems, including the Bay Trail, Stevens Creek Special Area and Ridge Trail. The General Alignment of the Bay Trail, as shown in the Association of Bay Area Governments’ Bay Trail planning document, is incorporated in the General Plan by reference.</li> <li>▪ Policy 4-5: Increased Use of Public Transit Support and encourage the increased use of public transit.</li> </ul>

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-3 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>Strategy 4-5.1. Transit Facilities in New Developments. Ensure all new development projects include amenities to support public transit such as: bus stop shelters; space for transit vehicles to stop and maneuver as needed; transit maps and schedules. Encourage commercial and institutional developments to support bus passes for employees.</p> <p>Strategy 4-5.3. Transit Stop Amenities. Work with the VTA and adjacent property owners to provide attractive amenities such as seating, lighting and signage at all bus stops.</p> <p>Strategy 4-5.4. Vallco Park Transit Station. Work with the VTA to study and develop a transit transfer station at Vallco Park. Anticipate a multi-modal station that serves future light rail.</p> <p>Strategy 4-5.5. Rapid Transit. Work with the VTA to plan for and develop bus and/or light rail rapid transit services in the Stevens Creek and north De Anza Special Areas to take advantage of the potential increase in mixed-use activities in the De Anza College customer base. Consider increased frequency of service to encourage ridership.</p> <p>Strategy 4-5.6. Shuttle Service. Study the possibility of providing shuttle service to key commercial, office and institutional locations in Cupertino.</p> <ul style="list-style-type: none"> <li>▪ Policy 4-7: Traffic Service and Pedestrians Needs Balance the needs of pedestrians with desired traffic service. Where necessary and appropriate, allow a lowered LOS standard to better accommodate pedestrians on major streets and at specific intersections.</li> </ul> <p>Strategy 4-7.1. Traffic Signal Walk Times. This strategy is described in Policy 4-3. Added time on walk signs would be most appropriate near shopping districts, schools and senior citizen developments.</p> <ul style="list-style-type: none"> <li>▪ Policy 4-10: Street Improvement Planning Plan street improvements such as curb cuts, sidewalks, bus stop turnouts, bus shelters, light poles, benches and trash containers as an integral part of a project to ensure an enhanced streetscape and the safe movement of people and vehicles with the least possible disruption to the streetscape.</li> </ul> <p>Strategy 4-10.1. Sidewalk Access to Parking or Buildings. Examine sidewalk to parking areas or building frontages at the time individual sites develop to regulate the entry to the site at a central point. Sidewalks in the Crossroads Area shall be wide enough to accommodate increased pedestrian activity.</p> <p>Strategy 4-10.2. Bus Stop Turnouts in Street Frontages. Require bus stop turnouts, or partial turnouts, within the street frontage of a new or redeveloping</p>

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-3 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>site. This policy does not apply to the Crossroads Area. Bus stops should include benches, trash receptacles and other amenities as appropriate. Follow the VTA specifications for improving bus stops.</p> <ul style="list-style-type: none"> <li>▪ Policy 4-11: Safe Parking Lots Require parking lots that are safe for pedestrians. Strategy 4-11.1 Safe Spaces for Pedestrians. Require parking lot design and construction to include clearly defined spaces for pedestrians so that foot traffic is separated from the hazards of car traffic and people are directed from their cars to building entries.</li> <li>▪ Policy 4-15: School Impacts on Neighborhoods Minimize the impact of school drop-off, pick-up and parking on neighborhoods. Strategy 4-15.1. Coordination with School Districts. Work with the School Districts to develop plans and programs that encourage car/van-pooling, stagger hours of adjacent schools, drop-off locations, encourage walking and bicycling to school. Assist Districts in the development of the “Safe Routes to School Program” to encourage more students walking and bicycling and less use of auto access.</li> <li>▪ Policy 5-2: Conservation and Efficient Use of Energy Resources Encourage the maximum feasible conservation and efficient use of electrical power and natural gas resources for new and existing residences, businesses, industrial and public uses. Strategy 5-2.10. Energy Efficient Transportation Modes. Encourage alternative, energy efficient transportation modes such as “clean” multi-modal public transit, car and vanpooling, flexible work hours, and pedestrian and bicycle paths.</li> </ul>
<p>Land Use and Local Impact Control Measures</p>	<ul style="list-style-type: none"> <li>▪ LUM 1 – Goods Movement</li> <li>▪ LUM 2 – Indirect Source Review</li> <li>▪ LUM 3 – Enhanced CEQA Program</li> <li>▪ LUM 4 – Land Use Guidelines</li> <li>▪ LUM 5 – Reduce Risk in Impacted Communities</li> <li>▪ LUM 6 – Enhanced Air Quality Monitoring</li> </ul>	<p>The 2010 Bay Area Clean Air Plan also includes land use measures to reduce air quality emissions and/or air quality exposure in the SFBAAB. The following policies support these land use measures:</p> <ul style="list-style-type: none"> <li>▪ Policy 5-4: Air Pollution Effects of New Development. Minimize the air quality impacts of new development projects and the impacts affecting new development. Strategy 5-4.1. Toxic Air Contaminants. Review projects for potential generation of toxic air contaminants at the time of approval and confer with BAAQMD on controls needed if impacts are uncertain. Strategy 5-4.2. Dust Control. Require water application to non-polluting dust control measures during demolition and the duration of the construction period. Strategy 5-4.3. Planning Decisions. Assess the potential for air pollution effects of future land use and transportation planning, and ensure that planning decisions support regional goals of improving air quality.</li> </ul>

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-3 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>Strategy 5-4.4. Environmental Review. Evaluate the relationship of sensitive receptors, such as convalescent hospitals and residential uses, to pollution sources through the environmental assessment of new development.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-5: Air Pollution Effects of Existing Development Minimize the air quality impacts of existing development.</li> </ul> <p>Strategy 5-5.1. Public Education Program. Establish a citywide public education program regarding the implications of the Clean Air Act and provide information on ways to reduce and control emissions; provide information about carpooling and restricting physical activities on “Spare the Air” high-pollution days.</p> <p>Strategy 5-5.2. Home Occupations. Expand the allowable home occupations in residentially zoned properties to reduce the need to commute to work.</p> <p>Strategy 5-5.3. Tree Planting. Increase planting of trees on City property and encourage the practice on private property.</p> <p>Strategy 5-5.4. Fuel-efficient Vehicles. Maintain City use of fuel-efficient and low polluting vehicles.</p> <p>Strategy 5-5.5. Work with County to monitor and influence improvement of emissions and dust from the Hanson and Stevens Creek Quarries on the West end of the City.</p> <ul style="list-style-type: none"> <li>▪ Policy 2-6: Neighborhood Compatibility. Minimize potential conflicts with residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, limitations, site design and other appropriate measures. Create zoning or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through measures such as: daylight planes for single-family development, minimum setback standards, landscape screening, acoustical analysis, location and orientation of service areas away from residential uses and limitations on hours of operation.</li> <li>▪ Policy 6-29: Proximity of Residents to Hazardous Materials Assess future residents’ exposure to hazardous materials when new residential development of childcare facilities are proposed in existing industrial and manufacturing areas. Do not allow residential development if such hazardous conditions cannot be mitigated to an acceptable level of risk.</li> </ul>
<p>Energy and Climate Control Measures</p>	<ul style="list-style-type: none"> <li>▪ ECM 1 – Energy Efficiency</li> <li>▪ ECM 2 – Renewable Energy</li> <li>▪ ECM 3 – Urban Heat Island Mitigation</li> </ul>	<p>The 2010 Bay Area Clean Air Plan also includes measures to reduce energy use, water use, and waste generation. The following policies support these energy efficiency and other sustainability measures:</p>

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-3 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
<ul style="list-style-type: none"> <li>▪ ECM 4 – Tree Planting</li> </ul>	<ul style="list-style-type: none"> <li>▪ Policy 5-1: Principles of Sustainability Incorporate the principles of sustainability into Cupertino’s planning and development system. Strategy 5-1.1. Appoint a Task Force or Commission to develop an appropriate comprehensive annual Sustainability and Resource Plan for the City. The mission for the Task Force/Commission would be:                             <ul style="list-style-type: none"> <li>a. Write and keep current the annual Tactical Plan and measurement of citywide programs to help achieve the Environmental Resources and Sustainability section of the General Plan.</li> <li>b. Identify and evaluate resources, technologies, products and the lifecycle cost of ownership for each recommended.</li> <li>c. Work with City staff to evaluate the financial feasibility of the recommendations.</li> </ul>                             Strategy 5-1.2. Implementation Programs. Adopt and implement energy policies and implementation programs that include the City’s planning and regulatory process. Strategy 5-1.3. City-Wide Inventory. Conduct a citywide sustainability inventory in order to identify issues, opportunities and planning alternatives. Strategy 5-1.4. Sustainable Energy and Water Conservation Plan. Prepare and implement a comprehensive sustainability energy plan as a part of the City’s General Plan. This plan will specifically include recommendations regarding:                             <ul style="list-style-type: none"> <li>a. Reduction of energy consumption.</li> <li>b. Reduction of fossil fuels.</li> <li>c. Use of renewable energy resources whenever possible.</li> <li>d. Improve citywide water usage and conservancy.</li> <li>e. Reduce water consumption by the City.</li> <li>f. Promote residential and business water reduction.</li> </ul>                             Strategy 5-1.5. Community Gardens. Encourage community gardens, which provide a more livable environment by controlling physical factors such as temperature, noise, and pollution.                             <ul style="list-style-type: none"> <li>▪ Policy 5-2: Conservation and Efficient Use of Energy Resources Encourage the maximum feasible conservation and efficient use of electrical power and natural gas resources for new and existing residences, businesses, industrial and public uses. Strategy 5-2.1. Alternate Energy Sources. Encourage the use of solar energy and other alternate, renewable energy resources for all new and significantly</li> </ul> </li> </ul>	

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-3 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>renovated private and public buildings. Ensure that all homes have an acceptable balance of access to the sun and protection from it. Promote new technologies, such as waterless water heaters to effect this change.</p> <p>Strategy 5-2.2. Comprehensive Energy Management Plan. Prepare and implement a comprehensive energy management plan for all applicable public facilities, equipment and procurement and construction practices.</p> <p>Strategy 5-2.3. Consistency with State and Federal Regulation. Review and evaluate applicable City codes, ordinances, and procedures for inclusion of local, state and federal policies and standards that promote the conservation and efficient use of energy and for consistency with the goal of sustainability. Change those that will promote energy efficiency without a punitive effect.</p> <p>Strategy 5-2.4. Energy Efficient Replacements. Using life cycle cost analysis, identify City assets for replacement with more energy efficient replacements.</p> <p>Strategy 5-2.5. Incentive Program. Implement an incentive program to include such items as reduced permit fees for building projects that exceed Title 24 requirements. Promote other incentives from the State, County and Federal Governments for improving energy efficiency by posting information regarding incentive, rebate and tax credit programs on the City's web site. Let's make learning about this easy and help those interested get started!</p> <p>Strategy 5-2.6. Solar Access Standards. Ensure compliance with the State of California Subdivision Map Act solar access standards in order to maximize natural heating and cooling opportunities for future residences. Encourage the inclusion of additional shade trees and landscaping for energy efficiency.</p> <p>Strategy 5-2.7 [A]. Educational Programs:</p> <ul style="list-style-type: none"> <li>▪ Develop conservation/efficiency educational programs serving all utility users.</li> <li>▪ Provide informational materials and participate in energy conservation workshops.</li> <li>▪ Provide educational materials, seminar and staff training on energy conservation/ efficiency for those who design, build and manage building facilities, and for those who regulate building design and construction.</li> <li>▪ In partnership with De Anza College, develop a "Sustainable Building Practices" guide for Cupertino residents and businesses. The Guide should include information regarding current rebates and subsidies to make implementing a sustainable building more financially attractive with references back to the City, State, Federal and other web sites for up-to-date information.</li> <li>▪ Provide education materials, seminars and a certification program for</li> </ul>

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-3 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>contractors and architects who have participated in “Sustainable Building” courses. Many of the curriculums are currently available at De Anza College. As an incentive for participating in the “Sustainable Building” program, the City will maintain a “Sustainable Builder/ Developer” page on their current City website. This page will not be an endorsement of the individual or company listed, but a resource center for the community.</p> <ul style="list-style-type: none"> <li>▪ Establish and maintain an Energy Information Center or Kiosk at City Hall where information concerning energy issues, building standards, recycling and assistance is available.</li> <li>▪ Require residents and businesses that are remodeling to review and sign as acknowledgment that they have reviewed the “Sustainable Building Practices” guide prior to permits being issued.</li> </ul> <p>Strategy 5-2.7 [B]. Energy Cogeneration Systems. Encourage the use of energy cogeneration systems through the provision of an awareness program targeting the larger commercial and industrial users and public facilities.</p> <p>Strategy 5-2.8. Regulation of Building Design: Ensure designer, developers, applicants and builders meet California Title 24 Energy Efficient Building Standards and encourage architects, building designers and contractors to exceed “Title 24” requirements for new projects through the provision of incentives. Encourage either passive solar heating and/or dark plaster interior with a cover for swimming pools, cabanas and other related accessory uses where solar access is available. Encourage the use of alternative renewable sources where feasible, and develop energy audits or subvention programs.</p> <p>Strategy 5-2.9. Use of Discretionary Development Permits (Use Permits): Require, as conditions of approval for new and renovated projects, the provision of energy conservation/efficiency applications.</p> <ul style="list-style-type: none"> <li>▪ Environmental Resources/Sustainability Element Policy 5-3: Green Building Design Set standards for the design and construction of energy and resource conserving/ efficient building (Green Building Design).</li> </ul> <p>Strategy 5-3.1. “Green Building” Program. Prepare and implement “Green Building” standards for all major private and public projects that ensure reduction in energy consumption for new development through site and building design.</p> <p>Strategy 5-3.2. Building energy audits. Participate in and encourage building energy audits, where feasible, for commercial, industrial and city facilities and convey to the business and industrial communities that energy conservation/efficiency is, in the long term, economically beneficial. PG&amp;E also</p>



**NO PROJECT ALTERNATIVE**

**TABLE 5.1-3 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>offers energy evaluation tools and services free of charge.</p> <p>Strategy 5-3.3. “Green Buildings” Evaluation Guide. Prepare a “Green Buildings” evaluation guide based upon the above listed “essential components” for use by the city staff when reviewing projects.</p> <p>Strategy 5-3.4. Staff Training. Train appropriate staff in the design principles, costs and benefits of energy conservation/efficient buildings and landscape design.</p> <p>Strategy 5-3.5. “Green Buildings” Informational Seminars. Conduct and/or participate in “Green Buildings” informational seminars and workshops to include people involved in the design and construction industry, land development, real estate sales, lending institutions, landscaping and design, the building maintenance industry and prospective project applicants. We recommend modeling this program after the CERT program.</p> <p>Strategy 5-3.6. Public Communication: Become a regular feature article in the Cupertino Scene, do media outreach to the Courier and the Guide (San Jose Mercury) tape the Sustainable Building and other conservation courses, or seminars and broadcast them on the City Channel as well, and make them available at the Library.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-7: Use of Open Fires and Fireplaces. Discourage high pollution fireplace use.</li> </ul> <p>Strategy 5-7.1. BAAQMD Literature. Make available BAAQMD literature on reducing pollution from fireplace use.</p> <p>Strategy 5-7.2. Installation of New Fireplaces. Prohibit the use of wood-burning fireplaces in new construction, except for Environmental Protection Agency Certified Woodstoves.</p> <ul style="list-style-type: none"> <li>▪ Environmental Resources/Sustainability Element Policy 5-28: Interagency Coordination. Actively pursue interagency coordination for regional water supply problem solving.</li> <li>▪ Environmental Resources/Sustainability Element Policy 5-29: Coordination of Local Conservation Policies with Regionwide Conservation Policies Coordinate citywide water conservation efforts with the Santa Clara Valley Water District efforts being conducted on a regional scale. Many of these conservation efforts are outlined in the Santa Clara Valley Water District Drought Plan and Countywide Water Use Reduction program.</li> <li>▪ Environmental Resources/Sustainability Element Policy 5-30: Public Information Effort Provide the public information regarding water conservation/efficiency</li> </ul>

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-3 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>techniques, including how paving and other impervious surfaces impact runoff.</p> <p>Strategy 5-30. 1. Consider sending regular notices to households and businesses on water prohibitions, water allocations and conservation tips. Become a regularly featured article in the Cupertino Scene, Courier and Guide. Provide conservation videotapes on the City’s government channel. Include water-wise demonstration gardens in some parks where feasible as they are re-landscaped or improved using draught tolerant native and noninvasive, non-native plants. Work with the County Master Gardeners to identify water-wise plant materials and irrigation methods for use in public and private areas. This information should be posted on the Sustainable portion of the City’s web site and included in Cupertino Scene Sustainable column.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-31: Water Use Efficiency. Promote efficient use of water throughout the City.</li> </ul> <p>Strategy 5-31.1. Landscaping Plans. Require water-efficient landscaping plans that incorporate the usage of recycled water for landscape irrigation as part of the development review process.</p> <p>Strategy 5-31.2. Water Conservation Programs. Work with the Santa Clara Valley Water District to undertake programs that promote water use efficiency for residential and commercial customers. Maintain programs for long-term water conservation at City Buildings, including installation of low flow toilets and showers, installation of automatic shut off valves in lavatories and sinks and water efficient outdoor irrigation.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-38: Commercial/Industrial. Recycling Expand existing commercial and industrial recycling programs to meet and surpass AB939 waste stream reduction goals.</li> </ul> <p>Strategy 5-38.1. Increase Recycling. Request that all commercial and industrial uses increase their recycling efforts to help the city achieve its recycling goals.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-39: Residential Recycling Streamline the residential curbside recycling program in the next decade. Include all citywide residential Zoning designations in the curbside recycling program.</li> </ul> <p>Strategy 5-39.1. Coordination with Los Altos Garbage Company. Work closely with the Los Altos Garbage Company to develop and implement efficient and effective recycling methods.</p> <p>Strategy 5-39.2. E-Waste Recycling Program. Continue /make permanent the e-waste recycling program.</p> <p>Strategy 5-39.3. Curbside Recycling of yard waste. Include vegetable; fruit and</p>

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-3 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>other appropriate food items, as well as, recycling of non-reusable batteries as the City of Palo Alto does.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-40: On-site Garbage Area Dedication. Modify existing, and require for new developments, on-site waste facility requirements for all multi-family residential, commercial and industrial land uses to have 50% of their garbage area dedicated to recycling and no more than 50% garbage.</li> </ul> <p>Strategy 5-40.1. Ordinance Revisions. Revise existing ordinances relative to on-site waste facility requirements for all multi-family residential, commercial and industrial Zoning designations to require that a minimum of 50% of garbage area be dedicated to recycling.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-41: Public Education. Promote the existing public education program regarding the reduction of solid waste disposal and recycling.</li> </ul> <p>Strategy 5-41.1. Recycling Program Information. Use the local television channel, the Cupertino Scene, the Internet and other available media to provide information to the residents about the objectives of the City’s recycling program.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-42: City Recycling Encourage City staff to recycle at all City facilities.</li> </ul> <p>Strategy 5-42. 1. Recycling Opportunities. Provide collection bins and increase the number of existing recycling bins at strategically located areas to facilitate disposal of recyclable materials, including all City parks.</p> <p>Strategy 5-42. 2. Schools and Institutions. Partner with schools/institutions in Cupertino to ensure that they understand and are adhering to the City’s recycling goals and providing adequate recycling opportunities to staff and students.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-43: Re-distribution of Reusable Materials Through public education, encourage residents and businesses to re-distribute reusable materials, e.g. garage sales, materials exchange.</li> </ul> <p>Strategy 5-42. 1. Dissemination of Recycling Information. Disseminate information to both businesses and residents regarding the benefits of recycling and further reducing the solid waste stream. Use of the Internet. Set up a web site for the benefit of the public where the availability of recyclable materials can be posted and exchanges can be conducted.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-44: Reuse of Building Materials. Encourage the recycling and reuse of building materials, including recycling materials generated by the demolition and remodeling of buildings.</li> </ul> <p>Strategy 5-44. 1. Post Demolition and Remodeling Projects. Encourage contractors to post demolition and remodeling projects on the Internet announcing the availability of potential reusable materials.</p>

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-3 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
Further Study Control Measures	<ul style="list-style-type: none"> <li>▪ FSM 1 – Adhesives and Sealants</li> <li>▪ FSM 2 – Reactivity in Coating and Solvents</li> <li>▪ FSM 3 – Solvent Cleaning and Degreasing Operations</li> <li>▪ FSM 4 – Emissions from Cooling Towers</li> <li>▪ FSM 5 – Equipment Leaks</li> <li>▪ FSM 6 – Wastewater from Coke Cutting</li> <li>▪ FSM 7 – SO<sub>2</sub> from Refinery Processes</li> <li>▪ FSM 8 – Reduce Emission from LPG, Propane, Butane, and other Pressurized Gases</li> <li>▪ FSM 9 – Greenhouse Gas Mitigation in BACT and TBACT Determinations</li> <li>▪ FSM 10 Further Reductions from Commercial Cooking Equipment</li> <li>▪ FSM 11 – Magnet Source Rule</li> <li>▪ FSM 12 – Wood Smoke</li> <li>▪ FSM 13 – Energy Efficiency and Renewable Energy</li> <li>▪ FSM 14 – Winery Fermentation</li> <li>▪ FSM 15 – Composting Operations</li> <li>▪ FSM 16 – Vanishing Oils and Rust Inhibitors</li> <li>▪ FSM 17 – Ferry System Expansion</li> <li>▪ FSM 18 – Greenhouse Gas Fee</li> </ul>	<p>Strategy 5-44. 2. Public and Private Projects. Require contractors working on City projects to use recycled building materials and sustainably harvested wood products to the maximum extent possible and encourage them to do the same on private projects.</p> <p>The majority of the Further Study control measures apply to sources regulated directly by BAAQMD. Because BAAQMD is the implementing agency, new and existing sources of stationary and area sources in the City would be required to comply with these additional further study control measures in the 2010 Bay Area Clean Air Plan.</p>

Source: Bay Area Air Quality Management District, 2011 Revised, California Environmental Quality Act Air Quality Guidelines.

## Regional Growth Projections for VMT and Population and Employment

Future development under the No Project Alternative would result in additional sources of criteria air pollutants. Growth accommodated within the City would occur over a 20-year or longer time horizon. As a result, BAAQMD's approach to evaluating impacts from criteria air pollutants generated by long-term growth associated with a plan is done in comparison to BAAQMD's AQMP rather than a comparison of emissions to project-level significance thresholds. This is because BAAQMD's AQMP plans for growth in the SFBAAB are based on regional population and employment projections identified by ABAG and growth in VMT identified by VTA. Changes in regional, community-wide emissions in Cupertino could affect the ability of BAAQMD to achieve the air quality goals identified in the AQMP. Consequently, air quality impacts for a plan-level analysis are based on consistency with the regional growth projections.

As previously discussed under subheading "Attain Air Quality Standards" above, the additional residential population resulting from implementation of the No Project Alternative would be within the regional population projections (7,827 fewer residents) and would not exceed the regional employment projections (2,412 less employees). Future growth under the No Project Alternative would come incrementally over approximately 26 years and would be guided by a policy framework that is generally consistent with many of the principal goals and objectives established in regional planning initiatives for the Bay Area. The General Plan includes policies and strategies that, once adopted, would ensure coordination with regional agencies on regional planning initiatives. Policy 5-4, Air Pollution Effects of New Development, would require the City to minimize the air quality impacts of new development projects and the impacts affecting new development. Supporting Strategy 3 would require the City to assess the potential for air pollution effects of future land use and transportation planning, to ensure that planning decisions support regional goals of improving air quality. The Circulation Element also includes policies regarding coordination with regional transportation planning agencies. Policy 4-1, City Participation in Regional Transportation Planning, would require the City to actively participate in developing regional approaches to meeting the transportation needs of the residents of the Santa Clara Valley. Growth identified under the No Project Alternative would be consistent with the regional planning objectives established for the Bay Area, which concentrates new development within infill sites.

Citywide VMT estimates derived from assumed 2040 land use under the No Project Alternative were calculated by Hexagon Transportation Consultants, using the Santa Clara Valley Transportation Agency (VTA) model. Land uses in the City generate 897,419 VMT per day (10.47 miles per service population per day in 2013). Based on the future estimates of VMT per person for Cupertino as projected by the VTA model for year 2040, 997,145 VMT per day (10.53 miles per service population per day in 2040) would be generated in the City. Table 5.1-4 compares the projected increase in service population with the projected increase in VMT. As shown in this table, daily VMT in the Project Study Area would increase at a greater rate (11.1 percent) between 2013 and 2040 than would the service population of the Project Study Area (10.5 percent). However, BAAQMD's AQMP requires that the VMT increase be less than or equal to the projected population increase of the project. The No Project Alternative would result in a higher VMT rate of growth than rate of service population growth. Consequently, impacts for the City of Cupertino would be *significant*.

## NO PROJECT ALTERNATIVE

TABLE 5.1-4 COMPARISON OF THE CHANGE IN SERVICE POPULATION AND VMT FOR THE NO PROJECT ALTERNATIVE

Category	2013	2040 Land Use Alt. A	Change	Percent Change
Population	58,302	63,873	5,571	9.6%
Employment	27,387	30,848	3,461	12.6%
Total Service Population	85,689	94,721	9,032	10.5%
VMT/Day	897,419	997,145	99,726	11.1%

Notes: VMT is provided by Hexagon based on the VTA model.

### *Applicable Regulations*

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations: Appliance Energy Efficiency Standards
- Title 24, Part 6, California Code of Regulations: Building and Energy Efficiency Standards
- Title 24, Part 11, California Code of Regulations: Green Building Standards Code
- CARB Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- CARB Rule 2477 (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate
- BAAQMD, Regulation 2, Rule 2, New Source Review
- BAAQMD, Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
- BAAQMD Regulation 6, Rule 1, General Requirements
- BAAQMD Regulation 6, Rule 2, Commercial Cooking Equipment
- BAAQMD Regulation 7, Odorous Substances
- BAAQMD Regulation 8, Rule 3, Architectural Coatings
- BAAQMD Regulation 8, Rule 4, General Solvent and Surface Coatings Operations
- BAAQMD Regulation 8, Rule 7, Gasoline Dispensing Facilities
- BAAQMD Regulation 11, Rule 2, Asbestos, Demolition, Renovation and Manufacturing

While the No Project Alternative would support the primary goals of the 2010 Bay Area Clean Air Plan, the buildout of the No Project Alternative would conflict with the BAAQMD Bay Area Clean Air Plan goal for community-wide VMT to increase at a slower rate compared to population and employment growth. The rate of growth in VMT would exceed the rate of population and employment growth, resulting in a substantial increase in regional criteria air pollutant emissions in Cupertino. Consequently, impacts are *significant*.

**NO PROJECT ALTERNATIVE**

## Mitigation Measures

There are no additional measures available to mitigate this impact.

The Plan Bay Area aims to improve transportation efficiency and reduce regional infrastructure costs in the region. Policies and development standards in the No Project Alternative would facilitate continued City participation/cooperation with BAAQMD and VTA to achieve regional air quality improvement goals, promote energy conservation design and development techniques, encourage alternative transportation modes, and implement transportation demand management strategies. However, due to the level of growth forecast in the city and the programmatic nature of the No Project Alternative, no additional mitigating policies or development standards are available and project-level and cumulative impacts are considered *significant and unavoidable*.

**Significance With Mitigation:** Significant and unavoidable.

---

**AQ-2                      Implementation of the No Project Alternative would violate any air quality standard or contribute substantially to an existing or projected air quality violation.**

---

BAAQMD has identified thresholds of significance for criteria pollutant emissions and criteria air pollutant precursors, including Reactive Organic Gases (ROG), Nitric Oxide (NO), PM<sub>10</sub> and PM<sub>2.5</sub>. Development projects below the significance thresholds are not expected to generate sufficient criteria pollutant emissions to violate any air quality standard or contribute substantially to an existing or projected air quality violation. According to BAAQMD's CEQA Guidelines, long-range plans (e.g. general plan, redevelopment plans, specific plans, area plans, community plans, regional plans, congestion management plans, etc.) present unique challenges for assessing impacts. Due to the SFBAAB's nonattainment status for ozone and PM and the cumulative impacts of growth on air quality, these plans almost always have significant, unavoidable adverse air quality impacts.

## Operational Emissions

Although BAAQMD's CEQA Air Quality Guidelines only require an emissions inventory of criteria air pollutants for project-level analyses, an inventory of criteria air pollutants was generated for the No Project Alternative, since enough information regarding the buildout of the General Plan is available and can be used to identify the magnitude of emissions from buildout of the No Project Alternative. Table 5.1-5 identifies the emissions associated with buildout of the No Project Alternative. Subsequent environmental review of development projects would be required to assess potential impacts under BAAQMD's project-level thresholds.

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-5 COMMUNITY-WIDE CRITERIA AIR POLLUTANTS GENERATED BY THE NO PROJECT ALTERNATIVE**

Category	Criteria Air Pollutants (average lbs/day)			
	ROG	NO <sub>x</sub>	Exhaust PM <sub>10</sub>	Exhaust PM <sub>2.5</sub>
Transportation <sup>a</sup>	60	341	117	51
Energy <sup>b</sup>	52	457	36	36
Area Sources <sup>c</sup>	1,459	747	54	53
<b>Total</b>	<b>1,571</b>	<b>1,545</b>	<b>206</b>	<b>140</b>
Change from 2013 Land Uses	149	1,288	173	117
BAAQMD Average Daily Project-Level Threshold	54	54	82	54
<b>Exceeds Average Daily Threshold</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Total Tons per Year (tpy)	285 tpy	273 tpy	36 tpy	25 tpy
Change from 2013 Land Uses	27 tpy	16 tpy	3 tpy	2 tpy
BAAQMD Annual Project-Level Threshold	10 tpy	10 tpy	15 tpy	10 tpy
<b>Exceeds Annual Threshold</b>	<b>Yes</b>	<b>Yes</b>	No	No

Note: Emissions may note total to 100 percent due to rounding.

a. Transportation. VMT is based on data provided by Hexagon, based on VTA model for Cupertino and modeled with EMFAC2011-PL for running exhaust emissions using 2035 emission rates (note: 2040 emissions rates are not available). VMT is multiplied by 347 days/year to account for reduced traffic on weekends and holidays.

b. Energy. Based on three-year average (2012–2010) of energy use provided by Pacific Gas & Electric (PG&E) and forecast based on the No Project Alternative housing units (residential), employment (non-residential), and service population (City) projections. The nonresidential sector includes direct access customers, county facilities, and other district facilities within the City boundaries.

c. Area Sources – Off-road Emissions. Generated using OFFROAD2007. Estimated based on population (Landscaping), employment (Light Commercial Equipment), and construction building permits (Construction) for Cupertino as a percentage of Santa Clara County. Annual construction emissions forecasts are assumed to be similar to historic levels. Forecasts for landscaping equipment use are based on the No Project Alternative population projections, and for light commercial equipment use are based on the No Project Alternative employment projections. Excludes BAAQMD-permitted sources. ROG emissions from consumer product use based on the emissions rates in CalEEMod 2013.2.2. Daily construction emissions multiplied by 347 days/year to account for reduced/limited construction activity on weekends and holidays. Excludes fugitive emissions from construction sites.

Policies and strategies in the current General Plan, once adopted, would reduce criteria air pollutants from development projects. Within the current Land Use/ Community Design Element Policy 2-2, Connections between Major Mixed-Use Special Areas, Employment Centers and the Community, requires the City to provide strong connections between the major mixed-use Special Areas, employment centers, and the surrounding community. Strategy 1, Neighborhood Connections, requires the City to enhance pedestrian and bicycle connections from the major mixed-use corridors and employment centers to surrounding neighborhoods. Strategy 2 for this policy, Public Access, requires the City to provide pedestrian and bicycle paths through new and redevelopment projects to enhance public access to and through the development. Policy 2-9, Long Term Growth Boundary, requires the City to allow modification of the long-term growth boundary only in conjunction with a comprehensive review of the City’s General Plan. Policy 2-19, Jobs/Housing Balance, requires the City to strive for a more balanced ratio of jobs and housing units. Strategy 1, Housing and Mixed-Use, requires the City to strive to achieve a balanced jobs/housing ratio based on the policies and strategies contained in the Housing Element. Under this policy, strategy 2,



**NO PROJECT ALTERNATIVE**

Housing Impact on Local Schools, states that since the quality of Cupertino schools (elementary and high school) is a primary asset of the City, care shall be taken to ensure any new housing will not adversely impact these systems. Policy 2-26, Heart of the City Special Area, requires the City to create a positive and memorable image along Stevens Creek Boulevard of mixed-use development; enhanced activity gateways and nodes; and safe and efficient circulation and access for all modes of transportation. Strategy 1 under this policy, Heart of the City Specific Plan, requires the City to maintain the Heart of the City Specific Plan as the primary implementation tool for the City to use for this area. Strategy 2, Traffic Calming, requires the City to evaluate options on Stevens Creek Boulevard to improve the pedestrian environment by proactively managing speed limits and traffic signal synchronization. Policy 2-57, Pedestrian Access, requires the City to create pedestrian access between new subdivisions and school sites. Review existing neighborhood circulation plans to improve safety and access for pedestrians and bicyclists to school sites, including completing accessible network of sidewalks and paths. Strategy 1 under this policy, Cupertino Pedestrian Transportation Guidelines, requires the City to implement the recommendations of the Cupertino Pedestrian Transportation Plan to develop a City trail/pedestrian linkage between major mixed-use corridors, employment centers, neighborhoods, and major open space areas. Strategy 2, Trail Projects, requires the City to implement the trail projects described in this element. Evaluate any safety, security and privacy impacts and mitigations associated with trail development. Work with affected neighborhoods in locating trails. Strategy 3, Dedicated Trails or Easements, calls for the City to require dedication or easements for trails, as well as their implementation, as part of the development process, where appropriate.

Within the current Environmental Resources/Sustainability Element Policy 5-1, Principles of Sustainability, requires the City to incorporate the principles of sustainability into Cupertino's planning and development system. Strategy 1 under this policy requires the City to appoint a Task Force or Commission to develop an appropriate comprehensive annual Sustainability and Resource Plan for the City. The mission for the Task Force/Commission would be threefold. First, it must write and keep current the annual Tactical Plan and measurement of citywide programs to help achieve the Environmental Resources and Sustainability section of the General Plan. Second, it must identify and evaluate resources, technologies, products and the lifecycle cost of ownership for each recommended. Lastly it must work with City staff to evaluate the financial feasibility of the recommendations. Strategy 2, Implementation Programs, requires the City to adopt and implement energy policies and implementation programs that include the City's planning and regulatory process. Strategy 3, Citywide Inventory, requires the City to conduct a citywide sustainability inventory in order to identify issues, opportunities and planning alternatives. Strategy 4, Sustainable Energy and Water Conservation Plan, requires the City to prepare and implement a comprehensive sustainability energy plan as a part of the City's General Plan. This plan will specifically include recommendations regarding; reduction of energy consumption, reduction of fossil fuels, use of renewable energy resources whenever possible, improve citywide water usage and conservancy, reduce water consumption by the City, and promote residential and business water reduction. Strategy 5, Community Gardens, requires the City to encourage community gardens, which provide a more livable environment by controlling physical factors such as temperature, noise, and pollution. Policy 5-2, Conservation and Efficient Use of Energy Resources, requires the City to encourage the maximum feasible conservation and efficient use of electrical power and natural gas resources for new and existing residences, businesses, industrial and public uses. Strategy 2 under this policy, Comprehensive Energy Management Plan, requires the City to prepare and implement a comprehensive energy management plan for all applicable public facilities, equipment and procurement and

## NO PROJECT ALTERNATIVE

construction practices. Strategy 3, Consistency with State and Federal Regulation, requires the City to review and evaluate applicable City codes, ordinances, and procedures for inclusion of local, state and federal policies and standards that promote the conservation and efficient use of energy and for consistency with the goal of sustainability. Change those that will promote energy efficiency without a punitive effect. Strategy 4, Energy Efficient Replacements, requires the City to identify City assets for replacement with more energy efficient replacements using life cycle cost analysis. Strategy 5, Incentive Program, requires the City to implement an incentive program to include such items as reduced permit fees for building projects that exceed Title 24 requirements. Promote other incentives from the State, County and Federal Governments for improving energy efficiency by posting information regarding incentive, rebate and tax credit programs on the City's web site. Strategy 7[B], Energy Cogeneration Systems, requires the City to encourage the use of energy cogeneration systems through the provision of an awareness program targeting the larger commercial and industrial users and public facilities. Strategy 8, Regulation of Building Design, requires the City to ensure designer, developers, applicants and builders meet California Title 24 Energy Efficient Building Standards and encourage architects, building designers and contractors to exceed "Title 24" requirements for new projects through the provision of incentives. Encourage either passive solar heating and/or dark plaster interior with a cover for swimming pools, cabanas and other related accessory uses where solar access is available. Encourage the use of alternative renewable sources where feasible, and develop energy audits or subvention programs. Strategy 9 under this policy, Use of Discretionary Development Permits (Use Permits), calls for the City to require, as conditions of approval for new and renovated projects, the provision of energy conservation/efficiency applications. Strategy 10, Energy Efficient Transportation Modes, requires the City to encourage alternative, energy efficient transportation modes such as "clean" multi-modal public transit, car and vanpooling, flexible work hours, and pedestrian and bicycle paths.

Policy 5-3, Green Building Design, requires the City to set standards for the design and construction of energy and resource conserving/ efficient building (Green Building Design). Strategy 1 under this policy, "Green Building" Program, requires the City to prepare and implement "Green Building" standards for all major private and public projects that ensure reduction in energy consumption for new development through site and building design. Strategy 2, Building energy audits, requires the City to participate in and encourage building energy audits, where feasible, for commercial, industrial and city facilities and convey to the business and industrial communities that energy conservation/efficiency is, in the long term, economically beneficial. PG&E also offers energy evaluation tools and services free of charge. Strategy 3, "Green Buildings" Evaluation Guide, requires the City to prepare a "Green Buildings" evaluation guide based upon the above listed "essential components" for use by the city staff when reviewing projects. Strategy 4, Staff Training, requires the City to train appropriate staff in the design principles, costs and benefits of energy conservation/efficient buildings and landscape design. Strategy 5, "Green Buildings" Informational Seminars, requires the City to conduct and/or participate in "Green Buildings" informational seminars and workshops to include people involved in the design and construction industry, land development, real estate sales, lending institutions, landscaping and design, the building maintenance industry and prospective project applicants. We recommend modeling this program after the CERT program. Strategy 6, Public Communication, requires the City to become a regular feature article in the Cupertino Scene, do media outreach to the Courier and the Guide (San Jose Mercury) tape the Sustainable Building and other conservation courses, or seminars and broadcast them on the City Channel as well, and make them available at the Library.

**NO PROJECT ALTERNATIVE**

Policy 5-5, Air Pollution Effects of Existing Development, requires the City to minimize the air quality impacts of existing development. Strategy 1 under this policy, Public Education Program, requires the City to establish a citywide public education program regarding the implications of the Clean Air Act and provide information on ways to reduce and control emissions; provide information about carpooling and restricting physical activities on “Spare the Air” high-pollution days. Strategy 2, Home Occupations, requires the City to expand the allowable home occupations in residentially zoned properties to reduce the need to commute to work. Strategy 3, Tree Planting, requires the City to increase planting of trees on City property and encourage the practice on private property. Strategy 4, Fuel-efficient Vehicles, requires the City to maintain City use of fuel-efficient and low polluting vehicles. Strategy 5 requires the City to work with Santa Clara County to monitor and influence improvement of emissions and dust from the Hanson and Stevens Creek Quarries on the West end of the City. Policy 5-6, Walking, Jogging and Bicycling, requires the City to encourage walking, jogging and bicycling instead of driving in the City. Policy 5-7, Use of Open Fires and Fireplaces, requires the City to discourage high pollution fireplace use. Strategy 1 under this policy, BAAQMD Literature, requires the City to make available BAAQMD literature on reducing pollution from fireplace use. Strategy 2, Installation of New Fireplaces, requires the City to prohibit the use of wood-burning fireplaces in new construction, except for Environmental Protection Agency Certified Woodstoves.

Within the current Circulation Element policy 4-1, City Participation in Regional Transportation Planning, requires the City to participate actively in developing regional approaches to meeting the transportation needs of the residents of the Santa Clara Valley. Work closely with neighboring jurisdictions and agencies responsible for roadways, transit facilities and transit services in Cupertino. Strategy 2 under this policy, Jobs–Housing Balance, requires the City to minimize regional traffic impacts on Cupertino by supporting regional planning programs to manage the jobs-housing balance throughout Santa Clara County and the Silicon Valley. Strategy 6 under this policy, Multi-modal Transportation, requires the City to ensure that connections are provided to enable travelers to transition from one mode of transportation to another, e.g. bicycle to bus. Strategy 7 under this policy, Regional Bus and Rapid Transit Service, requires the City to support the expansion of the VTA’s regional bus transit system and extension of bus and/or light rail rapid transit into the Stevens Creek and De Anza Corridors to fulfill the “spoke and wheel” transit system designed to serve all of Santa Clara County. Specific actions to implement this strategy are: review all right-of-way improvement projects for potential opportunities and constraints to rapid transit development; seek the cooperative support of residents, property owners and businesses in planning rapid transit extensions; actively seek to have Cupertino represent West Valley cities and ultimately chair the VTA Board of Directors to promote the above policy.

Policy 4-2, Reduced Reliance on the Use of Single-Occupant Vehicles, requires the City to promote a general decrease in reliance on private, mostly single-occupant vehicles (SOV) by encouraging attractive alternatives. Strategy 1 under this policy, Alternatives to the SOV, requires the City to encourage the use of alternatives to the SOV including increased car-pooling, use of public transit, bicycling and walking. Strategy 2, TSM Programs, requires the City to encourage TSM programs for employees in both the public and private sectors by including preferred parking for carpools, providing bus passes, encouraging compressed workweeks, and providing incentives and rewards for bicycling and walking. Strategy 3, Telecommuting, Teleconferencing and Other Electronic Communication, requires the City to encourage employers to use the internet to reduce commute travel. Encourage schools, particularly at the college and high school levels, to make maximum use of the internet to limit the need to travel to and from the campus. Strategy 4, Design

## NO PROJECT ALTERNATIVE

of New Developments, requires the City to encourage new commercial developments to provide shared office facilities, cafeterias, day-care facilities, lunchrooms, showers, bicycle parking, home offices, shuttle buses to transit facilities and other amenities that encourage the use of transit, bicycling, walking or telecommuting as commute modes to work. Provide pedestrian pathways and orient buildings to the street to encourage pedestrian activity. Strategy 4, Street Space for Alternative Transportation, requires the City to provide space on appropriate streets for bus turnouts, or safe and accessible bike lanes or pedestrian paths. Strategy 6, Alternative Transportation Information, requires the City to use the Cupertino Scene and other media to provide educational material on alternatives to the SOV. Strategy 7, Citizen Participation, requires the City to continue to work with the City Bicycle/Pedestrian Advisory Committee, community groups and residents to eliminate hazards and barriers to bicycle and pedestrian transportation.

Despite implementation of the existing and amended Project policies and strategies, as identified previously, criteria air pollutant emissions associated with buildout of the No Project Alternative would generate a substantial increase in emissions that exceeds the BAAQMD regional significance thresholds (ROG, NO<sub>x</sub>, and PM<sub>10</sub>). Criteria air pollutant emissions would be generated from on-site area sources (e.g. landscaping fuel, consumer products), vehicle trips generated by the project, and energy use (e.g. natural gas used for cooking and heating). This is considered a *significant* impact.

### *Applicable Regulations*

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations: Appliance Energy Efficiency Standards
- Title 24, Part 6, California Code of Regulations: Building and Energy Efficiency Standards
- Title 24, Part 11, California Code of Regulations: Green Building Standards Code
- CARB Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- CARB Rule 2477 (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate
- BAAQMD, Regulation 2, Rule 2, New Source Review
- BAAQMD, Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
- BAAQMD Regulation 6, Rule 1, General Requirements
- BAAQMD Regulation 6, Rule 2, Commercial Cooking Equipment
- BAAQMD Regulation 7, Odorous Substances
- BAAQMD Regulation 8, Rule 3, Architectural Coatings
- BAAQMD Regulation 8, Rule 4, General Solvent and Surface Coatings Operations
- BAAQMD Regulation 8, Rule 7, Gasoline Dispensing Facilities
- BAAQMD Regulation 11, Rule 2, Asbestos, Demolition, Renovation and Manufacturing

Future development under the No Project Alternative would result in a substantial long-term increase in criteria air pollutants over the 26-year General Plan horizon. Criteria air pollutant emissions would be generated from on-site area sources (e.g. landscaping fuel, consumer products), vehicle trips generated by

**NO PROJECT ALTERNATIVE**

the project, and energy use (e.g. natural gas used for cooking and heating). The General Plan policies and strategies listed previously under Impact AQ-1 would minimize emissions to the extent feasible; however, there are no additional measures available to mitigate this impact due to the level of growth forecast in the city. Impacts are *significant*.

**Mitigation Measures**

There are no additional measures available to mitigate this impact. Compliance with the goals and policies of the No Project Alternative would reduce operational emissions from development under the No Project Alternative. In addition, Mitigation Measure AQ-4a (for new sources of toxic air contaminants, see below), would also reduce criteria air pollutants associated with light industrial land uses within the city. Future development in Cupertino could generate operational emissions in excess of the BAAQMD significance thresholds. Operational emissions from future development would be determined during project-level CEQA review. The total criteria air pollutant emissions from operation of future development projects under the No Project Alternative would be substantial and would contribute to increases in concentrations of air pollutants, which could contribute to ongoing violations of air quality standards. It should be noted that the identification of this program-level impact does not preclude the finding of less-than-significant impacts for subsequent projects that comply with BAAQMD screening criteria or meet applicable thresholds of significance. However, due to the programmatic nature of the No Project Alternative, no additional mitigating policies are available, and the impact is considered *significant and unavoidable*.

**Significance With Mitigation:** Significant and unavoidable.

**Construction Emissions**

BAAQMD's plan-level guidelines do not require an evaluation of construction emissions for plan-level projects. There is no proposed development under the No Project Alternative at this time. Future development proposals under the No Project Alternative would be subject to separate environmental review pursuant to CEQA in order to identify and mitigate potential air quality impacts. Because the details regarding future construction activities are not known at this time, including phasing of future individual projects, construction duration and phasing, and preliminary construction equipment, construction emissions are evaluated qualitatively in accordance with BAAQMD's plan-level guidance.

Construction emissions associated with individual development projects under the No Project Alternative would generate an increase in criteria air pollutants and TACs. BAAQMD has developed project-level thresholds for construction activities. Subsequent environmental review of future development projects would be required to assess potential impacts under BAAQMD's project-level thresholds. Construction emissions from buildout of future projects within Cupertino would primarily be 1) exhaust emissions from off-road diesel-powered construction equipment; 2) dust generated by demolition, grading, earthmoving, and other construction activities; 3) exhaust emissions from on-road vehicles and 4) off-gas emissions of ROG from application of asphalt, paints, and coatings.

Implementation of some of the current General Plan policies and strategies would minimize impacts during construction. Within the current Environmental Resources/Sustainability Element policy 5-4, Air Pollution Effects of New Development, requires the City to minimize the air quality impacts of new development

## NO PROJECT ALTERNATIVE

projects and the impacts affecting new development. Strategy 2 under this policy, Dust Control, calls for the City to require water application to non-polluting dust control measures during demolition and the duration of the construction period.

Within the current Land Use/Community Design Element, Policy 2-52, Rural Improvement Standards in Hillside Areas, calls for the City to require rural improvement standards in hillside areas to preserve the rural character of the hillsides. Strategy 1 under this policy, Mass Grading in New Construction, requires the City to follow natural land contour and avoid mass grading in new construction, especially in flood hazard or hillside areas. Grading large, flat areas shall be avoided.

Existing federal, State, and local regulations, and policies and strategies of the No Project Alternative described throughout Chapter 4.2, Air Quality, of the Draft EIR protect local and regional air quality. Continued compliance with these regulations and implementation of General Plan policies and strategies, would reduce construction-related impacts to the extent feasible. However, if uncontrolled, fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>) levels downwind of actively disturbed areas during construction or overlapping construction activities could violate air quality standards or contribute substantially to an existing or projected air quality violation and expose sensitive receptors to elevated concentrations of pollutants during construction activities. Consequently, impacts are *significant*.

### Applicable Regulations

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations: Appliance Energy Efficiency Standards
- Title 24, Part 6, California Code of Regulations: Building and Energy Efficiency Standards
- Title 24, Part 11, California Code of Regulations: Green Building Standards Code
- CARB Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- CARB Rule 2477 (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate
- BAAQMD, Regulation 2, Rule 2, New Source Review
- BAAQMD, Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
- BAAQMD Regulation 6, Rule 1, General Requirements
- BAAQMD Regulation 6, Rule 2, Commercial Cooking Equipment
- BAAQMD Regulation 7, Odorous Substances
- BAAQMD Regulation 8, Rule 3, Architectural Coatings
- BAAQMD Regulation 8, Rule 4, General Solvent and Surface Coatings Operations
- BAAQMD Regulation 8, Rule 7, Gasoline Dispensing Facilities
- BAAQMD Regulation 11, Rule 2, Asbestos, Demolition, Renovation and Manufacturing

## NO PROJECT ALTERNATIVE

Future projects under the No Project Alternative would generate air pollutant emissions during construction phases that could exceed BAAQMD's significance criteria and subsequently result in *significant* air quality impacts.

### Mitigation Measures

**Mitigation Measure AQ-2a:** As part of the City's development approval process, the City shall require applicants for future development projects to comply with the current Bay Area Air Quality Management District's basic control measures for reducing construction emissions of PM<sub>10</sub>.

**Mitigation Measure AQ-2b:** As part of the City's development approval process the City shall require applicants for future development projects that could generate emissions in excess of the Bay Area Air Quality Management District's (BAAQMDs) current significance thresholds during construction, as determined by project-level environmental review, when applicable, to implement the current BAAQMD construction mitigation measures (e.g. Table 8-3 of the BAAQMD CEQA Guidelines) or any construction mitigation measures subsequently adopted by the BAAQMD.

Mitigation Measure AQ-2a would require adherence to BAAQMD's basic control measures for fugitive dust control and would ensure impacts from fugitive dust generated during construction activities are less than significant. However, applicants for future development in Cupertino could generate construction exhaust emissions in excess of the BAAQMD significance thresholds. An analysis of emissions generated from the construction of future projects under the General Plan would be required to evaluate emissions compared to BAAQMD's project-level significance thresholds during individual environmental review. It should be noted that the identification of this program-level impact does not preclude the finding of less-than-significant impacts for subsequent projects that comply with BAAQMD screening criteria or meet applicable thresholds of significance. However, due to the programmatic nature of the No Project Alternative, no additional mitigating policies are available and the impact is considered *significant and unavoidable*.

**Significance With Mitigation:** Significant and unavoidable.

---

**AQ-3                    Implementation of the No Project Alternative would result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).**

---

This section analyzes potential impacts related to air quality that could occur from the buildout associated with the No Project Alternative in combination with the regional growth within the air basin. The Air Basin is currently designated a nonattainment area for California and National O<sub>3</sub>, California and National PM<sub>2.5</sub>, and California PM<sub>10</sub> AAQS. At a plan-level, air quality impacts are measured by the potential for a project to exceed BAAQMD's significance criteria and contribute to the State and Federal nonattainment designations in the Air Basin. Any project that produces a significant project-level regional air quality impact in an area that is in nonattainment adds to the cumulative impact. Pursuant to the CEQA Guidelines Section 15130(b)(1), cumulative impacts can be based on the growth projections in a local General Plan.

## NO PROJECT ALTERNATIVE

Consequently, the analysis in this chapter is the No Project Alternative's contribution to cumulative impacts. The No Project Alternative's contribution to cumulative air quality impacts are identified under the impact discussion in Impact AQ-1 and AQ-2. The analyses in these sections identify whether the No Project Alternative would conflict with the 2010 Bay Area Clean Air Plan (Impact AQ-1) or generate a substantial increase in criteria air pollutants (Impact AQ-2). The No Project Alternative would result in a higher VMT rate of growth than rate of service population growth and would generate a substantial increase in criteria air pollutant emissions from construction and operational activities. Consequently, Impact AQ-1 and AQ-2 identified a regional air quality impact as significant.

### Applicable Regulations

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations: Appliance Energy Efficiency Standards
- Title 24, Part 6, California Code of Regulations: Building and Energy Efficiency Standards
- Title 24, Part 11, California Code of Regulations: Green Building Standards Code
- CARB Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- CARB Rule 2477 (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate
- BAAQMD, Regulation 2, Rule 2, New Source Review
- BAAQMD, Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
- BAAQMD Regulation 6, Rule 1, General Requirements
- BAAQMD Regulation 6, Rule 2, Commercial Cooking Equipment
- BAAQMD Regulation 7, Odorous Substances
- BAAQMD Regulation 8, Rule 3, Architectural Coatings
- BAAQMD Regulation 8, Rule 4, General Solvent and Surface Coatings Operations
- BAAQMD Regulation 8, Rule 7, Gasoline Dispensing Facilities
- BAAQMD Regulation 11, Rule 2, Asbestos, Demolition, Renovation and Manufacturing

Criteria air pollutants generated by land uses within the No Project Alternative would cumulatively contribute to the nonattainment designations of the SFBAAB. Construction activities associated with individual development projects have the potential to generate substantial emissions of ROGs during application of paints, and NO<sub>x</sub> and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) from use of heavy off-road construction equipment and construction vehicle trips. Operation of the No Project Alternative would generate an increase of ROGs, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> from vehicle trips generated by the proposed land uses, area sources (e.g. landscape fuel use, consumer products), and energy use (e.g. natural gas used for cooking and heating). The SFBAAB is designated nonattainment under the California AAQS for PM<sub>10</sub> and



## NO PROJECT ALTERNATIVE

nonattainment under both the California and National AAQS for PM<sub>2.5</sub>.<sup>3</sup> Emissions of particulate matter generated by the No Project Alternative would contribute to the SFBAAB's particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) nonattainment designations. The SFBAAB is designated nonattainment of the 1-hour California AAQS and 8-hour California and National AAQS for O<sub>3</sub>.<sup>4</sup> Emissions of ROGs, NO<sub>x</sub>, and particulate matter would contribute to the SFBAAB's O<sub>3</sub> nonattainment designation. Consequently, impacts are *significant*.

### Mitigation Measure

There are no additional measures available to mitigate this impact. Criteria air pollutant emissions generated by land uses within the No Project Alternative would exceed the BAAQMD thresholds (see AQ-2). Air quality impacts identified in Impact AQ-1 and AQ-2 are the No Project Alternative's contribution to cumulative air quality impacts in the SFBAAB. Mitigation measures proposed to reduce Project-related emissions would reduce impacts to the extent feasible. Due to the programmatic nature of the No Project Alternative, no additional mitigating policies or development standards are available. Air pollutant emissions associated with the No Project Alternative would result in a cumulatively considerable contribution to air quality impacts, and the No Project Alternative's impacts would be *significant and unavoidable*.

**Significance With Mitigation:** Significant and unavoidable.

---

**AQ-4                      Implementation of the No Project Alternative would expose sensitive receptors to substantial concentrations of air pollution.**

---

### Carbon Monoxide Hotspots

Areas of vehicle congestion have the potential to create pockets of Carbon Monoxide (CO) called hotspots. These pockets have the potential to exceed the State one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9.0 ppm. Because CO is produced in the greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds.

The General Plan under the No Project Alternative includes policies and strategies that, once adopted, would aim to encourage bicycle, pedestrian, and transit use to tie land use and transportation, which ensures consistency with VTA's 2013 Congestion Management Program, as identified below. Within the current Circulation Element, Policy 4-3, Cupertino Pedestrian Transportation Guidelines and the Cupertino Bicycle Transportation Plan, requires the City to implement the programs and projects recommended in the Cupertino Pedestrian Transportation Guidelines and in the Cupertino Bicycle Transportation Plan, as well as other programs that promote this goal. Strategy 1 under this policy, The Pedestrian Guidelines, requires the

---

<sup>3</sup> California Air Resources Board (CARB), 2013. "Area Designations Maps: State and National," updated April, <http://www.arb.ca.gov/desig/adm/adm.htm>.

<sup>4</sup> California Air Resources Board (CARB), 2013. "Area Designations Maps: State and National," updated April, <http://www.arb.ca.gov/desig/adm/adm.htm>.

## NO PROJECT ALTERNATIVE

City to implement the projects recommended in the Pedestrian Guidelines including; after engineering review, and where found to be feasible, improve safety at selected intersections by one or more of the following: prohibit right turn- on-red, add time to the pedestrian signal phase, construct a median and/or reduce corner radii; where feasible provide missing sidewalks on arterial and collector streets and on neighborhood streets as desired by residents; identify a citywide pedestrian circulation grid including shortcuts, pathways and bridges, where needed, to close gaps in the pedestrian circulation system. Strategy 2, Pedestrian Grid, requires the City to consider developing a quarter-mile grid of safe, walk-able sidewalks and paths to provide pedestrian access among residential, shopping, recreation and business locations. Strategy 3, Safe Routes to School, requires the City to work with the School Districts to promote the Safe Route to Schools program. Strategy 4, Pedestrian Time on Traffic Signals, requires the City to, with engineering review; provide additional time for pedestrians to cross streets at appropriate intersections. Added time would be most appropriate near shopping districts, schools and senior citizen developments. This strategy should be considered even if it could reduce the Level of Service (LOS) for automobile traffic. Strategy 5, Pedestrian Improvements, requires the City to enhance walking, consider various improvements to roadways to make them more pedestrian friendly and less auto-centric. Where a median is provided, it should be wide enough to safely accommodate pedestrians. Streets such as Homestead, Bollinger, Rainbow, Prospect or Stelling should be evaluated for potential improvements for pedestrians. Working with the neighborhood, consider reducing residential street widths to promote slower traffic and less pervious surface. Strategy 6, Crosswalk Marking, Medians, and “Chokers,” requires the City to, following engineering review, mark crosswalks with pavement treatment scaled to the speed of traffic. Use medians and “chokers” to narrow the width of the street where feasible and appropriate. Strategy 7, Pedestrian/Bicycle Impact Statement (PBIS), requires the City to encourage all public construction and private development projects to submit a PBIS. For projects that require a TIA, the PBIS may be incorporated into the TIA. The impact of the project on pedestrians and bicycles shall be reported in terms of safety, route connectivity, loss of existing facilities, adequacy of proposed facilities, and potential adverse impact of proposed pedestrian/bicycle programs on automobile traffic and vice versa. Strategy 8, Implementation of the Bicycle Plan, requires the City to implement the Bikeway Network as recommended in the Bicycle Plan. Strategy 9, Bicycle Facilities in New Developments, requires the City to encourage the developers of major new or remodeled buildings to include secure interior and/or fully weather protected bicycle parking. Strategy 10, Traffic Calming on Bicycle Routes, calls for the City to, where feasible and appropriate, implement traffic calming on those bicycle routes where automobile traffic volumes are low. Bicycle traffic flows best where automobile traffic volume and speeds are low and where there are no stop signs or traffic signals to hinder through traffic flow. Strategy 11, Bicycle Parking, requires the City to provide bicycle parking in multi-family residential developments and in commercial districts as required under Section 19.100.040 of the City Municipal code. Policy 4-4, Regional Trail Development, requires the City to continue to plan and provide for a comprehensive system of trails and pathways consistent with regional systems, including the Bay Trail, Stevens Creek Corridor and Ridge Trail. The General Alignment of the Bay Trail, as shown in the Association of Bay Area Governments’ Bay Trail planning document, is incorporated in the General Plan by reference. Policy 4-5, Increased Use of Public Transit., requires the City to support and encourage the increased use of public transit. Strategy 1 under this policy, Transit Facilities in New Developments, requires the City to ensure all new development projects include amenities to support public transit such as: bus stop shelters; space for transit vehicles to stop and maneuver as needed; transit maps and schedules. Encourage commercial and institutional developments to support bus passes for employees. Strategy 3, Transit Stop Amenities, requires the City to work with the VTA and adjacent property owners to provide attractive

**NO PROJECT ALTERNATIVE**

amenities such as seating, lighting and signage at all bus stops. Strategy 4, Vallco Park Transit Station, requires the City to work with the VTA to study and develop a transit transfer station at Vallco Park. Anticipate a multi-modal station that serves future light rail. Strategy 5, Rapid Transit, calls for the City to work with the VTA to plan for and develop bus and/or light rail rapid transit services in the Stevens Creek and north De Anza Corridors to take advantage of the potential increase in mixed-use activities in the De Anza College customer base. Consider increased frequency of service to encourage ridership. Strategy 6, Shuttle Service, requires the City to study the possibility of providing shuttle service to key commercial, office and institutional locations in Cupertino. Policy 4-7, Traffic Service and Pedestrians Needs, requires the City to balance the needs of pedestrians with desired traffic service. Where necessary and appropriate, allow a lowered LOS standard to better accommodate pedestrians on major streets and at specific intersections. Policy 4-10, Street Improvement Planning, requires the City to plan street improvements such as curb cuts, sidewalks, bus stop turnouts, bus shelters, light poles, benches and trash containers as an integral part of a project to ensure an enhanced streetscape and the safe movement of people and vehicles with the least possible disruption to the streetscape. Strategy 1 under this policy, Sidewalk Access to Parking or Buildings, requires the City to examine sidewalk to parking areas or building frontages at the time individual sites develop to regulate the entry to the site at a central point. Sidewalks in the Crossroads Area shall be wide enough to accommodate increased pedestrian activity. Strategy 2, Bus Stop Turnouts in Street Frontages, calls for the City to require bus stop turnouts, or partial turnouts, within the street frontage of a new or redeveloping site. This policy does not apply to the Crossroads Area. Bus stops should include benches, trash receptacles and other amenities as appropriate. Follow the VTA specifications for improving bus stops. Policy 4-11, Safe Parking Lots, calls for the City to require parking lots that are safe for pedestrians. Strategy 1, Safe Spaces for Pedestrians, calls for the City to require parking lot design and construction to include clearly defined spaces for pedestrians so that foot traffic is separated from the hazards of car traffic and people are directed from their cars to building entries. Policy 4-15, School Impacts on Neighborhoods, requires the City to minimize the impact of school drop-off, pick-up and parking on neighborhoods. Strategy 1 under this policy, Coordination with School Districts, requires the City to work with the School Districts to develop plans and programs that encourage car/van-pooling, stagger hours of adjacent schools, drop-off locations, encourage walking and bicycling to school. The City shall assist Districts in the development of the “Safe Routes to School Program” to encourage more students walking and bicycling and less use of auto access.

As demonstrated by the policies and strategies above, the No Project Alternative would be consistent with the VTA’s 2013 Congestion Management Program.<sup>5</sup> In addition, the SFBAAB has been designated attainment under both the national and California AAQS for CO. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—in order to generate a significant CO impact.<sup>6</sup> The No Project Alternative would not increase traffic volumes at affected intersections by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited. Trips associated with the No Project Alternative would not exceed the screening criteria of the BAAQMD. Therefore, the No Project Alternative would not have the

---

<sup>5</sup> Santa Clara Valley Transportation Authority (VTA), 2013. 2013 Congestion Management Program <http://www.vta.org/sfc/servlet.shepherd/version/download/068A0000001Q7pt>, October.

<sup>6</sup> Bay Area Air Quality Management District (BAAQMD), 2011 (Revised), *CEQA Air Quality Guidelines*.

## NO PROJECT ALTERNATIVE

potential to substantially increase CO hotspots at intersections in Cupertino. Localized air quality impacts related to mobile-source emissions would therefore be *less than significant*.

### Toxic Air Contaminants – New Sources of Air Toxics

Various industrial and commercial processes (e.g. manufacturing, dry cleaning) allowed under the existing General Plan would be expected to release TACs. TAC emissions generated by stationary and point sources of emissions within the SFBAAB are regulated and controlled by BAAQMD. Emissions of TAC from mobile sources are regulated by statewide rules and regulations, not by BAAQMD, and have the potential to generate substantial concentrations of air pollutants.

Existing land uses that have the potential to generate substantial stationary sources of emissions that would require a permit from BAAQMD for emissions of TACs include industrial land uses, such as chemical processing facilities, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. Emissions of stationary source TACs would be controlled by BAAQMD through permitting and would be subject to further study and health risk assessment prior to the issuance of any necessary air quality permits under BAAQMD Regulation 2, Rule 2, New Source Review, and Rule 5, New Source Review of Toxic Air Contaminants.

Mobile sources of TACs are not regulated by BAAQMD. The primary mobile source of TACs within the City of Cupertino is truck idling and use of off-road equipment at warehousing operations. Warehousing operations could generate a substantial amount of Diesel Particulate Matter (DPM) emissions from off-road equipment use and truck idling. In addition, some warehousing and industrial facilities may include use of transport refrigeration units (TRUs) for cold storage. New land uses in the City of Cupertino that are permitted under the No Project Alternative that use trucks, including trucks with TRUs, could generate an increase in DPM that would contribute to cancer and non-cancer health risk in the SFBAAB. Impacts could occur at facilities that permit 100 or more truck trips per day or 40 or more trucks with TRUs within 1,000 feet of a sensitive land use. These new land uses could be near existing sensitive receptors within and outside the City of Cupertino. In addition, trucks would travel on regional transportation routes through the SFBAAB contributing to near-roadway DPM concentrations.

To reduce community risk and hazards from placement of new sources of air toxics, implementation of current General Plan policies and strategies would minimize impacts. Policy 5-4, Air Pollution Effects of New Development, requires the City to minimize the air quality impacts of new development projects and the impacts affecting new development. Strategy 1 under this policy, Toxic Air Contaminants, requires the City to review projects for potential generation of toxic air contaminants at the time of approval and confer with BAAQMD on controls needed if impacts are uncertain. Strategy 3, Planning Decisions, requires the City to assess the potential for air pollution effects of future land use and transportation planning, and ensure that planning decisions support regional goals of improving air quality. Policy 5-6, Air Pollution Effects of Existing Development, requires the City to minimize the air quality impacts of existing development. Strategy 5 requires the City to work with Santa Clara County to monitor and influence improvement of emissions and dust from the Hanson and Stevens Creek Quarries on the West end of the city.

**NO PROJECT ALTERNATIVE**

Within the current Land Use/Community Design Element Policy 2-6, Neighborhood Compatibility, requires the City to minimize potential conflicts with residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, limitations, site design and other appropriate measures. Create zoning or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through measures such as: daylight planes for single-family development, minimum setback standards, landscape screening, acoustical analysis, location and orientation of service areas away from residential uses and limitations on hours of operation.

Current General Plan Policy 5-4, and the accompanying Strategy 1, Toxic Air Contaminants, would require that projects that generate new sources of TACs would be required to reduce emissions. However, future projects would need to ensure that they could achieve BAAQMD's performance standards (ten in one million [10E-06], PM<sub>2.5</sub> concentrations exceed 0.3 µg/m<sup>3</sup>, or the appropriate noncancer hazard index exceeds 1.0) and consequently, mitigation is needed to ensure that new projects are evaluated in accordance with BAAQMD's CEQA Guidelines. Community risk and hazard impacts are *significant*.

### **Toxic Air Contaminants – Siting of Sensitive Receptors**

Regulation of land uses falls outside California Air Resources Board (CARB) jurisdiction; however, CARB developed and approved the Air Quality and Land Use Handbook: A Community Health Perspective (2005) to provide guidance regarding the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. This guidance document was developed to assess compatibility and associated health risks when placing sensitive receptors near existing pollution sources.

CARB's recommendations on the siting of new sensitive land uses were based on a compilation of recent studies that evaluated data on the adverse health effects ensuing from proximity to air pollution sources. The key observation in these studies is that proximity to air pollution sources substantially increases both exposure and the potential for adverse health effects. There are three carcinogenic toxic air contaminants that constitute the majority of the known health risks from motor vehicle traffic, DPM from trucks, and benzene and 1,3 butadiene from passenger vehicles. Table 4.2-9, in Chapter 4.2, Air Quality, of this Draft EIR, shows a summary of CARB recommendations for siting new sensitive land uses within the vicinity of AQ-pollutant sources. Recommendations in Table 4.2-9, in Chapter 4.2, Air Quality, of this Draft EIR, are based on data that show that localized air pollution exposures can be reduced by as much as 80 percent by following CARB minimum distance separations.

Local air pollution sources in the City of Cupertino include mobile (roadways, including SR 85 and I-280) and stationary/area sources (industrial, warehousing, commercial/retail, institutional, and residential land uses). Figure 4.2-3, in Chapter 4.2, Air Quality, of this Draft EIR, identifies several major areas of the city that have the potential to expose sensitive receptors to substantial pollutant concentrations within 1,000 feet of the sources identified.

- Stationary sources in Cupertino were identified using BAAQMD's Stationary Source Screening Analysis Tool. There are approximately 86 potential stationary sources in or near the City of Cupertino. Of these sources, approximately 4 are industrial uses, 25 emergency diesel generators, 4 auto body repair and

## NO PROJECT ALTERNATIVE

refinishing facilities, 23 gas stations, 13 dry cleaners, and 17 miscellaneous sources (e.g. technology companies, city services, printing shops, furniture refinishing, etc.).

- High-volume roadways with over 10,000 vehicles per day were also mapped using the California Environmental Health Tracking Program's (CEHTP's) Traffic Linkage web service and 2040 traffic projections from the traffic analysis prepared by Hexagon Transportation Consultants.<sup>7</sup> A total of 13 high volume roadways were identified within 1,000 feet of the City, including I-280 and SR 85.

The Union Pacific (UP) rail line is included in Figure 4.2-3 since UP uses diesel-fueled locomotives, which are a source of TAC emissions. Figure 4.2-3 also identifies a 500-foot screening area around high-volume roadways and a 200-foot screening area for rail lines. Because these are screening distances, refined analysis of the effects from many of the high volume roadways and rail lines may show much lower potential TAC exposure and smaller buffer zones. A refined analysis or site-specific health risk assessment should be conducted for all new sensitive sources that are sited within this area to determine the actual health impact. Current General Plan policies and strategies would minimize emissions. Within the current Environmental Resources/Sustainability Element, Policy 5-4, Air Pollution Effects of New Development, requires the City to minimize the air quality impacts of new development projects and the impacts affecting new development. Strategy 3 under this policy, Planning Decisions, requires the City to assess the potential for air pollution effects of future land use and transportation planning, and ensure that planning decisions support regional goals of improving air quality. Strategy 4, Environmental Review, requires the City to evaluate the relationship of sensitive receptors, such as convalescent hospitals and residential uses, to pollution sources through the environmental assessment of new development.

Within the current Health and Safety Element, Policy 6-29, Proximity of Residents to Hazardous Materials, requires the City to assess future residents' exposure to hazardous materials when new residential development of childcare facilities are proposed in existing industrial and manufacturing areas. Do not allow residential development if such hazardous conditions cannot be mitigated to an acceptable level of risk.

Within the current Land Use/ Community Design Element, Policy 2-6, Neighborhood Compatibility, requires the City to minimize potential conflicts with residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, limitations, site design and other appropriate measures. Create zoning or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through measures such as: daylight planes for single-family development, minimum setback standards, landscape screening, acoustical analysis, location and orientation of service areas away from residential uses and limitations on hours of operation.

Implementation of General Plan Policy 5-4, Air Pollution Effects of New Development, and accompanying Strategy 4, Environmental Review, and Policy 6-29, Proximity of Residents to Hazardous Materials, would reduce impacts from placement of sensitive receptors proximate to major sources of air pollution. However, future projects proximate to major sources of air pollution (i.e. when within 1,000 feet of an industrial area) would need to ensure that they could achieve BAAQMD's performance standards (ten in one million

---

<sup>7</sup> California Environmental Health Tracking Program (CEHTP), 2013. Traffic linkage web service. [http://www.ehib.org/traffic\\_tool.jsp](http://www.ehib.org/traffic_tool.jsp).

## NO PROJECT ALTERNATIVE

[10E-06],  $PM_{2.5}$  concentrations exceed  $0.3 \mu\text{g}/\text{m}^3$ , or the appropriate noncancer hazard index exceeds 1.0) and consequently, mitigation is needed to ensure that new projects are evaluated in accordance with BAAQMD's CEQA Guidelines. Consequently, impacts are *significant*.

### Applicable Regulations

- CARB Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- CARB Rule 2477 (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate
- BAAQMD, Regulation 2, Rule 2, New Source Review
- BAAQMD, Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
- BAAQMD Regulation 6, Rule 1, General Requirements
- BAAQMD Regulation 6, Rule 2, Commercial Cooking Equipment
- BAAQMD Regulation 7, Odorous Substances
- BAAQMD Regulation 8, Rule 3, Architectural Coatings
- BAAQMD Regulation 8, Rule 4, General Solvent and Surface Coatings Operations
- BAAQMD Regulation 8, Rule 7, Gasoline Dispensing Facilities
- BAAQMD Regulation 11, Rule 2, Asbestos, Demolition, Renovation and Manufacturing

The No Project Alternative could result in the placement of sensitive receptors proximate to major sources of air pollution or the siting of new sources of air pollution proximate to sensitive receptors in the city. Non-residential land uses that generate truck trips may generate substantial quantities of air pollutants within 1,000 feet of off-site sensitive receptors. In addition, proposed sensitive land uses in Cupertino may be within 1,000 feet of major sources of air pollutants. Consequently, impacts are *significant*.

### Mitigation Measure

**Mitigation Measure AQ-4a:** Applicants for future non-residential land uses within the city that: 1) have the potential to generate 100 or more diesel truck trips per day or have 40 or more trucks with operating diesel-powered TRUs, and 2) are within 1,000 feet of a sensitive land use (e.g. residential, schools, hospitals, nursing homes), as measured from the property line of the proposed Project to the property line of the nearest sensitive use, shall submit a health risk assessment (HRA) to the City of Cupertino prior to future discretionary Project approval. The HRA shall be prepared in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment and the Bay Area Air Quality Management District. If the HRA shows that the incremental cancer risk exceeds ten in one million (10E-06),  $PM_{2.5}$  concentrations exceed  $0.3 \mu\text{g}/\text{m}^3$ , or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that Best Available Control Technologies for Toxics (T-BACTs) are capable of reducing potential cancer and noncancer risks to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include but are not limited to:

## NO PROJECT ALTERNATIVE

- Restricting idling on-site.
- Electrifying warehousing docks.
- Requiring use of newer equipment and/or vehicles.
- Restricting offsite truck travel through the creation of truck routes.

T-BACTs identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site development plan as a component of the proposed Project.

**Mitigation Measure AQ-4b:** Applicants for residential and other sensitive land use projects (e.g. hospitals, nursing homes, day care centers) in Cupertino within 1,000 feet of a major sources of TACs (e.g. warehouses, industrial areas, freeways, and roadways with traffic volumes over 10,000 vehicle per day), as measured from the property line of the project to the property line of the source/edge of the nearest travel lane, shall submit a health risk assessment (HRA) to the City of Cupertino prior to future discretionary Project approval. The HRA shall be prepared in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment (OEHHA) and the Bay Area Air Quality Management District. The latest OEHHA guidelines shall be used for the analysis, including age sensitivity factors, breathing rates, and body weights appropriate for children age 0 to 16 years. If the HRA shows that the incremental cancer risk exceeds ten in one million (10E-06),  $PM_{2.5}$  concentrations exceed  $0.3 \mu\text{g}/\text{m}^3$ , or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that mitigation measures are capable of reducing potential cancer and non-cancer risks to an acceptable level (i.e. below ten in one million or a hazard index of 1.0), including appropriate enforcement mechanisms. Measures to reduce risk may include but are not limited to:

- Air intakes located away from high volume roadways and/or truck loading zones.
- Heating, ventilation, and air conditioning systems of the buildings provided with appropriately sized Maximum Efficiency Rating Value (MERV) filters.

Mitigation measures identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site development plan as a component of the proposed Project. The air intake design and MERV filter requirements shall be noted and/or reflected on all building plans submitted to the City and shall be verified by the City's Planning Division.

Buildout of the No Project Alternative could result in new sources of criteria air pollutant emissions and/or toxic air contaminants near existing or planned sensitive receptors. Existing policies would reduce concentrations of TACs and  $PM_{2.5}$  generated by new development. Review of projects by BAAQMD for permitted sources of air toxics (e.g. industrial facilities, dry cleaners, and gasoline dispensing facilities) would ensure health risks are minimized. Mitigation Measure AQ-4a would ensure that mobile sources of TACs not covered under BAAQMD permits are considered during subsequent project-level environmental review. Development of individual projects would be required to achieve the incremental risk thresholds established by BAAQMD, and impacts would *be less than significant*. Placement of new sensitive receptors near major sources of TACs and  $PM_{2.5}$  could expose people to substantial pollutant concentrations. Existing policies would reduce concentrations of criteria air pollutant emissions and air toxics generated by



## NO PROJECT ALTERNATIVE

new development. Mitigation Measure AQ-4b would ensure that placement of sensitive receptors near major sources of air pollution would achieve the incremental risk thresholds established by BAAQMD, and impacts would be *less than significant*.

**Significance With Mitigation:** Less than significant.

---

**AQ-5                      Implementation of the No Project Alternative would result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).**

---

Sources of objectionable odors may occur within the City. BAAQMD's Regulation 7, Odorous Substances, places general limitations on odorous substances and specific emission limitations on certain odorous compounds. In addition, odors are also regulated under BAAQMD Regulation 1, Rule 1-301, Public Nuisance, which states that "no person shall discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or the public; or which endangers the comfort, repose, health or safety of any such persons or the public, or which causes, or has a natural tendency to cause, injury or damage to business or property." Under BAAQMD's Rule 1-301, a facility that receives three or more violation notices within a 30 day period can be declared a public nuisance.

There are two types of odor impacts: 1) siting sensitive receptors near nuisance odors, and 2) siting new sources of nuisance odors near sensitive receptors. Table 4.2-10, in Chapter 4.2, Air Quality, of this Draft EIR, identifies screening distances from potential sources of objectionable odors within the SFBAAB. Odors from these types of land uses are regulated under BAAQMD Regulation 7, Odorous Substances.<sup>8</sup>

### Siting Receptors Proximate to Odor Sources

Sensitive receptors, such as the residential uses associated with planned development under the No Project Alternative, may be placed within the distances to these sources specified in Table 4.2-10, in Chapter 4.2, Air Quality, of this Draft EIR. In general, the City's land use plan designates residential areas and commercial/industrial areas of the City to prevent potential mixing of incompatible land use types, with the exception of mixed-use areas that combine commercial with residential. BAAQMD Regulation 7, Odorous Substances, requires abatement of any nuisance generated by an odor complaint. Implementation of General Plan policy would also reduce potential land use incompatibilities.

Within the current Land Use/ Community Design Element, Policy 2-6, Neighborhood Compatibility, requires the City to minimize potential conflicts with residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping,

---

<sup>8</sup> It should be noted that while restaurants can generate odors, these sources are not identified by BAAQMD as nuisance odors since they typically do not generate significant odors that affect a substantial number people. Larger restaurants that employ five or more people are subject to BAAQMD Regulation 7, Odorous Substances.

## NO PROJECT ALTERNATIVE

walls, limitations, site design and other appropriate measures. Create zoning or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through measures such as: daylight planes for single-family development, minimum setback standards, landscape screening, acoustical analysis, location and orientation of service areas away from residential uses and limitations on hours of operation.

Because existing sources of odors are required to comply with BAAQMD Regulation 7, impacts to siting of new sensitive land uses would be *less than significant*.

### Applicable Regulations

- California Health & Safety Code, Section 114149
- BAAQMD Regulation 7, Odorous Substances

**Significance Without Mitigation:** Less than significant.

### Siting New Odor Sources

While not all sources in Table 4.2-10, in Chapter 4.2, Air Quality, of this Draft EIR, are found in Cupertino (e.g. rendering plants, confined animal facilities), commercial and industrial areas in the City of Cupertino have the potential to include land uses that generate objectionable odors. Buildout permitted under the No Project Alternative could include new sources of odors, such as composting, greenwaste, and recycling operations; food processing; chemical manufacturing; and painting/coating operations, because these are permitted uses in the commercial and/or industrial areas in the City. Future environmental review could be required for industrial projects listed in Table 4.2-8, in Chapter 4.2, Air Quality, of this Draft EIR, to ensure that sensitive land uses are not exposed to objectionable odors. BAAQMD Regulation 7, Odorous Substances, requires abatement of any nuisance generating an odor complaint. Typical abatement includes passing air through a drying agent followed by two successive beds of activated carbon to generate odor-free air. Facilities listed in Table 4.2-10, in Chapter 4.2, Air Quality, of this Draft EIR, would need to consider measures to reduce odors as part of their CEQA review. Implementation of General Plan policies would also reduce potential land use incompatibilities. Within the current Land Use/ Community Design Element, Policy 2-6, Neighborhood Compatibility, requires the City to minimize potential conflicts with residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, limitations, site design and other appropriate measures. Create zoning or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through measures such as: daylight planes for single-family development, minimum setback standards, landscape screening, acoustical analysis, location and orientation of service areas away from residential uses and limitations on hours of operation. Within the current Environmental Resources/Sustainability Element, Policy 5-4, Air Pollution Effects of New Development, requires the City to minimize the air quality impacts of new development projects and the impacts affecting new development. Strategy 3, Planning Decisions, requires the City to assess the potential for air pollution effects of future land use and transportation planning, and ensure that planning decisions support regional goals of improving air quality. Strategy 4, Environmental Review, requires the City to evaluate the relationship of sensitive receptors, such as convalescent hospitals and residential uses, to pollution sources through the environmental assessment of new development.

## NO PROJECT ALTERNATIVE

Consequently, review of projects using BAAQMD's odor screening distances during future CEQA review and compliance with BAAQMD Regulation 7 would ensure that odor impacts are minimized and are *less than significant*.

### *Applicable Regulations*

- California Health & Safety Code, Section 114149
- BAAQMD Regulation 7, Odorous Substances

**Significance Without Mitigation:** Less than significant.

---

### **AQ-6 Implementation of the No Project Alternative, in combination with past, present and reasonably foreseeable projects, would result in significant cumulative impacts with respect to air quality.**

---

As described under AQ-3, regional air quality impacts were identified as significant; therefore, in combination with past, present, and reasonably foreseeable projects, the No Project Alternative would result in a significant cumulative impact with respect to air quality

### *Applicable Regulations*

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations: Appliance Energy Efficiency Standards
- Title 24, Part 6, California Code of Regulations: Building and Energy Efficiency Standards
- Title 24, Part 11, California Code of Regulations: Green Building Standards Code
- CARB Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- CARB Rule 2477 (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate
- BAAQMD, Regulation 2, Rule 2, New Source Review
- BAAQMD, Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
- BAAQMD Regulation 6, Rule 1, General Requirements
- BAAQMD Regulation 6, Rule 2, Commercial Cooking Equipment
- BAAQMD Regulation 7, Odorous Substances
- BAAQMD Regulation 8, Rule 3, Architectural Coatings
- BAAQMD Regulation 8, Rule 4, General Solvent and Surface Coatings Operations
- BAAQMD Regulation 11, Rule 2, Asbestos, Demolition, Renovation and Manufacturing

Criteria air pollutants generated by land uses within the No Project Alternative would cumulatively contribute to the nonattainment designations of the SFBAAB. Construction activities associated with individual development projects have the potential to generate substantial emissions of ROG<sub>s</sub> during application of paints, and NO<sub>x</sub> and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) from use of heavy off-road

## NO PROJECT ALTERNATIVE

construction equipment and construction vehicle trips. Operation of the No Project Alternative would generate an increase of ROGs, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> from vehicle trips generated by the proposed land uses, area sources (e.g. landscape fuel use, consumer products), and energy use (e.g. natural gas used for cooking and heating). The SFBAAB is designated nonattainment under the California AAQS for PM<sub>10</sub> and nonattainment under both the California and National AAQS for PM<sub>2.5</sub>.<sup>9</sup> Emissions of particulate matter generated by the No Project Alternative would contribute to the SFBAAB's particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) nonattainment designations. The SFBAAB is designated nonattainment of the 1-hour California AAQS and 8-hour California and National AAQS for O<sub>3</sub>.<sup>10</sup> Emissions of ROGs, NO<sub>x</sub>, and particulate matter would contribute to the SFBAAB's O<sub>3</sub> nonattainment designation. Consequently, impacts are *significant*.

### Mitigation Measures

There are no additional measures available to mitigate this impact. Criteria air pollutant emissions generated by land uses within the No Project Alternative would exceed the BAAQMD thresholds (see AQ-2). Air quality impacts identified in Impact AQ-1 and AQ-2 are the No Project Alternative's contribution to cumulative air quality impacts in the SFBAAB. Mitigation measures proposed to reduce Project-related emissions would reduce impacts to the extent feasible. Due to the programmatic nature of the No Project Alternative, no additional mitigating policies or development standards are available. Air pollutant emissions associated with the No Project Alternative would result in a cumulatively considerable contribution to air quality impacts, and the No Project Alternative's impacts would be *significant and unavoidable*.

**Significance With Mitigation:** Significant and unavoidable.

### 5.1.6.3 BIOLOGICAL RESOURCES

---

<b>BIO-1</b>	<b>Implementation of the No Project Alternative would not have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife, or U.S. Fish and Wildlife Service.</b>
--------------	---

---

Development and land use activities consistent with the No Project Alternative would occur in urbanized areas where special-status species are generally not expected to occur. The potential for occurrence of special-status species in developed areas is generally very remote in comparison to undeveloped lands with natural habitat that contain essential habitat characteristics for the range of species known from the west Cupertino vicinity.

Future development under the No Project Alternative would be required to comply with current General Plan policies and strategies that would minimize to special-status species associated with potential future

---

<sup>9</sup> California Air Resources Board (CARB), 2013. "Area Designations Maps: State and National," updated April, <http://www.arb.ca.gov/desig/adm/adm.htm>.

<sup>10</sup> California Air Resources Board (CARB), 2013. "Area Designations Maps: State and National," updated April, <http://www.arb.ca.gov/desig/adm/adm.htm>.

## NO PROJECT ALTERNATIVE

development under the proposed Project. Within the current General Plan Environmental Resources/Sustainability, Policy 5-9, Development near Sensitive Areas, requires the City to encourage the clustering of new development away from sensitive areas such as riparian corridors, wildlife habitat and corridors, public open space preserves, and ridgelines. New developments in these areas must have a harmonious landscaping plan approved prior to development. Strategy under this policy, Riparian Corridor Protection, calls for the City to require riparian corridor protection through a riparian corridor ordinance and through the development approval process. Policy 5-10, Landscaping Near Natural Vegetation, requires the City to emphasize drought tolerant and pest resistant native and non-invasive, nonnative, drought tolerant plants and ground covers when landscaping properties near natural vegetation, particularly for control of erosion from disturbance to the natural terrain. Policy 5-11, Natural Area Protection, requires the City to preserve and enhance the existing natural vegetation, landscape features and open space when new development is proposed. The strategy under this policy, Native Plants, requires the City to encourage drought tolerant native and drought tolerant, noninvasive, non-native plants and trees, and minimize lawn area in the hillsides. Policy 5-14, Recreation and Wildlife Trails, requires the City to provide open space linkages within and between properties for both recreational and wildlife activities, most specifically for the benefit of wildlife that is threatened, endangered, or designated as species of special concern. The Strategy under this policy calls for the City to require identification of creeks and water courses on site plans and require that they be protected from adjacent development. Additionally, it must be stated that trail easements for trail linkages may be required if analysis determines that they are needed.

Policy 5-19, Natural Water Bodies and Drainage Systems, calls for the City to require that site design respect the natural topography and drainages to the extent practicable to reduce the amount of grading necessary and limit disturbance to natural water bodies and natural drainage systems caused by development including roads, highways, and bridges. Policy 5-22, Compact Development Away from Sensitive Areas, requires the City to, where such measures do not conflict with other municipal purposes or goals, encourage, via zoning ordinances, compact development located away from creeks, wetlands, and other sensitive areas. Policy 5-27, Natural Water Courses, requires the City to retain and restore creek beds, riparian corridors, watercourses and associated vegetation in their natural state to protect wildlife habitat and recreation potential and assist groundwater percolation. Encourage land acquisition dedication of such areas. The strategy under this policy, Santa Clara Valley Water District, requires the City to work with the Santa Clara Valley Water District and other relevant regional agencies to enhance riparian corridors and provide adequate flood control by use of flow increase mitigation measures.

However, some special-status bird species such as Cooper's hawk and white-tailed kite could utilize the remaining riparian corridors and heavily wooded areas for nesting, dispersal and other functions when they pass through urbanized areas. More common birds protected under the federal Migratory Bird Treaty Act (MBTA) may nest in trees and other landscaping on Project Component locations. Preconstruction surveys are typically required to confirm that no bird nests in active use are present when tree and vegetation removal is to occur during the bird-nesting season (February 1 to August 31). Given the remote potential for occurrence of nesting birds at one or more of the Project Component sites and possibility that nests could be inadvertently destroyed or nests abandoned as a result of construction activities, this would be considered a potentially significant impact.

## NO PROJECT ALTERNATIVE

### Mitigation Measure

The following mitigation measure is recommended to minimize the possible loss or abandonment of nests of birds protected under the federal MBTA and CDFG Code.

**Mitigation Measure BIO-1:** Nests of raptors and other birds shall be protected when in active use, as required by the federal Migratory Bird Treaty Act and the California Department of Fish and Game Code. If construction activities and any required tree removal occur during the breeding season (February 1 and August 31), a qualified biologist shall be required to conduct surveys prior to tree removal or construction activities. Preconstruction surveys are not required for tree removal or construction activities outside the nesting period. If construction would occur during the nesting season (February 1 to August 31), preconstruction surveys shall be conducted no more than 14 days prior to the start of tree removal or construction. Preconstruction surveys shall be repeated at 14-day intervals until construction has been initiated in the area after which surveys can be stopped. Locations of active nests containing viable eggs or young birds shall be documented and protective measures implemented under the direction of the qualified biologist until the nests no longer contain eggs or young birds. Protective measures shall include establishment of clearly delineated exclusion zones (i.e. demarcated by identifiable fencing, such as orange construction fencing or equivalent) around each nest location as determined by a qualified biologist, taking into account the species of birds nesting, their tolerance for disturbance and proximity to existing development. In general, exclusion zones shall be a minimum of 300 feet for raptors and 75 feet for passerines and other birds. The active nest within an exclusion zone shall be monitored on a weekly basis throughout the nesting season to identify signs of disturbance and confirm nesting status. The radius of an exclusion zone may be increased by the qualified biologist if project activities are determined to be adversely affecting the nesting birds. Exclusion zones may be reduced by the qualified biologist only in consultation with California Department of Fish and Wildlife. The protection measures shall remain in effect until the young have left the nest and are foraging independently or the nest is no longer active.

With incorporation of the above Mitigation Measure BIO-1, impacts to special-status and non-special status bird species that are protected under the federal MBTA and CDFG Code would be *less than significant*.

**Significance With Mitigation:** Less than significant.

---

<b>BIO-2</b>	<b>Implementation of the No Project Alternative would not have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife, or U.S. Fish and Wildlife Service.</b>
--------------	--

---

Development and land use activities consistent with the No Project Alternative components would occur in urbanized areas where sensitive natural communities are absent, and *no impact* is therefore anticipated.

**Significance Without Mitigation:** No impact.

**NO PROJECT ALTERNATIVE**

---

**BIO-3                    Implementation of the No Project Alternative would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.**

---

Development and land use activities consistent with the No Project Alternative components occur in urbanized areas where jurisdictional waters are absent. Indirect impacts to wetlands and jurisdictional other waters include: 1) an increase in the potential for sedimentation due to construction grading and ground disturbance, 2) an increase in the potential for erosion due to increased runoff volumes generated by impervious surfaces, and 3) an increase in the potential for water quality degradation due to increased levels in non-point pollutants. However, indirect impacts could be largely avoided through effective implementation of Best Management Practices (BMPs) during construction and compliance with water quality controls. As discussed in Section 4.8.1.1, Regulatory Framework, Chapter 4.9, Hydrology and Water Quality, of this Draft EIR, water quality in stormwater runoff is regulated locally by the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), which includes provision C.3 of the Municipal Regional Storm Water National Pollutant Discharge Elimination System (NPDES) Permit (MRP) adopted by the San Francisco Bay Regional Water Quality Control Board (RWQCB). Adherence to these permit conditions requires new development or redevelopment projects to incorporate treatment measures, an agreement to maintain them, and other appropriate source control and site design features that reduce pollutants in runoff to the maximum extent practicable. Many of the requirements involve low impact development (LID) practices such as the use of onsite infiltration that reduce pollutant loading. Incorporation of these measures can even improve on existing conditions.

In addition, future development would be required to comply with the National Pollutant Discharge Elimination System Permit (Municipal Code Chapter 9.18, Stormwater Pollution Prevention and Watershed Protection) and implement a construction Storm Water Pollution Prevention Plan (SWPPP) that require the incorporation of BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction.

The indirect water quality-related issues are discussed further in Section 5.1.3.5, Hydrology & Water Quality, below. Implementation of these controls would reduce potential indirect impacts to *less than significant* levels.

**Significance Without Mitigation:** Less than significant.

---

**BIO-4                    Implementation of the No Project Alternative would not interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.**

---

Development and land use activities consistent with the No Project Alternative components would occur in urbanized areas where sensitive wildlife resources and important wildlife movement corridors are no longer

## NO PROJECT ALTERNATIVE

present because of existing development. Wildlife species common to urban and suburban habitat could be displaced where existing structures are demolished and landscaping is removed as part of future development. But these species are relatively abundant, and adapted to human disturbance. New structures and landscaping installed as part of future development would provide replacement habitat for wildlife species adapted to urban areas. Potential impacts on the movement of fish and wildlife, wildlife corridors, or wildlife nursery sites would be considered *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**BIO-5                    Implementation of the No Project Alternative would not conflict with any local polices or ordinances protecting biological resources.**

---

Development and land use activities consistent with the No Project Alternative components would occur in urbanized areas where sensitive biological and wetland resources are generally considered to be absent, and no major conflicts with the relevant policies in the current General Plan and/or Municipal Code are anticipated. Additionally, potential future development would have to comply with Chapters 14.12, Protected Tree Ordinance, and 9.19, Water Protection Ordinance, of the Cupertino Municipal Code, as described in Section 4.3.1.1, Regulatory Framework, of Chapter 4.3, Biological Resources, of this draft EIR, which require permit approval prior to removal of any protected trees or streamside modification, respectively.

With adherence to the General Plan policies listed above in impact discussion BIO-1 of this chapter, and cited Tree Ordinance, no conflicts with local plans and policies are anticipated, and impacts would be considered *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**BIO-6                    Implementation of the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would result in significant cumulative impacts with respect to biological resources.**

---

This Draft EIR, this EIR takes into account growth projected by the proposed Project within the Cupertino city boundary and Sphere of Influence (SOI), in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). The geographic scope of the cumulative analysis for biological resources considers the surrounding incorporated and unincorporated lands, and the region.

The potential impacts of proposed development under the No Project Alternative on biological resources tend to be site-specific, and the overall cumulative effect would be dependent on the degree to which significant vegetation and wildlife resources are protected on a particular site. This includes preservation of well-developed native vegetation (native grasslands, oak woodlands, riparian woodland, etc.), populations of special-status plant or animal species, and wetland features (including freshwater seeps and tributary drainages).



## NO PROJECT ALTERNATIVE

To some degree, cumulative development contributes to an incremental reduction in the amount of existing wildlife habitat, particularly for birds and larger mammals. Habitat for species intolerant of human disturbance can be lost as development encroaches into previously undeveloped areas, disrupting or eliminating movement corridors and fragmenting the remaining suitable habitat retained within parks, private open space, or undeveloped properties. New development in the region would result in further conversion of existing natural habitats to urban and suburban conditions, limiting the existing habitat values of the surrounding area. This could include further loss of wetlands and sensitive natural communities, reduction in essential habitat for special-status species, removal of mature native trees and other important wildlife habitat features, and obstruction of important wildlife movement corridors. Additional development may also contribute to degradation of the aquatic habitat in the creeks throughout the region, including the No Project component areas.

Grading associated with construction activities generally increases erosion and sedimentation, and urban pollutants from new development would reduce water quality. However, most of the parcels within the Project Component locations are already developed and occur within urbanized areas, thus avoiding or diminishing effects on biological resources. With implementation of the Mitigation Measures BIO-1 identified below, the proposed Project would not make a significant contribution to cumulative impacts to biological resources. Therefore, the proposed Project would result in a *less-than-significant* cumulative impact on biological resources.

**Significance With Mitigation:** Less than significant.

### 5.1.6.4 CULTURAL RESOURCES

---

<b>CULT-1</b>	<b>Implementation of the No Project Alternative would not have the potential to cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.</b>
---------------	--

---

The types of cultural resources that meet the definition of historical resources under CEQA generally consist of districts, sites, buildings, structures, and objects that are significant for their traditional, cultural, and/or historical associations. Historical architectural resources may be impacted by development allowed under the current General Plan. Archaeological deposits are addressed in CULT-2, and human remains are addressed below in impact discussion CULT-4, below.

As shown on Figure 4.4-1 and listed in Section 4.4.2.3, Historic Sites Within Project Components, in Chapter 4.4, Cultural Resources, of this Draft EIR, several historical resources are within the boundaries of some Cultural Resource Sites. Therefore, implementation of the No Project Alternative could have the potential to directly impact cultural resources from potential new development at the following Cultural Resource Sites:

- Cultural Resource Site 15 (Not evaluated for National and/or California Register eligibility)
- Cultural Resource Site 58 (City of Cupertino Commemorative Site)
- Cultural Resource Site 19 (National Register/California Register/Local Landmark)

## NO PROJECT ALTERNATIVE

- Cultural Resource Site 25 (Local Landmark, National Register/Not evaluated for California Register eligibility)
- Cultural Resource Site 31 (Ineligible for National Register/Not evaluated for California Register eligibility)
- Cultural Resource Site 32 (California Register/Local Landmark)
- Cultural Resource Site 42 (City of Cupertino Local Historic Site)
- Cultural Resource Site 43 (City of Cupertino Local Historic Site)
- Cultural Resource Site 44 (City of Cupertino Local Historic Site)
- Cultural Resource Site 57 (National Register/Commemorative Site)
- Cultural Resource Site 59 (City of Cupertino Commemorative Site)
- Cultural Resource Site 60 (City of Cupertino Commemorative Site)
- Cultural Resource Site 64 (City of Cupertino Community Landmark)
- Cultural Resource Site 65 (City of Cupertino Community Landmark)
- Cultural Resource Site 67 (City of Cupertino Community Landmark)
- Cultural Resource Site 68<sup>11</sup> (City of Cupertino Community Landmark)
- Cultural Resource Site 66 (City of Cupertino Community Landmark)
- Cultural Resource Site 68<sup>12</sup> (City of Cupertino Community Landmark)
- Cultural Resource Site 52 (California Register/Eligible for National Register)
- Cultural Resource Site 53 (City of Cupertino Commemorative Site)
- Cultural Resource Site 54 (City of Cupertino Commemorative Site)
- Cultural Resource Site 62 (City of Cupertino Community Landmark)
- Cultural Resource Site 55 (City of Cupertino Commemorative Site)
- Cultural Resource Site 68 (City of Cupertino Community Landmark)
- Cultural Resource Site 41 (City of Cupertino Local Historic Site)
- Cultural Resource Site 49 (City of Cupertino Commemorative Site)
- Cultural Resource Site 50 (City of Cupertino Commemorative Site)

Where Cultural Resource Sites listed above and their immediate surroundings do not contain properties currently on the California Register or appear to be eligible for listing on the California Register, as described above, impacts from implementation of the No Project Alternative would result in *less-than-significant* impacts on historical resources at these sites. However, for Cultural Resource Sites that contain properties currently on the California Register or appear to be eligible for listing on the California Register where the historical buildings might be demolished or materially altered to allow future development, this Alternative would cause significant impacts. The following Cultural Resource Sites could be impacted by future development under this Alternative:

---

<sup>11</sup> Cultural Resource Site 68 is also in Study Area 6 (Vallco Shopping District) and Housing Element Site 11 (Vallco Mall).

<sup>12</sup> Cultural Resource Site 68 is also in Heart of the City Special Area and Housing Element Site 11 (Vallco Mall).

**NO PROJECT ALTERNATIVE**

**Heart of the City Specific Plan Area**

- Cultural Resource Site 19 (National Register/California Register/Local Landmark)
- Cultural Resource Site 25 (Local Landmark, National Register/Not evaluated for California Register eligibility)
- Cultural Resource Site 32 (California Register/Local Landmark)
- Cultural Resource Site 57 (National Register/Commemorative Site)

**Monta Vista Special Center**

- Cultural Resource Site 52 (California Register/Eligible for National Register)

Even if the historical resources identified throughout the city, as shown in Figure 4.4-1 in Chapter 4.4, Cultural Resources, of this Draft EIR, were retained, future development under the No Project Alternative could cause a significant impact on the historical resource in question if the new construction were incompatible with the Cultural Resources Site relationships that characterize the existing property (for example, new construction which extends to all property lines where the historical pattern is to have setbacks), or if the massing (height and bulk) of the new construction were incompatible with the historical resource. Lastly, the design characteristics and materials of the new construction could cause an impact on adjoining or nearby historical buildings (for example, a flat-roofed building with aluminum windows and a rain-screen wall finish next to a gable-roofed building with period-revival stucco walls). Because future development would continue to occur and function similar to what’s permitted under the current General Plan and because the factors described above which could impair the historic integrity as a result of new construction, the impacts on historical resources could be *significant*.

However, the General Plan includes policies and strategies that, once adopted, would minimize potential impacts to historic resources. Policy 2-62A, Historic Sites, directs the City to require that projects on Historic Sites shall meet the Secretary of the Interior’s Standard for Treatment of Historic Properties and provide a plaque, reader board and/or other educational tools on the site to explain the historic significance of the resource(s). The plaque shall include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. For public and quasi-public sites, coordinate with property owner to allow public access of the historical site to foster public awareness and provide educational opportunities. For privately-owned sites, property owners should be encouraged, but not required, to provide access to the public. Policy 2-62B, Commemorative Sites, directs the City to require projects on Commemorative Sites shall provide a plaque, reader board and/or other educational tool on the site to explain the historic significance of the resource. The plaque shall include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. For public and quasi-public sites, coordinate with property owner to allow public access to the historical site to foster public awareness and provide educational opportunities. For privately-owned sites, property owners should be encouraged, but not required, to provide access to the public. Policy 2-62C, Community Landmarks, directs the City to require projects on Landmark Sites shall provide a plaque, reader board and/or other educational tools on the site to explain the historic significance of the resource. The plaque shall include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. Policy 2-62D, Historic Mention/Interest Sites, requires the City to encourage agencies that have jurisdiction over the historical resource to encourage rehabilitation of the resource and

## NO PROJECT ALTERNATIVE

provide public access to foster public awareness and provide educational opportunities. These are sites outside the City's jurisdictions, but have contributed to the City's historic past. Policy 2-62E, Incentives for Preservation of Historic Resources, requires the City to utilize a variety of techniques to serve as incentives toward fostering the preservation and rehabilitation of Historic Sites including: 1) allowing flexible interpretation of zoning ordinance not essential to public health and safety. This could include flexibility as to use, parking requirements and/or setback requirements; 2) Using the California Historical Building Code for rehabilitation of historic structures; 3) tax rebates (Mills Act or Local tax rebates); 4) Financial incentives such as grants/loans to assist rehabilitation efforts. Potential impacts from future development on historical architectural resources could lead to: 1) demolition, which by definition results in the material impairment of a resource's ability to convey its significance; 2) inappropriate modification, which may use incompatible materials, designs, or construction techniques in a manner that alters character-defining features; and 3) Inappropriate new construction, which could introduce incompatible new buildings that clash with an established architectural context.

While any of these scenarios, especially demolition and alteration, have the potential to change the historic fabric or setting of an architectural resource such that the resource's ability to convey its significance may be materially impaired, implementation of the General Plan policies and strategies identified above, as well as compliance with federal and State laws, as described in Section 4.4.1.1, Regulatory Framework, above, would ensure future development would not be detrimental or injurious to property or improvements in the vicinity and impacts would be *less than significant*.

**Significance With Mitigation:** Less than significant.

---

<b>CULT-2</b>	<b>Implementation of the No Project Alternative would not have the potential to cause substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.</b>
---------------	---

---

Historical and pre-contact archaeological deposits that meet the definition of historical resources under CEQA could be damaged or destroyed by ground-disturbing activities associated with future development allowed under the current General Plan. Should this occur, the ability of the deposits to convey their significance, either as containing information important in prehistory or history, or as possessing traditional or cultural significance to Native American or other descendant communities, would be materially impaired.

Although future development would be likely occur on sites and in areas either already developed, and/or in close proximity to existing residential and residential-serving development, where development would have a lesser impact on historical archeological resources, the potential remains that archaeological deposits could be discovered because the No Project Alternative would result in development on, or within the vicinity of, several identified cultural resources as shown on Figure 4.4-1 in Chapter 4.4, Cultural Resources, of this Draft EIR. In addition, the City of Cupertino in its entirety has not been systematically surveyed, and much of the land remains unsurveyed. Approximately 25 percent of the land within the city boundary and existing SOI has been surveyed for cultural resources. Therefore, it is possible that unrecorded Native American prehistoric archaeological sites exist throughout the city that may have not been identified or surveyed, including those that are buried under alluvial or fill soils due to the age of geologic deposits within the city, which have the potential to contain prehistoric archaeological resources. Furthermore, prior

**NO PROJECT ALTERNATIVE**

to its development, much of the land within Cupertino was used as ranches and/or vineyards. Therefore, there is a potential for significant subsurface historical archaeological features, including hollow-filled features (e.g. privies and wells) and other historic debris.

Although soils throughout the city and any potential historic features have been disturbed by farming operations and grading and trenching for development of existing buildings and structures, future development permitted under the current General Plan could still contain subsurface archaeological deposits. Any ground-disturbing activities related to future development permitted under this Alternative have the potential to affect subsurface prehistoric archaeological resources that may be present. Based on the significance criteria identified above, future development permitted under this Alternative would have a significant impact on the environment if these ground-disturbing activities cause a substantial adverse change in the significance of a historical archaeological resource. A substantial adverse change in the significance of an historical archaeological resource would occur from its demolition, destruction, relocation, or alteration such that the significance of the resource would be materially impaired (CEQA Guidelines Section 15064.5(b)(1)).

The following General Plan policy and strategy, once adopted, would protect archaeologically sensitive areas and would provide for the identification of archaeological deposits prior to actions that may disturb such deposits. Policy 2-63, Archaeologically Sensitive Areas, requires the City to protect archaeologically sensitive areas. The supporting strategy requires an investigation for development proposed in areas likely to be archaeologically sensitive, such as along stream courses and in oak groves, to determine if significant archaeological resources may be affected by the project. Also require appropriate mitigation measures in the project design. Therefore, compliance of the General Plan policy and strategies above, and with federal and State laws described in Section 4.4.1.1, Regulatory Framework, in Chapter 4.4, Cultural Resources, potential impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**CULT-3**                    **Implementation of the No Project Alternative would not have the potential to directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature.**

---

A review of the University of California’s Museum of Paleontology’s (UCMP) fossil locality database was conducted, and the presence of Pleistocene deposits that are known to contain fossils indicates that the city could contain paleontological resources.

Consequently, future development permitted under the No Project Alternative, as a result of continued implementation of the current General Plan, would have a significant effect on the environment if it would directly or indirectly destroy a unique paleontological resource or site. Although continued implementation of the current General Plan would not in and of itself result in direct physical development, future development as a result of implementation of the current General Plan could result in potentially significant impacts to a unique paleontological resources or site, or unique geologic feature. Compliance with the General Plan policies listed above under impact discussion CULT-1, along with compliance with federal and State laws, as discussed in Section 4.4.1.1, Regulatory Framework, of Chapter 4.4, Cultural Resources, of

## NO PROJECT ALTERNATIVE

this Draft EIR, would minimize the potential impact related to directly or indirectly destroying a unique paleontological resource or site relating to construction and other ground-disturbing activities associated with future development, would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>CULT-4</b>	<b>Implementation of the No Project Alternative would not have the potential to disturb any human remains, including those interred outside of formal cemeteries.</b>
---------------	---

---

Human remains associated with pre-contact archaeological deposits could exist in throughout Cupertino, and could be encountered at the time potential future development occurs. The associated ground-disturbing activities, such as site grading and trenching for utilities, have the potential to disturb human remains interred outside of formal cemeteries. Descendant communities may ascribe religious or cultural significance to such remains, and may view their disturbance as an unmitigable impact. Disturbance of unknown human remains would be a significant impact.

However, any human remains encountered during ground-disturbing activities associated with future development under implementation of the No Project Alternative would be subject to federal, State, and local regulations, such as the California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and the California Code of Regulations Section 15064.5(e) (CEQA), which state the mandated procedures of conduct following the discovery of human remains. According to the provisions in CEQA, if human remains are encountered at the site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The Santa Clara County Coroner shall be notified immediately. The Coroner shall then determine whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours, who will, in turn, notify the person the NAHC identifies as the Most Likely Descendant (MLD) of any human remains. Further actions shall be determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC. In addition, Policy 2-64 requires the City to protect Native American burial sites and the supporting strategy requires that upon the discovery of such burials during construction, project applicants shall take action prescribed by State law.

Therefore, with the mandatory regulatory procedures and compliance with the General Plan policy and strategy described above, potential impacts related to the potential discovery or disturbance to any human remains accidentally unearthed during construction activities associated with future development as a result of implementation of the No Project Alternative would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

**NO PROJECT ALTERNATIVE**

---

**CULT-5            Implementation of the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would not result in a significant cumulative impacts with respect to cultural resources.**

---

This EIR takes into account growth projected by this Alternative within the Cupertino city boundary and SOI, in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). Potential future development permitted under the current General Plan, has the potential to cumulatively impact historical resources. Such impacts could result from more intensive land uses, incompatible site designs that impact the historical integrity of nearby historical buildings and districts, and demolition of historical resources. Further, development within the city boundary also has the potential to adversely affect archaeological resources, paleontological resources, and human remains through their destruction or disturbance. Therefore, before mitigation, development allowed under this alternative, in combination with other future development in the region, has the potential to cause adverse cumulative impacts to cultural resources due to their destruction or loss of integrity. However, the current and amended General Plan policies and strategies, and mandatory regulation described in Section 4.4.3, Impact Discussion, in Chapter 4.4, Cultural Resources, of this Draft EIR, would avoid impacts to such resources that would occur from development and land use changes allowed by the current General Plan. Therefore, past, present, and reasonably foreseeable future development in Cupertino is not expected to have a significant effect on cultural resources.

With implementation of Mitigation Measures CULT-1 through CULT-4 identified above, the No Project Alternative is not anticipated to have a significant impact on cultural resources. Therefore, implementation of the No Project Alternative would result in a *less-than-significant* contribution to cumulative cultural resources impacts.

**Significance Without Mitigation:** Less than significant.

### 5.1.6.5 GEOLOGY, SOILS, AND SEISMICITY

---

**GEO-1            Implementation of the No Project Alternative would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving surface rupture along a known active fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; and landslides.**

---

To date, only one Alquist-Priolo Earthquake Fault Zone has been mapped within Cupertino, as shown on Figure 4.5-2 in Chapter 4.5, Geology, Soils, and Seismicity, of this Draft EIR, namely, the zone that flanks the San Andreas Fault in the southwestern-most part of Cupertino. Protections afforded by the Alquist-Priolo Act, as well as Municipal Code ordinances, as described in Section 4.5.1.1, Regulatory Framework, of Chapter 4.5, Geology, Soils, and Seismicity, of this Draft EIR, that empower the City to require detailed geotechnical reports in areas of suspected geological hazards, suggest that the potential for ground rupture would be mitigated for future development or construction in the city. However, in the event of a large,

## NO PROJECT ALTERNATIVE

MW 6.7 or greater seismic event, much of the city is projected to experience “strong” ground shaking, with the most intense shaking forecast for the northeast part of Cupertino. Based on published studies and maps of Cupertino, the potential for seismically-induced liquefaction appears low, limited to narrow areas that flank natural drainages such as Stevens, Regnart, and Calabazas Creeks. In contrast, the State-mapped hazards for seismic-induced landslides appears to be extensive in the Foothills that occupy the southwest part of the city. Municipal Code ordinances that empower the City to require detailed soils and/or geotechnical reports in areas of suspected geological hazards, would minimize the potential for seismically-induced landsliding for future development or construction in the southwest part of city.

Future development under the No Project alternative would be subject to the General Plan policies and strategies that minimize risk from seismic hazards. Policy 6-1, Seismic/Geologic Review Process, requires the City to evaluate new development proposals within mapped potential hazard zones using a formal seismic/geologic review process, and to use Table 6-D in the General Plan to determine the level of review required. Strategy 1, Acceptable Level of Risk, requires the City to encourage developers to consult with design professionals regarding performance-based design to achieve levels of safety that exceed the Uniform Building Code. The design criteria should be the maximum credible earthquake for that site. Hazardous materials use and storage facilities should aim for the highest level of seismic resistance. Strategy 2, Geotechnical and Structural Analysis, requires the City to require all developers to provide geotechnical analyses per the requirements of the California Seismic Hazards Mapping Act and the California Environmental Quality Act. In addition, require any site with a slope exceeding 10 percent to reference the Landslide Hazard Potential Zone maps of the State of California. Strategy 3, Earthquake Resistant Design Techniques, requires the City to encourage new earthquake-resistant design techniques in the design and structural engineering of buildings. Strategy 4, Residential Construction Standards Upgrade, requires the City to review construction standards for residences to reduce earthquake damage. Examples include additional bracing for garage openings of two-story and split-level homes and increased first story bracing in multiple family residences over parking garages. Encourage property owners to upgrade standards in these situations. Strategy 5, Residential Upgrade Requirements, directs the City to require any residential facility that is being increased more than 50 percent in price, or more than 50 percent in size, conform to the building code then in existence throughout the entire structure. Owners of residential buildings with known structural defects, such as un-reinforced garage openings, “Soft first story” construction, unbolted foundations, or inadequate sheer walls are encouraged to take steps to remedy the problem and bring their buildings up to the current building code. Strategy 6, Geotechnical Review Procedure, requires the City to adopt a geotechnical review procedure that incorporates these concerns into the development review process. Policy 6-2, Public Education on Seismic Safety, requires the City to encourage various public education programs to help residents reduce earthquake hazards. Strategy 1, Covenant on Seismic Risk, requires require developers to record a covenant to tell future residents in high-risk areas about the risk and inform them that more information is in City Hall records. This is in addition to the State requirement that information on the geological report is recorded on the face of subdivision maps. Strategy 2, Emergency Preparedness, requires the City to publish and promote emergency preparedness activities and drills. Use the Cupertino Scene and website to provide safety tips that may include identifying and correcting household hazards, knowing how and when to turn off utilities, helping family members protect themselves during and after an earthquake, recommending neighborhood preparation activities, and advising residents to maintain an emergency supply kit containing first-aid supplies, food, drinking water and battery operated radios and flashlight. Strategy 3, Neighborhood Response Groups, requires the City to encourage



**NO PROJECT ALTERNATIVE**

participation in Community Emergency Response Team (CERT) training. Train neighborhood groups to care for themselves during disasters. Assist in neighborhood drills. Strategy 4, Dependent Populations, requires the City to actively cooperate with State agencies that oversee facilities for vulnerable populations, to ensure that such facilities conform to all health and safety requirements, including emergency planning, training, exercises and employee education. Strategy 5, Foreign Language Emergency Information, requires the City to obtain translated emergency preparedness materials and make them available to appropriate foreign language populations.

In addition, new development in Cupertino would be required to comply with the CBC and the City's Building Code as described in Section 4.5.1.1, Regulatory Framework, of Chapter 4.5, Geology, Soils, and Seismicity, which contain criteria and standards that are designed to reduce ground rupture risks to acceptable levels.

Through the implementation of the policies and strategies discussed above, along with compliance with the CBC and City Building Code, the City would mitigate the risks associated with fault rupture, and the impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**GEO-2                      Implementation of the No Project Alternative would not result in substantial soil erosion or the loss of topsoil.**

---

The No Project Alternative would not result in substantial soil erosion or the loss of topsoil. Substantial soil erosion or loss of topsoil during construction could undermine structures and minor slopes, and this could be a concern during buildout of under the existing General Plan. Under this alternative, buildout allocation is limited and would result in the least amount of development. However, compliance with existing regulatory requirements, such as implementation of grading erosion control measures as specified in the City of Cupertino's Municipal Code, as described in Section 4.5.1.1, Regulatory Framework, of Chapter 4.5, Geology, Soils, and Seismicity, of this Draft EIR, would reduce potential impacts under this alternative from erosion and the loss of topsoil. Specifically, Section 16.08.110, requires the preparation of an Interim Erosion and Sediment Control Plan, either integrated with the site map/grading plan or submitted separately, to the Director of Public Works that calculates the maximum runoff from the site for the 10-year storm event and describes measures to be undertaken to retain sediment on the site, a brief description of the surface runoff and erosion control measures to be implemented, and vegetative measures to be undertaken. Policy 5-10, Landscaping Near Natural Vegetation, requires the City to emphasize drought tolerant and pest-resistant native and non-invasive, nonnative, drought tolerant plants and ground covers when landscaping properties near natural vegetation, particularly for control of erosion from disturbance to the natural terrain.

Policy 5-20, Reduction of Impervious Surfaces, requires the City to minimize storm water flow and erosion impacts resulting from development. Strategy 1 requires the City to change City codes to include a formula regulating how much paved surface is allowable on each lot. This would include driveways and patios installed at the time of building or remodeling. Strategy 2 requires the City to encourage the use of non-impervious materials for walkways and driveways. If used in a City or quasi-public area, mobility and access

## NO PROJECT ALTERNATIVE

for handicapped should always take precedent. Strategy 3 requires the City to minimize impervious surface areas, minimizing directly-connected impervious surfaces, maximizing onsite infiltration and using on-site retaining facilities. 4. Encourage volunteer organizations to help restore and clean the creek beds. Finally, Policy 6-48, Hillside Grading, requires the City to restrict the extent and timing of hillside grading operation to April through October. Require performance bonds during the remaining time to guarantee the repair of any erosion damage. All graded slopes must be planted as soon as practical after grading is complete. Furthermore, the future development permitted by the No Project Alternative would be concentrated on sites either developed and/or underutilized, where development would result in limited soil erosion or loss of topsoil. Therefore, adherence to existing regulatory requirements in the Municipal Code and implementation of the General Plan policies would ensure that impacts associated with substantial erosion and loss of topsoil would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>GEO-3</b>	<b>Implementation of the No Project Alternative would not result in a significant impact related to development on unstable geologic units and soils or result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.</b>
--------------	--

---

Unstable geologic units are known to be present within the City of Cupertino. The impacts of such unstable materials include, but may not be limited to subsidence where fill material may be highly compressible. Such subsidence has been exacerbated by historical groundwater overdraft. Areas underlain by thick colluvium or poorly engineered fill as well as low-lying areas may also be prone to subsidence. Therefore, certain areas throughout the city may be at greater risk for seismically-induced liquefaction, although these areas appear to be limited to land flanking natural drainages such as Stevens, Regnart, and Calabazas Creeks. Compliance with Municipal Code requirements described in Section 4.5.1.1, Regulatory Framework of Chapter 4.5, Geology, Soils, and Seismicity and General Plan policies outlined under Impact GEO-1 and GEO-2 above, which can require site-specific soils and/or geotechnical studies for land development or construction in areas of potential geologic instability (as shown on the City's geologic hazard maps), would reduce the potential impacts associated with soil instability to a *less-than-significant* level. **Significance Without Mitigation:** Less than significant.

---

<b>GEO-4</b>	<b>Implementation of the No Project Alternative would not create substantial risks to life or property as a result of its location on expansive soil, as defined Section 1803.5.3 of the California Building Code, creating substantial risks to life or property.</b>
--------------	--

---

The pattern of expansive soils within the city is such that expansive soils (denoted by soils with high linear extensibility and plasticity index) are most prevalent in the northeast part of Cupertino as shown in Figure 4.5-1 in Chapter 4.5, Geology, Soils and Seismicity. However, future development in these areas would be subject to the CBC regulations and provisions, as adopted in Chapter 16.04, Building Code, of the City's Municipal Code and enforced by the City during plan review prior to building permit issuance. The CBC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site

**NO PROJECT ALTERNATIVE**

demolition, and also regulates grading activities, including drainage and erosion control. Further, compliance with the General Plan policies listed above in impact discussion GEO-1 would require the formal seismic and geologic evaluation of new development proposals that lie within mapped potential hazard zones. Thus, compliance with existing regulations and policies would ensure that the potential future development impacts permitted under the No Project Alternative would be reduced to a *less-than-significant* level.

**Significance Without Mitigation:** Less than significant.

---

**GEO-5                    Implementation of the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would not result in a significant cumulative impacts with respect to geology and soils.**

---

This EIR takes into account growth projected by the No Project Alternative within the Cupertino city boundary and Sphere of Influence (SOI), in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). Potential cumulative geological impacts could arise from a combination of the development of the No Project Alternative together with future development in the immediate vicinity of the adjoining jurisdictions.

Only one active earthquake fault (i.e. the San Andreas Fault Zone) has been mapped by the State of California within the city, which is approximately 5 miles from city boundary the risk of primary fault rupture on occupied buildings is judged low. Furthermore, new development in Cupertino under this alternative would be subject to CBC and Municipal Code requirements, as described in Section 4.5.1.1, Regulatory Framework, of Chapter 4.5, Geology, Soils, and Seismicity, of this Draft EIR. Compliance with these building code requirements would, to the maximum extent practicable, reduce cumulative, development-related impacts that relate to seismically-induced ground-shaking, liquefaction, and expansive soils. Similarly, compliance with the General Plan policies and strategies, as listed above in impact discussion GEO-1 of this chapter, as well as the City's Ordinances pertaining to excavation and grading (i.e. Chapter 16.08, Excavations, Grading and Retaining Walls) including implementation of an Interim Erosion Control Plan and various control measures, would minimize the cumulative impacts associated with soil erosion and loss of topsoil to the maximum extent practicable. Therefore, the No Project Alternative would result in a *less-than-significant* cumulative impact with respect to geology, soils, and seismicity.

**Significance Without Mitigation:** Less than significant.

## NO PROJECT ALTERNATIVE

### 5.1.6.6 GREENHOUSE GAS EMISSIONS

---

<b>GHG-1</b>	<b>Implementation of the No Project Alternative would not directly or indirectly generate GHG emissions that may have a significant impact on the environment.</b>
--------------	--

---

Development under the No Project Alternative would contribute to global climate change through direct and indirect emissions of GHG from transportation sources, energy (natural gas and purchased energy), water use and wastewater generation, waste generation, and other, off-road equipment (e.g. landscape equipment, construction activities).

#### Community-Wide GHG Emissions – No Project Alternative

BAAQMD has not adopted a 2040 per capita GHG threshold for operation-related GHG emissions. However, a 2040 efficiency target was derived for the No Project Alternative based on the long-term GHG reduction target for 2050 interpolated from Executive Order S-03-05, which is an 80 percent reduction from 1990 levels by 2020. This methodology is consistent with CARB's recommendations in the Update to the Scoping Plan.<sup>13</sup> The 2040 efficiency target would be 3.1 MTCO<sub>2</sub>e per service population for the city. The community-wide GHG emissions inventory for the No Project Alternative compared to existing conditions is included in Table 5.1-6.

The GHG emissions in the City of Cupertino under this Alternative would decrease by 36,857 MTCO<sub>2</sub>e in 2040 compared to existing conditions. As shown in Table 5.1-6, community-wide GHG emissions in the city at 2040 would also meet the 3.1 MTCO<sub>2</sub>e threshold, which is based on the long-term GHG reduction goal of Executive Order S-03-05. Impacts from GHG emissions within the City of Cupertino would be *less than significant* for long-term growth anticipated under the No Project Alternative.

In addition, the General Plan includes several policies and strategies that, once adopted, would reduce GHG emissions from development projects to the maximum extent practicable. Within the Community Design Element, Policy 2-2, Connections Between Special Areas, employment centers and the Community, requires the City to provide strong connections between the major mixed-use Special Areas, employment centers, and the surrounding community. Supporting strategies requires the City to enhance pedestrian and bicycle connections from the major mixed-use Special Areas and employment centers to surrounding neighborhoods and provide pedestrian and bicycle paths through new and redevelopment projects to enhance public access to and through the development. Policy 2-9, Long Term Growth Boundary, requires the City to allow modification of the long-term growth boundary only in conjunction with a comprehensive review of the City's General Plan. Policy 2-19, Jobs/Housing Balance, requires the City to strive for a more balanced ratio of jobs and housing units. Policy 2-27, Heart of the City Special Area, requires the City to create a positive and memorable image along Stevens Creek Boulevard of mixed-use development; enhanced activity gateways and nodes; and safe and efficient circulation and access for all modes of transportation.

---

<sup>13</sup> California Air Resources Board (CARB), 2014, Proposed First Update to the Climate Change Scoping Plan: Building on the Framework, [http://www.arb.ca.gov/cc/scopingplan/2013\\_update/draft\\_proposed\\_first\\_update.pdf](http://www.arb.ca.gov/cc/scopingplan/2013_update/draft_proposed_first_update.pdf), February

## NO PROJECT ALTERNATIVE

Supporting strategies 1 and 2 require the City to maintain the Heart of the City Specific Plan as the primary implementation tool for the City to use for this area and evaluate options on Stevens Creek Boulevard to improve the pedestrian environment by proactively managing speed limits and traffic signal synchronization. Policy 2-57, Pedestrian Access, require the City to create pedestrian access between new subdivisions and school sites. Review existing neighborhood circulation plans to improve safety and access for pedestrians and bicyclists to school sites, including completing accessible network of sidewalks and paths. Supporting strategies require the City to implement the recommendations of the Cupertino Pedestrian Transportation Plan and trail projects, evaluate any safety, security and privacy impacts and mitigations associated with trail development and work with affected neighborhoods in locating trails.

Within the Environmental Resources/Sustainability Element, Policy 5-1, Principles of Sustainability, requires the City to incorporate the principles of sustainability into Cupertino's planning and development system. Supporting strategies include requiring the City to appoint a Task Force or Commission to develop an appropriate comprehensive annual Sustainability and Resource Plan for the City to write and keep current the annual Tactical Plan and measurement of City-wide programs to help achieve the Environmental Resources and Sustainability section of the General Plan; identify and evaluate resources, technologies, products and the lifecycle cost of ownership for each recommended; and work with City staff to evaluate the financial feasibility of the recommendations. The City would be required to encourage community gardens, which provide a more livable environment by controlling physical factors such as temperature, noise, and pollution. In addition, the City is required to adopt and implement energy policies and implementation programs that include the City's planning and regulatory process; conduct a Citywide sustainability inventory in order to identify issues, opportunities and planning alternatives; and prepare and implement a comprehensive sustainability energy plan as a part of the City's General Plan. The supporting energy plan would be designed to include the following:

- Reduction of energy consumption.
- Reduction of fossil fuels.
- Use of renewable energy resources whenever possible.
- Improve City-wide water usage and conservancy.
- Reduce water consumption by the City.
- Promote residential and business water reduction.

Policy 5-2, Conservation and Efficient Use of Energy Resources, requires the City to encourage the maximum feasible conservation and efficient use of electrical power and natural gas resources for new and existing residences, businesses, industrial and public uses. Supporting strategies require the City to do the following:

- Prepare and implement a comprehensive energy management plan for all applicable public facilities, equipment, and procurement and construction practices.
- Review and evaluate applicable City codes, ordinances, and procedures for inclusion of local, state, and federal policies and standards that promote the conservation and efficient use of energy and for consistency with the goal of sustainability. Change those that will promote energy efficiency without a punitive effect.
- Using life cycle cost analysis, identify City assets for replacement with more energy efficient replacements.

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-6 NO PROJECT ALTERNATIVE COMMUNITY GREENHOUSE GAS EMISSIONS INVENTORY**

Category	GHG Emissions (MTCO <sub>2</sub> e/Year)						
	Existing 2013	2040 BAU (Without State and Federal GHG Reductions)	2040 Adjusted BAU (With State and Federal GHG Reductions)	Change from 2013	Percent Change	Change from BAU	Percent Change
Transportation <sup>a</sup>	123,518	139,369	97,221	-26,296	-21%	-42,147	-30%
Residential (Natural Gas and Electricity) <sup>b</sup>	74,579	81,183	72,660	-1,919	-3%	-8,524	-10%
Nonresidential* (Natural Gas and Electricity) <sup>b</sup>	85,416	96,210	78,195	-7,221	-8%	-18,015	-19%
City (Natural Gas and Electricity) <sup>b</sup>	1,081	1,194	903	-177	-16%	-291	-24%
Waste <sup>c</sup>	7,095	7,843	7,843	748	11%	0	0%
Water/Wastewater <sup>d</sup>	3,712	3,944	2,840	-872	-23%	-1,105	-28%
Other - Offroad Equipment <sup>e</sup>	14,006	14,318	12,886	-1,119	-8%	-1,432	-10%
Total Community Emissions	309,406	344,062	272,549	-36,857	-12%	-71,513	-21%
Service Population <sup>f</sup>	85,689		94,721	—	—	—	—
MTCO <sub>2</sub> e/Service Population (SP)	3.6	3.7	2.9	—	—	—	—
BAAQMD GHG 2040 Plan-Level Threshold	—	—	3.1	—	—	—	—
Achieves BAAQMD GHG Plan-Level Threshold?	—	—	Yes	—	—	—	—

Notes: Emissions may not total to 100 percent due to rounding. BAU: business as usual; ABAU: adjusted business as usual. Based on GWPs in the IPCC Second Assessment Report.

a. Transportation. VMT is based on data provided by Hexagon based on VTA model for Cupertino and modeled with EMFAC2011-PL for running exhaust emissions using 2035 emission rates (note: 2040 emissions rates are not available). VMT is multiplied by 347 days/year to account for reduced traffic on weekends and holidays.

b. Energy. Based on 3-year average (2012–2010) of energy use provided by Pacific Gas & Electric (PG&E) and forecast based on the No Project Alternative housing units (residential), employment (non-residential), and service population (City) projections. The nonresidential sector includes direct access customers, county facilities, and other district facilities within the city boundaries. PG&E energy based on PG&E’s carbon intensity for 2020. The 2020 emissions rate is estimated by PG&E. It includes reductions from 33 percent RPS, Cap-and-Trade, and other regulatory reductions for HGWP gases such as reductions of SF<sub>6</sub>. Direct access energy based on the eGRID carbon intensity and assumes 33 percent RPS.

c. Waste. Based on CARB Landfill Emissions Tool Version 1\_2013. Waste generation based on 3-year average (2012-2010) waste commitment for the City of Cupertino obtained from CalRecycle and forecast based on the service population increase. Assumes 75 percent of fugitive GHG emissions are captured within the landfill’s Landfill Gas Capture System with a landfill gas capture efficiency of 75 percent. The Landfill gas capture efficiency is based on the CARB’s LGOP, Version 1.1.

d. Water/Wastewater. Includes fugitive emissions from wastewater processing and energy associated with water/wastewater treatment and conveyance. The net increase in water use was based on the Water Supply Evaluation prepared for the No Project Alternative.

e. Area Sources – Off-Road Emissions. Generated using OFFROAD2007. Estimated based on population (Landscaping), employment (Light Commercial Equipment), and construction building permits (Construction) for Cupertino as a percentage of Santa Clara County. Annual construction emissions forecasts are assumed to be similar to historic levels. Forecasts for landscaping equipment use are based on the No Project Alternative population projections, and for light commercial equipment use are based on the No Project Alternative employment projections. Excludes BAAQMD permitted sources. Daily construction emissions multiplied by 347 days/year to account for reduced/limited construction activity on weekends and holidays. Excludes fugitive emissions from construction sites.

f. Based on: Existing service population of 85,689 people (58,302 residents and 27,387 employees). 2040 service population of 94,721 people (63,873 residents and 30,848 employees).

## NO PROJECT ALTERNATIVE

- Implement an incentive program to include such items as reduced permit fees for building projects that exceed Title 24 requirements. Promote other incentives from the State, County, and Federal Governments for improving energy efficiency by posting information regarding incentive, rebate, and tax credit programs on the City's web site. Let's make learning about this easy and help those interested get started!
- Encourage the use of energy cogeneration systems through the provision of an awareness program targeting the larger commercial and industrial users and public facilities.
- Ensure designer, developers, applicants and builders meet California Title 24 Energy Efficient Building Standards and encourage architects, building designers and contractors to exceed "Title 24" requirements for new projects through the provision of incentives. Encourage either passive solar heating and/or dark plaster interior with a cover for swimming pools, cabanas and other related accessory uses where solar access is available. Encourage the use of alternative renewable sources where feasible, and develop energy audits or subvention programs.
- Require, as conditions of approval for new and renovated projects, the provision of energy conservation/efficiency applications.
- Encourage alternative, energy efficient transportation modes such as "clean" multi-modal public transit, car and vanpooling, flexible work hours, and pedestrian and bicycle paths.

Policy 5-3, Green Building Design, requires the City to set standards for the design and construction of energy and resource conserving/efficient building (Green Building Design). Supporting strategies require the City to prepare and implement "Green Building" standards for all major private and public projects that ensure reduction in energy consumption for new development through site and building design. The City would be required to participate in and encourage building energy audits, where feasible, for commercial, industrial and city facilities and convey to the business and industrial communities that energy conservation/efficiency is, in the long term, economically beneficial. PG&E also offers energy evaluation tools and services free of charge. In addition, the City would prepare a "Green Buildings" evaluation guide for use by the city staff when reviewing projects, train appropriate staff in the design principles, costs and benefits of energy conservation/efficient buildings and landscape design, conduct and/or participate in "Green Buildings" informational seminars and workshops to include people involved in the design and construction industry, land development, real estate sales, lending institutions, landscaping and design, the building maintenance industry and prospective project applicants, and become a regular feature article in the Cupertino Scene, do media outreach to the Courier and the Guide (San Jose Mercury) tape the Sustainable Building and other conservation courses, or seminars and broadcast them on the City Channel as well, and make them available at the Library.

Policy 5-5, Air Pollution Effects of Existing Development, requires the City to minimize the air quality impacts of existing development. Supporting strategies require the City to establish a Citywide public education program regarding the implications of the Clean Air Act and provide information on ways to reduce and control emissions; provide information about carpooling and restricting physical activities on "Spare the Air" high-pollution days, expand the allowable home occupations in residentially zoned properties to reduce the need to commute to work, increase planting of trees on City property and encourage the practice on private property, maintain City use of fuel-efficient and low polluting vehicles, and work with County to monitor and influence improvement of emissions and dust from the Hanson and Stevens Creek Quarries on the West end of the City. Policy 5-7, Use of Open Fires and Fireplaces, requires the City to

## **NO PROJECT ALTERNATIVE**

discourage high pollution fireplace use. Policy 5-28, Interagency Coordination, actively pursue interagency coordination for regional water supply problem solving. Policy 5-29, Coordination of Local Conservation Policies with Regionwide Conservation Policies, requires the City to Coordinate city-wide water conservation efforts with the Santa Clara Valley Water District efforts being conducted on a regional scale. Many of these conservation efforts are outlined in the Santa Clara Valley Water District Drought Plan and Countywide Water Use Reduction program. Policy 5-30, Public Information Effort, requires the City to provide the public information regarding water conservation/efficiency techniques, including how paving and other impervious surfaces impact runoff. Policy 5-31, Water Use Efficiency, requires the City to promote efficient use of water throughout the City.

Policy 5-38, Commercial/Industrial Recycling, requires the City to expand existing commercial and industrial recycling programs to meet and surpass AB 939 waste stream reduction goals. Policy 5-39, Residential Recycling, requires the City to streamline the residential curbside recycling program in the next decade. Include all city-wide residential zoning districts in the curbside recycling program. Policy 5-40, On-Site Garbage Area Dedication, requires the City to modify existing, and require for new developments, on-site waste facility requirements for all multi-family residential percent garbage. Supporting strategy, Ordinance Revisions, requires the City to revise existing ordinances relative to on-site waste facility requirements for all multi-family residential, commercial and industrial zoning districts to require that a minimum of 50 percent of garbage area be dedicated to recycling. Policy 5-41, Public Education, requires the City to promote the existing public education program regarding the reduction of solid waste disposal and recycling. Supporting strategy, Recycling Program Information, requires the City to use the local television channel, the Cupertino Scene, the Internet and other available media to provide information to the residents about the objectives of the City's recycling program. Policy 5-42, City Recycling, requires the City to encourage City staff to recycle at all City facilities. Policy 5-43, Re-distribution of Reusable Materials, requires the City to re-distribute reusable materials, e.g. garage sales, materials exchange through public education, encourage residents and businesses. Policy 5-44, Reuse of Building Materials, requires the City to encourage the recycling and reuse of building materials, including recycling materials generated by the demolition and remodeling of buildings.

Within the Circulation Element, Policy 4-1, City Participation in Regional Transportation Planning, requires the City to participate actively in developing regional approaches to meeting the transportation needs of the residents of the Santa Clara Valley. Work closely with neighboring jurisdictions and agencies responsible for roadways, transit facilities and transit services in Cupertino. Supporting strategies require the City to minimize regional traffic impacts on Cupertino by supporting regional planning programs to manage the jobs-housing balance throughout Santa Clara County and the Silicon Valley; ensure that connections are provided to enable travelers to transition from one mode of transportation to another, e.g. bicycle to bus ;support the expansion of the VTA's regional bus transit system and extension of bus and/or light rail rapid transit into the Stevens Creek and De Anza Special Areas to fulfill the "spoke and wheel" transit system designed to serve all of Santa Clara County. Policy 4-2, Reduced Reliance on the Use of Single-Occupant Vehicles, require the City to promote a general decrease in reliance on private, mostly single-occupant vehicles (SOV) by encouraging attractive alternatives. Supporting strategies require the City to encourage the use of alternatives to the SOV including increased car-pooling, use of public transit, bicycling and walking; encourage TSM programs for employees in both the public and private sectors by including preferred parking for carpools, providing bus passes, encouraging compressed workweeks, and providing



## NO PROJECT ALTERNATIVE

incentives and rewards for bicycling and walking; encourage employers to use the internet to reduce commute travel. Encourage schools, particularly at the college and high school levels, to make maximum use of the internet to limit the need to travel to and from the campus; encourage new commercial developments to provide shared office facilities, cafeterias, day-care facilities, lunchrooms, showers, bicycle parking, home offices, shuttle buses to transit facilities and other amenities that encourage the use of transit, bicycling, walking or telecommuting as commute modes to work. Provide pedestrian pathways and orient buildings to the street to encourage pedestrian activity; provide space on appropriate streets for bus turnouts, or safe and accessible bike lanes or pedestrian paths; use the Cupertino Scene and other media to provide educational material on alternatives to the SOV; continue to work with the City Bicycle/Pedestrian Advisory Committee, community groups and residents to eliminate hazards and barriers to bicycle and pedestrian transportation.

### *Applicable Regulations*

- California Global Warming Solutions Act (AB 32)
- Sustainable Communities and Climate Protection Act (SB 375)
- Greenhouse Gas Emission Reduction Targets (Executive Order S-3-05)
- Clean Car Standards – Pavely (AB 1493)
- Renewable Portfolio Standards (SB 1078)
- California Integrated Waste Management Act of 1989 (AB 939)
- California Mandatory Commercial Recycling Law (AB 341)
- California Advanced Clean Cars CARB/ Low-Emission Vehicle Program – LEV III (Title 13 CCR)
- Heavy-Duty Vehicle Greenhouse Gas Emissions Reduction Measure (Title 17 CCR)
- Low Carbon Fuel Standard (Title 17 CCR)
- California Water Conservation in Landscaping Act of 2006 (AB 1881)
- California Water Conservation Act of 2009 (SBX7-7)
- Statewide Retail Provider Emissions Performance Standards (SB 1368).
- Airborne Toxics Control Measure to Limit School Bus Idling and Idling at Schools (13 CCR 2480)
- Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling (13 CCR 2485)
- In-Use Off-Road Diesel Idling Restriction (13 CCR 2449)
- Building Energy Efficiency Standards (Title 24, Part 6)
- California Green Building Code (Title 24, Part 11)
- Appliance Energy Efficiency Standards (Title 20)

The General Plan establishes the framework for future growth and development in Cupertino. A General Plan does not directly result in development without additional approvals. Before any development can occur in the City, it is required to be analyzed for conformance with the General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits. As identified in Table 5.1-6, the No Project Alternative would achieve the 2035 performance criteria, which would ensure that the City is on a trajectory that is consistent with the statewide GHG reduction goals. Consequently, short-term and long-term GHG emissions impacts of the No Project Alternative are *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

## NO PROJECT ALTERNATIVE

---

---

### GHG-2            **Implementation of the No Project Alternative would not conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.**

---

The following plans have been adopted and are applicable for development in the City of Cupertino:

#### *CARB's Scoping Plan*

In accordance with AB 32, CARB developed the Scoping Plan to outline the State's strategy to achieve 1990 level emissions by year 2020. To estimate the reductions necessary, CARB projected statewide 2020 BAU (Business As Usual) GHG emissions (i.e. GHG emissions in the absence of statewide emission reduction measures). CARB identified that the State as a whole would be required to reduce GHG emissions by 28.5 percent from year 2020 BAU to achieve the targets of AB 32.<sup>14</sup> The revised BAU 2020 forecast shows that the state would have to reduce GHG emissions by 21.6 percent from BAU without implementation of the Pavley GHG emissions standards for passenger vehicles and the 33 percent renewable portfolio standard (RPS) for electricity, or 15.7 percent from the adjusted baseline (i.e. with Pavley and 33 percent RPS).<sup>15</sup>

Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard (LCFS), California Appliance Energy Efficiency regulations; California Building Standards (i.e. CALGreen and the 2008 Building and Energy Efficiency Standards); California Renewable Energy Portfolio standard (33 percent RPS); changes in the corporate average fuel economy standards (e.g. Pavley I and Pavley II); and other measures that would ensure the State is on target to achieve the GHG emissions reduction goals of AB 32. Statewide GHG emissions reduction measures that are being implemented over the next six years would reduce the City's GHG emissions.

As shown in Table 5.1-6, the City would achieve the 2020 target of AB 32 for cities within the SFBAAB. New residential and non-residential construction in the City would achieve the current building and energy efficiency standards. The new buildings would be constructed in conformance with CALGreen, which requires high-efficiency water fixtures for indoor plumbing and water efficient irrigation systems. Therefore, impacts would be *less than significant*.

#### *MTC's Plan Bay Area*

To achieve ABAG's/MTC's sustainable vision for the Bay Area, the Plan Bay Area land use concept plan for the region concentrates the majority of new population and employment growth in the region in PDAs. PDAs are transit-oriented, infill development opportunity areas within existing communities. Overall, well over two-thirds of all regional growth by 2040 is allocated within PDAs. PDAs are expected to accommodate 80 percent (or over 525,570 units) of new housing and 66 percent (or 744,230) of new jobs.<sup>16</sup> In Cupertino, Plan Bay Area includes the Santa Clara VTA – City Cores, Special Areas & Station Areas

---

<sup>14</sup> California Air Resources Board (CARB). 2008. October. *Climate Change Proposed Scoping Plan, a Framework for Change*.

<sup>15</sup> California Air Resources Board (CARB), 2012. *Status of Scoping Plan Recommended Measures*, [http://www.arb.ca.gov/cc/scopingplan/status\\_of\\_scoping\\_plan\\_measures.pdf](http://www.arb.ca.gov/cc/scopingplan/status_of_scoping_plan_measures.pdf).

<sup>16</sup> Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG), 2013. *Plan Bay Area: Strategy for a Sustainable Region*, July 18.

## NO PROJECT ALTERNATIVE

PDA.<sup>17</sup> The current and amended General Plan includes the following policies, which would encourage new growth in this mixed-use Special Area, consistent with Plan Bay Area's vision.

The General Plan under the No Project Alternative includes policies and strategies, which would encourage use of alternative modes of travel, which is also consistent with Plan Bay Area's vision. Within the Circulation Element, Policy 4-2, Reduced Reliance on the Use of Single-Occupant Vehicles, requires the City to promote a general decrease in reliance on private, mostly single-occupant vehicles (SOV) by encouraging attractive alternatives. Supporting strategies require the City to do the following:

- Encourage the use of alternatives to the SOV including increased car-pooling, use of public transit, bicycling and walking.
- Encourage TSM programs for employees in both the public and private sectors by including preferred parking for carpools, providing bus passes, encouraging compressed workweeks, and providing incentives and rewards for bicycling and walking.
- Encourage employers to use the internet to reduce commute travel. Encourage schools, particularly at the college and high school levels, to make maximum use of the internet to limit the need to travel to and from the campus.
- Encourage new commercial developments to provide shared office facilities, cafeterias, day-care facilities, lunchrooms, showers, bicycle parking, home offices, shuttle buses to transit facilities, and other amenities that encourage the use of transit, bicycling, walking or telecommuting as commute modes to work. Provide pedestrian pathways and orient buildings to the street to encourage pedestrian activity.
- Provide space on appropriate streets for bus turnouts, or safe and accessible bike lanes or pedestrian paths.
- Use the Cupertino Scene and other media to provide educational material on alternatives to the SOV.
- Continue to work with the City Bicycle/Pedestrian Advisory Committee, community groups and residents to eliminate hazards and barriers to bicycle and pedestrian transportation.

Policy 4-3, Improve Pedestrian and Bicycle Circulation Throughout Cupertino, requires the City Expand city-wide pedestrian and bicycle circulation in order to provide improved recreation, mobility, and safety. Supporting strategies require the City to implement the projects recommended in the Pedestrian Guidelines including consider developing a quarter-mile grid of safe, walk-able sidewalks and paths to provide pedestrian access among residential, shopping, recreation and business locations and work with the School Districts to promote the Safe Route to Schools program. The City is also required to provide additional time for pedestrians to cross streets at appropriate intersections and consider various improvements to roadways to make them more pedestrian friendly and less auto-centric. The City is required to implement a Bicycle Plan, encourage the developers of major new or remodeled buildings to include secure interior and/or fully weather protected bicycle parking, and provide bicycle parking in multi-family residential developments and in commercial districts as required under Section 19.100.040 of the City code. Policy 4-4, Regional Trail Development, requires the City to continue to plan and provide for a comprehensive system of trails and pathways consistent with regional systems. Policy 4-5, Increased Use of Public Transit, requires the City to

---

<sup>17</sup> Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG), 2013. *Plan Bay Area*, <http://geocommons.com/maps/141979>.

## NO PROJECT ALTERNATIVE

support and encourage the increased use of public transit. Policy 4-7, Traffic Service and Pedestrians Needs, requires the City to balance the needs of pedestrians with desired traffic service. Policy 4-10, Street Improvement Planning, requires the City to plan street improvements such as curb cuts, sidewalks, bus stop turnouts, bus shelters, light poles, benches and trash containers as an integral part of a project to ensure an enhanced streetscape and the safe movement of people and vehicles with the least possible disruption to the streetscape.

The Land Use/Community Design Element also includes Policy 2-1, Focused Development in Urban Centers, which would encourage new growth in the PDA mixed-use corridor, which is consistent with Plan Bay Area's vision. Policy 2-1 focuses new development in major mixed-use corridors in the City by allowing higher intensity development and increased building heights where appropriate in designated corridors, gateways, sub areas and nodes. As identified by the list of policies that encourage use of alternative modes of transportation and Policy 2-1 that focuses new growth in mixed-use areas, the No Project Alternative is consistent with the objectives of the Plan Bay Area for growth within this PDA. Therefore, the No Project Alternative is consistent with land use concept plan for Cupertino identified in the Plan Bay Area. Therefore, impacts would be *less than significant*.

### *Applicable Regulations*

- California Global Warming Solutions Act (AB 32)
- Sustainable Communities and Climate Protection Act (SB 375)
- Greenhouse Gas Emission Reduction Targets (Executive Order S-3-05)
- Clean Car Standards – Pavely (AB 1493)
- Renewable Portfolio Standards (SB 1078)
- California Integrated Waste Management Act of 1989 (AB 939)
- California Mandatory Commercial Recycling Law (AB 341)
- California Advanced Clean Cars CARB/ Low-Emission Vehicle Program – LEV III (Title 13 CCR)
- Heavy-Duty Vehicle Greenhouse Gas Emissions Reduction Measure (Title 17 CCR)
- Low Carbon Fuel Standard (Title 17 CCR)
- California Water Conservation in Landscaping Act of 2006 (AB 1881)
- California Water Conservation Act of 2009 (SBX7-7)
- Statewide Retail Provider Emissions Performance Standards (SB 1368).
- Airborne Toxics Control Measure to Limit School Bus Idling and Idling at Schools (13 CCR 2480)
- Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling (13 CCR 2485)
- In-Use Off-Road Diesel Idling Restriction (13 CCR 2449)
- Building Energy Efficiency Standards (Title 24, Part 6)
- California Green Building Code (Title 24, Part 11)
- Appliance Energy Efficiency Standards (Title 20)

Implementation of the No Project Alternative policies as well as compliance with applicable State standards listed and described above would ensure consistency with state and regional GHG reduction planning efforts; therefore, this impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

**NO PROJECT ALTERNATIVE**

---

**GHG-3                    Implementation of the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to GHG emissions.**

---

As described above, GHG emissions related to the No Project Alternative are not confined to a particular air basin but are dispersed worldwide. Therefore, the analysis in GHG-1 addresses cumulative impacts.

As identified above, the General Plan is a regulatory document that sets the framework for future growth and development. A General Plan does not directly result in development without further approvals. Before any development can occur in the city, it is required to be analyzed for conformance with the General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits. Furthermore, existing federal, State, and local regulations and policies, including the City’s draft CAP, described throughout this chapter serve to reduce community-wide GHG emissions. Continued compliance with these regulations and implementation of existing policies, including applicable General Plan policies, would reduce impacts. As identified in Impact GHG-1, Table 5.1-6 shows that the No Project Alternative would achieve the 2035 performance criteria, which would ensure that the City is on a trajectory that is consistent with the statewide GHG reduction goals. Consequently, cumulative GHG emissions impacts of the No Project Alternative are *less than significant*.

**Significance Without Mitigation:** Less than significant.

### 5.1.6.7 HAZARDS AND HAZARDOUS MATERIALS

---

**HAZ-1                    Implementation of the No Project Alternative would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.**

---

While commercially-available hazardous materials (e.g. fuels, solvents, paints, and some consumer electronics) would be used at new construction sites conceivable under the No Project Alternative, and may generate small amounts of hazardous waste, the waste would be handled in accordance with applicable federal, State, and local laws, and regulations, as described in Section 4.7.1.1, Regulatory Framework, of Chapter 4.7, Hazards and Hazardous Materials, of this Draft EIR. As a general matter, the potential future development under the No Project Alternative would not include manufacturing or research processes that generate substantial quantities of hazardous materials. The Santa Clara County Fire Department (SCCFD) and City of Cupertino Building Division coordinate the review of building permits to ensure that hazardous materials requirements are met prior to construction, including required separation between hazardous materials and sensitive land uses, and proper hazardous materials storage facilities. Any businesses that transport, generate, use, and/or dispose of hazardous materials within the No Project Alternative area would also be subject to existing hazardous materials regulations, such as those implemented by Santa Clara County Department of Environmental Health (DEH) Hazardous Materials Compliance Division (HMCD) and hazardous materials permits from the SCCFD. The SCCFD also conducts inspections for fire safety and

## NO PROJECT ALTERNATIVE

hazardous materials management of businesses and multi-family dwellings, in accordance with the City of Cupertino Hazardous Materials Storage Ordinance.<sup>18</sup>

In addition, the current General Plan contains the following policies, to further ensure that new development would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Policy 6-28, Hazardous Materials Storage and Disposal, directs the City to require the proper storage and disposal of hazardous materials to prevent leakage, potential explosions, fire or the release of harmful fumes. Policy 6-29, Proximity of Residents to Hazardous Materials, requires the City to assess future residents' exposure to hazardous materials when new residential development or childcare facilities are proposed in existing industrial and manufacturing areas, and does not allow residential development or childcare facilities if such hazardous conditions cannot be mitigated to an acceptable level of risk. Policy 6-30, Electromagnetic Fields, requires the City to consider potential hazards from Electromagnetic Fields in the project review process. Policy 6-31, Alternative Products, requires the City to continue to encourage residents and businesses to use non- and less-hazardous products, especially less toxic pest control products, to slow the generation of new hazardous waste requiring disposal through the county-wide program. Policy 6-32, Household Hazardous Wastes, requires the City to continue to support and facilitate for residences and businesses a convenient opportunity to properly dispose of hazardous waste. Policy 6-33, Hazardous Waste Dumping, requires the City to maintain information channels to the residential and business communities about the illegality and danger of dumping hazardous material and waste in the storm drain system or in creeks.

Compliance, with applicable federal, State, and local laws and regulations regarding handling of these materials, as described in Section 4.7.1.1, Regulatory Framework, of Chapter 4.7, Hazards and Hazardous Materials, of this Draft EIR, and the General Plan policies listed above would ensure the risks associated with release of hazardous materials into the environment from the routine transport, use, storage, or disposal of hazardous materials following construction are would be a *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>HAZ-2</b>	<b>Implementation of the No Project Alternative would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.</b>
--------------	--

---

The No Project Alternative would facilitate new development, including residential, mixed-use, and commercial uses, within Cupertino. Some of the new development could occur on properties that possibly are contaminated and inactive, undergoing evaluation, and/or undergoing corrective action, as indicated in Table 4.7.1 of Chapter 4.7, Hazards and Hazardous Materials. Construction of new buildings and improvements could have the potential to release potentially hazardous soil-based materials into the environment during site grading and excavation operations. Likewise, demolition of existing structures could potentially result in release of hazardous building materials (e.g. asbestos, lead paint, etc.) into the

---

<sup>18</sup> Cupertino City Code, Chapter 9.12. *Hazardous Materials Storage*.

**NO PROJECT ALTERNATIVE**

environment. Use of hazardous materials on newly developed properties after construction could potentially include cleaning solvents, fertilizers, pesticides, and other materials used in the regular maintenance and operation of the proposed uses. Compliance with applicable federal, State, and local laws and regulations regarding handling of these materials described in Section 4.7.1.1, Regulatory Framework, of Chapter 4.7, Hazards and Hazardous Materials, the General Plan policies listed under Impact HAZ-1, and compliance with the Stormwater Pollution Prevention Plan and Best Management Practices required for the proposed Project (see Chapter 4.8, Hydrology and Water Quality, for additional detail), would ensure future development under the proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; therefore, impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**HAZ-3                      Implementation of the No Project Alternative would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.**

---

Several public and private schools, including preschools, elementary, middle, and high schools, are located within one-quarter mile of known hazardous wastes sites that may be redeveloped as part of the No Project Alternative. The location of schools in proximity to the overall Study Area is described in detail in Chapter 3, Project Description, of this Draft EIR.

The SCCFD and City of Cupertino Building Division coordinate the review of building permits to ensure that hazardous materials use requirements are met prior to construction, including required separation between hazardous materials and sensitive land uses, and proper hazardous materials storage facilities. In addition, this alternative could use hazardous materials. Future development under this alternative would be required by the HMCD and the City of Cupertino to store, manage, and dispose of the materials in accordance with the Unified Program.

While compliance with existing regulations described in Section 4.7.1.1, Regulatory Framework, of Chapter 4.7, Hazards and Hazardous Materials along with the General Plan policies listed under Impact HAZ-1 would reduce the potential for school children to be exposed to hazardous materials during both construction and operation from future development permitted under the proposed Project, impacts would be potentially significant.

The No Project Alternative could use hazardous materials; however, the No Project Alternative would be required by the HMCD and the City of Cupertino to store, manage, and dispose of the materials in accordance with the Unified Program. Therefore, compliance with existing regulations and implementation Mitigation Measure HAZ-4a and HAZ-4b, as discussed in Impact HAZ-4 below, would reduce the potential for school children to be exposed to hazardous materials from the No Project Alternative to a *less-than-significant* level.

**Significance With Mitigation:** Less than significant.

---

## NO PROJECT ALTERNATIVE

---

**HAZ-4            Implementation of the No Project Alternative would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.**

---

As shown on Table 4.7-2, of Chapter 4.7, Hazards and Hazardous Materials, of this Draft EIR, the search of the DTSC's EnviroStor Database revealed five sites, and the GeoTracker database search revealed 27 LUST sites, on or within close proximity to the Project Component locations. The status of the LUST sites that are listed as "Completed-Case Closed," indicates that appropriate response actions have been completed to the satisfaction of the San Francisco Bay RWQCB or the Santa Clara Water District and, in recent years, the Santa Clara County DEH, as the local oversight agency. The status of the Hazardous Site Number 23 (Tosco #11220), in the Heart of the City Special Area, is LUST site that is listed as "Open-Verification Monitoring," indicating that remediation phases are essentially completed and a monitoring program is occurring to confirm successful completion of cleanup at the Site. The on-going monitoring at this Hazardous Material Site is currently being reviewed by Santa Clara County DEH with RWQSB oversight.

Out of the 32 Hazardous Materials Sites, the following have a status that indicates additional action is required to address the hazardous materials at these locations. These are described as follows:

- Hazardous Site 1 (Cupertino Village Cleaners), located in the North Vallco Special Area, North Vallco Gateway and Study Area 5 (Cupertino Village) is listed as "voluntary cleanup," which means, in this case, the Site has a confirmed release of tetrachloroethylene (PCE) that has impacted site soil, and the project proponents have requested the DTSC to oversee evaluation, investigation, and/or cleanup activities and have agreed to provide coverage for the DTSC's costs. Based on the potential human health risk to future tenants of the former dry cleaners tenant space, the DTSC has concluded that remediation (soil excavation or soil vapor extraction [SVE]) would be required at this location.
- Hazardous Site 2 (Anderson Chevrolet Dealership), located in the Heart of the City Special Area and North Crossroads Node, is listed as sites where the DTSC has determined that a Preliminary Endangerment Assessment (PEA) or other evaluation is required.
- Hazardous Site 3 (Four-Phase System), located in the South De Anza Special Area, is listed as undergoing closure.
- Hazardous Site 5 (Acrian Incorporated), located in the Bubb Road Special Area, is listed as sites where the DTSC has determined that a Preliminary Endangerment Assessment (PEA) or other evaluation is required.
- Hazardous Site 13 (PG&E), located in Study Area 3 (PG&E), is a listed as LUST site. Case closure for the Site was issued by the Santa Clara County DEH on June 29, 2005. However, Santa Clara County DEH has determined that residual contamination in soil remains at the Site that could pose an unacceptable risk under certain site development activities such as site grading, excavation, or the installation of water wells. Therefore, the impact of the disturbance of any residual contamination or the installation of water well(s) in the vicinity of the residual contamination must be assessed and appropriate action taken so that there is no significant impact to human health, safety, or the



## NO PROJECT ALTERNATIVE

environment. This could necessitate additional sampling, health risk assessment, and mitigation measures.

Because hazardous materials are known to be present in soil, soil gas, and/or groundwater for past land uses at certain sites that may be redeveloped as part of the proposed Project, the direct contact, inhalation, or ingestion of hazardous materials could potentially cause adverse health effects to construction workers and future site users. The severity of health effects would depend on the contaminant(s), concentration, and use of personal protective equipment during construction, and duration of exposure. The disturbance and release of hazardous materials during earthwork activities, if present, could pose a hazard to construction workers, nearby receptors, and the environment and impacts could be potentially *significant*.

### Mitigation Measures

The following mitigation measures are recommended to minimize potential impacts related to sites with known hazardous materials:

**Mitigation Measure HAZ-4a:** Construction at the sites with known contamination shall be conducted under a project-specific Environmental Site Management Plan (ESMP) that is prepared in consultation with the Regional Water Quality Control Board (RWQCB). The purpose of the ESMP is to protect construction workers, the general public, the environment, and future site occupants from subsurface hazardous materials previously identified at the site and to address the possibility of encountering unknown contamination or hazards in the subsurface. The ESMP shall summarize soil and groundwater analytical data collected on the project site during past investigations; identify management options for excavated soil and groundwater, if contaminated media are encountered during deep excavations; and identify monitoring, irrigation, or other wells requiring proper abandonment in compliance with local, State, and federal laws, policies, and regulations.

The ESMP shall include measures for identifying, testing, and managing soil and groundwater suspected of or known to contain hazardous materials. The ESMP shall: 1) provide procedures for evaluating, handling, storing, testing, and disposing of soil and groundwater during project excavation and dewatering activities, respectively; 2) describe required worker health and safety provisions for all workers potentially exposed to hazardous materials in accordance with State and federal worker safety regulations; and 3) designate personnel responsible for implementation of the ESMP.

**Mitigation Measure HAZ-4b:** For those sites with potential residual contamination in soil, gas, or groundwater that are planned for redevelopment with an overlying occupied building, a vapor intrusion assessment shall be performed by a licensed environmental professional. If the results of the vapor intrusion assessment indicate the potential for significant vapor intrusion into an occupied building, project design shall include vapor controls or source removal, as appropriate, in accordance with regulatory agency requirements. Soil vapor mitigations or controls could include passive venting and/or active venting. The vapor intrusion assessment and associated vapor controls or source removal can be incorporated into the ESMP (Mitigation Measure HAZ-4a).

**Significance With Mitigation:** Less than significant.

## NO PROJECT ALTERNATIVE

---

**HAZ-5                    Implementation of the No Project Alternative would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.**

---

The City of Cupertino Office of Emergency Services is responsible for coordinating agency response to disasters or other large-scale emergencies in the City of Cupertino with assistance from the Santa Clara County Office of Emergency Services and the SCCFD. The Cupertino Emergency Operations Plan (EOP) establishes policy direction for emergency planning, mitigation, response, and recovery activities within the City. The Cupertino EOP addresses interagency coordination, procedures to maintain communications with county and State emergency response teams, and methods to assess the extent of damage and management of volunteers.

In addition, the current General Plan has policies and strategies to ensure that new development would not conflict with emergency operations in Cupertino. Policy 6-7, Early Project Review, requires the City to involve the Fire Department in the early design stage of all projects requiring public review to assure Fire Department input and modifications as needed. Policy 6-8, Commercial and Industrial Fire Protection Guidelines, requires the City to coordinate with the Fire Department to develop new guidelines for fire protection for commercial and industrial land uses. Policy 6-9, Fire Prevention and Emergency Preparedness, requires the City to promote fire prevention and emergency preparedness through city-initiated public education programs, through the government television channel, the Internet and the Cupertino Scene. Policy 6-14, Roadway Design, requires the City to involve the Fire Department in the design of public roadways for review and comments. Attempt to ensure that roadways have frequent median breaks for timely access to properties. Policy 6-15, Dead-End Street Access, requires the City to allow the public use of private roadways during an emergency for hillside subdivisions that have dead-end public streets longer than 1,000 feet or find a secondary means of access. Policy 6-16, Hillside Access Routes, directs the city to require new hillside development to have frequent grade breaks in access routes to ensure a timely response from fire personnel. Policy 6-17, Hillside Road Upgrades, directs the city to require new hillside development to upgrade existing access roads to meet Fire Code and City standards. Policy 6-18, Private Residential Electronic Security Gates, requires the City to discourage the use of private residential electronic security gates that act as a barrier to emergency personnel.

Policy 6-34, Promote Emergency Preparedness, requires the City to distribute multi-hazard emergency preparedness information for all threats identified in the emergency plan. Information will be provided through Cardio-Pulmonary Resuscitation (CPR), First Aid and Community Emergency Response Team (CERT) training, lectures and seminars on emergency preparedness, publication of monthly safety articles in the Cupertino Scene, posting of information on the Emergency Preparedness website and coordination of video and printed information at the library. Policy 6-38, Emergency Operations Center, requires the City to ensure ongoing training of identified City employees on their functions/responsibilities in the EOC. Policy 6-39, Emergency Public Information, requires the City to maintain an Emergency Public Information program to be used during emergency situations. Policy 6-42, Evacuation Map, requires the City to prepare and update periodically an evacuation map for the flood hazard areas and distribute it to the general public.

Compliance, with applicable federal, State, and local laws and regulations regarding handling of these materials, as described in Section 4.7.1.1, Regulatory Framework, of Chapter 4.7, Hazards and Hazardous

**NO PROJECT ALTERNATIVE**

Materials and the General Plan policies listed above would ensure future development under the No Project Alternative would not interfere with, an adopted emergency response plan or emergency evacuation plan and impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**HAZ-6                    Implementation of the No Project Alternative would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.**

---

According to CalFIRE there are no very high fire hazard severity zones with the Local Responsibility Areas of Cupertino. Furthermore, in 2009 the City adopted a Wildland Urban Interface Fire Area map, which also identified that there are no high or very high fire risk areas near the overall Study Area. Although this indicated that the wildfire risk in the overall Study Area is low, there are many resources available to address wildland fires should they arise, including the CalFIRE Strategic Plan, the CFC, and cooperative fire services from SCCFD and CalFIRE, as described in Section 4.7.1.1, Regulatory Framework, in Chapter 4.7, Hazards and Hazardous Materials, of this Draft EIR. Because the overall Project Study Area is located in a highly urbanized area at a distance from regional open space areas, they are not subjected to wildland fires.

In addition, the current General Plan contains the following policies to further ensure that wildfire hazards would be minimized. Policy 6-3, Wild Fire Prevention Efforts, requires the City to coordinate wild fire prevention efforts with adjacent jurisdictions. Policy 6-4, County Fire Hazard Reduction, requires the City to encourage the County to put into effect the fire reduction policies of the County Public Safety Element. Policy 6-5, Fuel Management to Reduce Fire Hazard, requires the City to encourage the Midpeninsula Open Space District and the County Parks Department to continue efforts in fuel management to reduce fire hazards. Policy 6-6, Green Fire Breaks, requires the City to encourage the Midpeninsula Open Space District to consider “green” firebreak uses for open space lands. Policy 6-7, Early Project Review, requires the City to involve the Fire Department in the early design stage of all projects requiring public review to assure Fire Department input and modifications as needed. Policy 6-8, Commercial and Industrial Fire Protection Guidelines, requires the City to coordinate with the Fire Department to develop new guidelines for fire protection for commercial and industrial land uses. Policy 6-10, Multi-Story Buildings Fire Risks, requires the City to recognize that multi-story buildings of any land use type increase risks of fire, and ensure that adequate fire protection is built into the design and require on-site fire suppression materials and equipment to ensure the safety of the community. Policy 6-12, Smoke Detectors, directs the City to require smoke detectors in all new residential units, and in all residential units at time of sale or rental, in conformance with State law, and to continue to use the Cupertino Scene to publicize fire hazards correction methods.

Compliance with these General Plan policies and strategies, combined with the policies listed above under Impact HAZ-7, would ensure that impacts from wildland hazards would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

## NO PROJECT ALTERNATIVE

---

**HAZ-7**            **Implementation of the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to hazards and hazardous materials.**

---

As discussed previously, development allowed under the No Project Alternative would not result in significant impacts from the increased use of hazardous household materials and would not increase exposure to potential hazards associated with wildland fires and aircraft operation. Future development under the No Project Alternative would not interfere with implementation of emergency response plans. In addition, potential project-level impacts associated with hazards and hazardous materials would be further reduced through compliance with General Plan policies and strategies, other local, regional, State, and federal regulations, and with implementation of Mitigation Measures HAZ-4a and HAZ-4b. Since impacts associated with hazardous materials, wildland fire, and airport hazards are, by their nature, focus on specific sites or areas, the less-than-significant impacts within the Project Study Area from the No Project Alternative would not contribute to a cumulative increase in hazards in the immediate vicinity of the Project Study Area or throughout the region. Therefore, the potential for cumulative impacts associated with safety and hazards would be *less than significant*.

**Significance With Mitigation:** Less than significant.

### 5.1.6.8 HYDROLOGY AND WATER QUALITY

---

**HYDRO-1**            **Implementation of the No Project Alternative would not violate any water quality standards or waste discharge requirements.**

---

Development or redevelopment that could occur under the No Project Alternative could affect drainage patterns and increase the overall amount of impervious surfaces, thus creating changes to storm water flows and water quality. Increasing the total area of impervious surfaces can result in a greater potential to introduce pollutants to receiving waters. Urban runoff can carry a variety of pollutants (i.e. oil and grease, metals, sediments, and pesticide residues from roadways, parking lots, rooftops, landscaped areas) and deposit them into an adjacent waterway via the storm drain system. New construction could also result in the degradation of water quality with the clearing and grading of sites, releasing sediment, oil and greases, and other chemicals to nearby water bodies. However, future development permitted by the No Project Alternative would be located on underutilized, infill sites, all of which have already been developed and currently have a high percentage of impervious surfaces.

As discussed in Section 4.8.1.1, Regulatory Framework, in Chapter 4.8, Hydrology and Water Quality, of this Draft EIR, water quality in storm water runoff is regulated locally by the Santa Clara Valley Urban Runoff Pollution Prevention Program, which includes provisions C.3 of the Municipal Regional Storm Water NPDES Permit adopted by the San Francisco Bay RWQCB.

Adherence to these permit conditions requires new development or redevelopment projects to incorporate treatment measures, an agreement to maintain them, and other appropriate source control and site design

## NO PROJECT ALTERNATIVE

features that reduce pollutants in runoff to the maximum extent practicable. Many of the requirements involve LID practices such as the use of onsite infiltration that reduce pollutant loading. Incorporation of these measures can even improve on existing conditions.

In addition, future development would be required to comply with the NPDES Permit (Municipal Code Chapter 9.18, Stormwater Pollution Prevention and Watershed Protection) and implement a construction SWPPP that require the incorporation of BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction.

The General Plan includes policies and strategies that, once adopted, would protect water quality and reduce potential impacts to water quality as a result of implementation of potential future development in the city. Policy 5-19, Natural Water Bodies and Drainage Systems, directs the City to require that site design respect the natural topography and drainages to the extent practicable to reduce the amount of grading necessary and limit disturbance to natural water bodies and natural drainage systems caused by development including roads, highways, and bridges. Policy 5-20, Reduction of Impervious Surfaces, requires the City to minimize storm water flow and erosion impacts resulting from development. Strategy 1 requires the City to change City codes to include a formula regulating how much paved surface is allowable on each lot. This would include driveways and patios installed at the time of building or remodeling. Strategy 2 requires the City to encourage the use of non-impervious materials for walkways and driveways. If used in a City or quasi-public area, mobility and access for handicapped should always take precedent. Strategy 3 requires the City to minimize impervious surface areas, minimizing directly connected impervious surfaces, maximizing onsite infiltration and using on-site retaining facilities. Strategy 4 requires the City to encourage volunteer organizations to help restore and clean the creek beds. Policy 5-21, Pollution and Flow Impacts, states that the City, prior to making land use decisions, estimate increases in pollutant loads and flows resulting from projected future development to avoid surface and groundwater quality impacts. The supporting Strategy, Best Management Practices (BMPs), requires the incorporation of structural and nonstructural BMPs to mitigate the projected increases in pollutant loads and flows. Policy 5-22, Compact Development Away from Sensitive Areas, directs the City to where such measures do not conflict with other municipal purposes or goals, encourage, via zoning ordinances, compact development located away from creeks, wetlands, and other sensitive areas. Policy 5-23, Conformance with Watershed-Based Planning and Zoning, requires the City to encourage development projects to follow watershed-based planning and zoning by examining the project in the context of the entire watershed area. Policy 5-32, Urban Runoff Pollution Prevention Program, requires the City to support and participate in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) in order to work cooperatively with other cities to improve the quality of storm water runoff discharge into San Francisco Bay. Policy 5-33, Illicit Discharge into Storm Drains and Waterways, requires the City to prohibit the discharge of pollutants and the illicit dumping of wastes into the storm drains, creeks and waterways. Policy 5-34, Storm Water Runoff, requires the City to encourage the reduction of impervious surface areas and investigate opportunities to retain or detain storm runoff on new development.

Policy 5-35, Development on Septic Systems, requires the City to not permit urban development to occur in areas not served by a sanitary sewer system, except in the previously approved Regnart Canyon development. Policy 5-36, Mitigation for Potential Storm Water Impacts, directs the City to require mitigation measures for potential storm water pollutant impacts for projects subject to environmental

## NO PROJECT ALTERNATIVE

review. Policy 5-37, Pest-Resistant Landscaping and Design Features, requires the City to encourage the consideration of pest-resistant landscaping and design features, and the incorporation of storm water detention and retention techniques in the design and landscaping of proposed development projects. The City will reduce runoff from the use of pesticides and chemical fertilizers from public and quasi-public land by employing companion planting techniques, using pesticides such as insecticidal soaps and oils, mulching and release of beneficial insects as appropriate. In addition, Policy 6-48, Hillside Grading, protects water quality from runoff by requiring the City to restrict the extent and timing of hillside grading operation to April through October. Require performance bonds during the remaining time to guarantee the repair of any erosion damage. All graded slopes must be planted as soon as practical after grading is complete.

While implementation of the No Project Alternative would permit new office, commercial and hotel development, and new housing units to meet projected housing demands, as described above, it does not contain any policies that would directly or indirectly result in violations of water quality standards. Therefore, implementation of this alternative would have a *less-than-significant* impact on water quality.

**Significance Without Mitigation:** Less than significant.

---

<b>HYDRO-2</b>	<b>Implementation of the No Project Alternative would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).</b>
----------------	---

---

Planned future development for the No Project Alternative could result in an increase in impervious surfaces, which would reduce infiltration and could lead to reduced groundwater recharge. However, as previously described, future development permitted by the No Project Alternative would be located on underutilized, infill sites, most of which have already been developed and currently have a high percentage of impervious surfaces. The Applicants for new development and redevelopment would be encouraged to implement site design measures, LID, and BMPs, including infiltration features that will contribute to groundwater recharge and minimize storm water runoff. As discussed above in Impact HYDRO-1, General Plan Policy 5-20, Reduction of Impervious Surfaces, requires minimizing impervious surface areas, minimizing directly connected impervious surfaces, maximizing onsite infiltration and using on-site retaining facilities amongst other strategies. In addition, given the Project Component locations, future development would not interfere with groundwater recharge that takes place in the McClellan Ponds recharge facility located within the City of Cupertino or the creeks and streams that run through the city.

While buildout of the No Project Alternative could lead to an increased demand for water, which could lead to an increase in groundwater pumping, water supply impacts are discussed in Chapter 4.14, Utilities and Service Systems, of this Draft EIR. As discussed in Chapter 4.14, Utilities and Service Systems, of this Draft EIR, water retailers for the City of Cupertino obtain their water from groundwater wells and purchases from SCVWD. The SCVWD's 2010 Urban Water Management Plan (UWMP) indicates that there is a

## NO PROJECT ALTERNATIVE

sufficient supply of water through 2035 even for multiple dry years.<sup>19</sup> In addition, the SCVWD operates and maintains an active groundwater recharge program with 18 major recharge systems, over 70 off-stream ponds with a combined surface area of more than 320 acres, and over 30 local creeks. Runoff is captured in the SCVWD's reservoirs and released into both in-stream and off-stream recharge ponds for percolation into the groundwater basin. In addition, imported water is delivered by the raw water conveyance system to streams and ponds.<sup>20</sup>

The use of site design features required by provisions C.3 of the MRP and compliance with the City of Cupertino General Plan policies listed above in Impact HYDRO-1 would reduce the impact of increased impervious surfaces on groundwater recharge. Therefore, implementation of the No Project Alternative would have a *less-than-significant* impact with respect to groundwater supplies or groundwater recharge.

**Significance Without Mitigation:** Less than significant.

---

**HYDRO-3      Implementation of the No Project Alternative would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion, siltation, or flooding on- or off-site.**

---

Development under the No Project Alternative would result in an increase in impervious surfaces. This could result in an increase in storm water runoff, higher peak discharges to drainage channels, and the potential to cause erosion or sedimentation in drainage swales and streams. Increased runoff volumes and velocities could create nuisance flooding in areas without adequate drainage facilities. However, none of the future development would require alteration of the course of an existing stream. Most of the future development sites are in infill areas that are already developed or paved and new development on these sites should not create a substantial increase in the amount of impervious surfaces.

All new development and redevelopment projects will be required, pursuant to the SCVURPPP and MRP, to implement construction phase BMPs, post-construction design measures that encourage maximize infiltration in pervious areas, and post-construction source control measures to help keep pollutants out of storm water. In addition, post-construction storm water treatment measures are required for most projects with 10,000 square feet or more of impervious surface and post-construction storm water quantity (flow peak, volume, and duration) controls are required for projects in certain locations with one acre or more of impervious surface, in accordance with Santa Clara Valley Urban Runoff Pollution Prevention Program's Hydromodification Management Plan (HMP). This would minimize the amount of storm water runoff from new development and redevelopment sites within the city.

During construction, project applicants are subject to the NPDES construction permit requirements, including preparation of a SWPPP. In addition, Section 16.08.110, Interim Erosion and Sediment Control Plan, of the City's Municipal Code, requires preparation of an Interim Erosion and Sediment Control Plan,

---

<sup>19</sup> Santa Clara Valley Water District, 2010. *Urban Water Management Plan*.

<sup>20</sup> Santa Clara Valley Water District, 2010. *Urban Water Management Plan*.

## NO PROJECT ALTERNATIVE

either integrated with the Site map/grading plan or submitted separately, that calculates the maximum runoff from the Site for the ten-year storm event and describes measures to be undertaken to retain sediment on the Site, a brief description of the surface runoff and erosion control measures to be implemented, and vegetative measures to be undertaken. These control measures would further reduce the potential for substantial erosion or siltation and would ensure that runoff from the Site is protective of the beneficial uses of receiving waters. Once constructed, the requirements for new development or redevelopment would include source control measures and site design measures that address storm water runoff and would reduce the potential for erosion or siltation.

In addition, Provisions C.3 of the MRP require new development and redevelopment projects, meeting certain criteria, to implement storm water treatment measures to contain site runoff, using specific numeric sizing criteria based on volume and flow rate. For hydromodification projects, post-project runoff shall not exceed estimated pre-project rates and durations where the increased storm water discharge rates and durations would result in increased potential for erosion.<sup>21</sup>

The General Plan includes policies and strategies that, once adopted, would further prevent soil erosion and reduce impacts to water quality. Within the Environmental Resources Element, Policy 5-10, Landscaping Near Natural Vegetation, per the City's Water Efficient Landscaping Ordinance, Environmentally Preferable Procurement Policy, and the Parks & Recreation Green Policies, requires the City to continue to emphasize drought tolerant and pest-resistant native and non-invasive, non-native, drought tolerant plants and ground covers when landscaping public and private properties near natural vegetation, particularly for control of erosion from disturbance to the natural terrain. Policy 5-20, Reduction of Impervious Surfaces, discussed above, requires the City to minimize storm water flow and erosion impacts resulting from development. Policy 5-21, Pollution and Flow Impacts, states that the City, prior to making land use decisions, estimate increases in pollutant loads and flows resulting from projected future development to avoid surface and groundwater quality impacts. Strategy 1, Best Management Practices, require incorporation of structural and non-structural Best Management Practices (BMPs) to mitigate the projected increases in pollutant loads and flows. Policy 5-32, Urban Runoff Pollution Prevention Program, requires the City to support and participate in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) in order to work cooperatively with other cities to improve the quality of storm water runoff discharge into San Francisco Bay. Strategy 1, Post-Construction Urban Runoff Management, requires the City to implement the Post-Construction Urban Runoff Management requirements of the City's Municipal NPDES Permit to reduce urban runoff from project sites. Strategy 2, Hydromodification Management, requires the City to implement the Hydromodification Management requirements of the City's Municipal NPDES Permit to manage runoff flow and volume from project sites.

In addition, within the Health and Safety Element, Policy 6-48, Hillside Grading, requires the City to restrict the extent and timing of hillside grading operation to April through October. Require performance bonds during the remaining time to guarantee the repair of any erosion damage. All graded slopes must be planted as soon as practical after grading is complete. Within the Environmental Resources Element, Policy 5-23, Storm Drainage Management and Conformance with Watershed-Based Planning, would require the

---

<sup>21</sup> Santa Clara Valley Urban Runoff Pollution Prevention Program, 2014. Website: [http://www.scvurppp-w2k.com/nd\\_wp.shtml#other](http://www.scvurppp-w2k.com/nd_wp.shtml#other) accessed on May 3, 2014.



## NO PROJECT ALTERNATIVE

City to encourage development projects to follow watershed-based planning and zoning by examining the project in the context of the entire watershed area. Policy 5-24, Ground Water Recharge Sites, requires the City to support the Santa Clara Valley Water District to find and develop groundwater recharge sites within Cupertino's planning area and provide for public recreation at the sites where possible. Policy 5-34, Storm Water Runoff, includes a new strategy that would direct the City to "ensure that private development includes adequate measures to treat stormwater runoff," and to "maximize opportunities to filter, infiltrate, store and reuse or evaporate stormwater runoff onsite." As individual flood control or stormwater system projects are proposed, such projects would undergo project-level environmental review that would evaluate and address potential adverse physical effects. By encouraging improved stormwater drainage, management, and retention, these policies would serve to prevent or reduce unmanaged runoff that could result in erosion, siltation, or flooding.

With implementation of these erosion and sediment control measures and regulatory provisions to limit runoff for new development and redevelopment sites, the No Project Alternative would not result in significant increases in erosion and sedimentation or contribute to flooding on-site or off-site and impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**HYDRO-4      Implementation of the No Project Alternative would not create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.**

---

As discussed previously, an increase in impervious surfaces with implementation of the No Project Alternative could result in an increase in storm water runoff that could exceed the capacity of existing or planned storm water drainage systems. Under existing conditions, portions of the City's storm drainage systems are not capable of containing the runoff from 10-year storm events.<sup>22</sup> As shown in Table 4.8-2, in Chapter 4.8, Hydrology and Water Quality, of this Draft EIR, there are existing deficiencies in the Project Component locations that could be exacerbated by potential future development under the No Project Alternative.

In accordance with established City and County requirements, new development and redevelopment projects must be designed such that the storm water runoff generated from the ten-year storm is conveyed in the storm drainage system (underground pipes or open channels) and the storm water runoff generated from the 100-year design storm must be safely conveyed away from the site without creating and/or contributing to downstream or upstream flooding conditions.<sup>23</sup> In addition, the City of Cupertino requires that post-project storm water runoff rates be less than or equal to pre-project values for projects subject to hydromodification requirements and where storm drain facilities are at or have exceeded system capacities.<sup>24</sup> Therefore, future development associated with the No Project Alternative would not be

---

<sup>22</sup> City of Cupertino, 1993. *Storm Drain Master Plan*.

<sup>23</sup> Santa Clara County, 2007. *Drainage Manual*. Adopted August 14, 2007.

<sup>24</sup> Verbal communication with Fletcher Parsons, BKF and Chad Mosley, City of Cupertino, March 19, 2014.

## NO PROJECT ALTERNATIVE

expected to result in downstream flooding but could exacerbate existing conditions of the storm drain system, which is undersized to convey the 10-year storm event at some locations.

New development and redevelopment within the city would not create substantial additional sources of polluted runoff. During the construction phase, projects would be required to prepare SWPPPs and erosion and sediment control plans, thus limiting the discharge of pollutants from the site. During operation, projects must implement BMPs and LID measures that minimize the amount of storm water runoff and associated pollutants. Additionally, new development or redevelopment projects would be required to pay storm drainage fees pursuant to City Council Resolution No. 12-033, to support expansion and improvements to the existing storm drain system. Also, as discussed in Impact HYDRO-1 and HYDRO-3, the General Plan includes polices and strategies that, once adopted, would require the City to minimize storm water flow and erosion impacts resulting from development, Support and participate in the SCVURPPP, implement the Post-Construction Urban Runoff Management requirements of the City's Municipal NPDES Permit to reduce urban runoff from project sites, require mitigation measures for potential storm water pollutant impacts for projects subject to environmental review, and encourage the consideration of design features, including the landscaping and design of storm water detention and retention facilities proposed in development projects. Specifically, Policy 5-23, Storm Drainage Management and Conformance with Watershed-Based Planning, would encourage development projects to follow watershed-based planning and zoning by examining the project in the context of the entire watershed area. By encouraging improved stormwater drainage, including project-practices to prevent runoff, this policy would serve to deploy strategies to decrease runoff and prevent increases to stormwater entering the drainage system.

Within the Environmental Resources Element, Policy 5-23, Storm Drainage Management and Conformance with Watershed-Based Planning, would encourage development projects to follow watershed-based planning and zoning by examining the project in the context of the entire watershed area. Policy 5-32, Urban Runoff Pollution Prevention Program, requires the City to support and participate in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) in order to work cooperatively with other cities to improve the quality of storm water runoff discharge into San Francisco Bay. By encouraging improved stormwater drainage, management, and retention, these policies would serve to prevent or reduce unmanaged runoff that could exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

Implementation of General Plan policies and strategies aimed at reducing storm water and compliance with the mandatory regulation outlined in this discussion, once adopted, would ensure development consistent with this Alternative would not require significant expansions of the existing storm water drainage infrastructure. Therefore, impacts associated with future development runoff would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

**NO PROJECT ALTERNATIVE**

---

**HYDRO-5      Implementation of the No Project Alternative would not otherwise substantially degrade water quality.**

---

Increased runoff from the construction of impermeable surfaces as the Project Component locations are developed could worsen water quality in the storm water runoff. Pollutants commonly associated with construction sites that can impact storm water are sediments, nutrients, trace metals, pesticides, oil, grease, fuels, and miscellaneous construction wastes. Pollutants generated from the proposed land uses of the Project Study Area may include sediment, nutrients, bacteria and viruses, oil and grease, metals, organics, pesticides/herbicides, and trash/debris.

As required by City and County storm water management guidelines, BMPs would be implemented during both construction and operation of the No Project Alternative. These BMPs would control and prevent the release of sediment, debris, and other pollutants into receiving water bodies. Implementation of BMPs during construction would be in accordance with the provisions of the SWPPP, which would minimize the release of sediment, soil, and other pollutants. Operational BMPs would be required to meet MRP requirements, which include site design, source control, and treatment control measures to treat and control runoff before it enters the storm drain system or receiving water bodies. With Implementation of General Plan Policies listed under Impact HYDRO-4 and the BMPs in accordance with City and County requirements, the potential impact on water quality would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**HYDRO-6      Implementation of the No Project Alternative would not place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place structures that would impede or redirect flood flows within a 100-year flood hazard area.**

---

Implementation of the proposed Project would not result in the development of residential structures in existing FEMA-designated 100-year floodplains or Special Flood Hazard Areas (SFHAs). As shown on Figure 4.8-4 in Chapter 4.8, Hydrology and Water Quality, of this Draft EIR, the areas within Cupertino and the Sphere of Influence (SOI) that are within the 100-year floodplain are limited and are areas located immediately adjacent to creeks and drainage channels that travel through the city. The Project Components locations relative to the 100-year floodplains are shown on Figure 4.8-4.

Regnant Creek and Calabasas Creek and their associated 100-year floodplains pass through portions of the South De Anza and the Heart of the City Special Areas, which are proposed to include new housing and/or new development. However, the FEMA floodplain maps state that the 100-year flood would be contained within the channels of these creeks at some of the locations within the Special Areas. At other locations, the width of the floodplain parallels the creek channels and varies in width between 50 to 100 feet. Because the City of Cupertino and Santa Clara County have restrictions on construction within 50 feet of a stream, new residences or structures would not be located within the 100-year floodplain. Calabasas Creek and its associated 100-year floodplain also passes through the North Vallco Park Special Area. However, no new

## NO PROJECT ALTERNATIVE

housing is proposed in the portion of the North Vallco Park Special Area where the 100-year floodplain is located. Also, because the floodplain is only 100 feet wide at this location and there are restrictions on construction next to streams, no other structures will be built in the floodplain. General Plan and Zoning Ordinance Conformance Sites 39, 44, and 45 are also in areas mapped as including the 100-year floodplain. However, these sites are proposed to be rezoned as PR (park and recreation) so no new housing or structures would be located in these areas.

As described in Section 4.8.1.2, Existing Conditions, in Chapter 4.8, Hydrology and Water Quality, of this Draft EIR, under the subheading “Waterways,” the creeks that run through Cupertino pose little threat of flooding as a result of effort by the City and SCVWD to modify, restore and improve the flow channels and implement erosion control measures to reduce impacts from flooding.

The General Plan includes policies and supporting strategies that, once adopted, would reduce impacts from flooding and ensure potential impacts from flooding would not occur with the implementation of the potential future development. Policy 5-27, Natural Water Courses, requires the City to retain and restore creek beds, riparian corridors, watercourses and associated vegetation in their natural state to protect wildlife habitat and recreation potential and assist groundwater percolation. Encourage land acquisition or dedication of such areas. The supporting Strategy, Santa Clara Valley Water District, requires the City to work with the Santa Clara Valley Water District and other relevant regional agencies to enhance riparian corridors and provide adequate flood control by use of flow increase mitigation measures. Policy 6-42, Evacuation Map, requires the City to prepare and update periodically an evacuation map for the flood hazard areas and distribute it to the general public. Policy 6-43, Flood Insurance Map Rates, requires the City to ensure that FEMA Flood Insurance Rate Maps are developed for the City of Cupertino. Policy 6-46, New Construction in Flood Plains, requires the City to adopt stringent land use, zoning and building code regulations limiting new construction in the already urbanized flood hazard areas recognized by the Federal Flood Insurance Administrator. Strategy 1, Finish Floor Level, require the City to install the first floor finish level of all habitable space of new construction above the inundation level of a projected 100-year flood. Strategy 2, Description of Flood Zone Regulation, requires the City to publish a description of flood zone regulations and a map of potential flood hazard areas in the Cupertino Scene. Policy 6-47, Dwellings in Natural Flood Plain, require the City to regulate closely all types of habitable development in natural flood plains. This includes prohibiting fill materials and obstructions that may increase flood potential downstream or modify the natural riparian corridors.

In addition, the City of Cupertino has adopted local standards for construction in floodplain areas,<sup>25</sup> and together with Santa Clara County, there are restrictions on construction within 50 feet of a stream, which includes most of the designated 100-year floodplains within the city.<sup>26</sup> If future development were to be constructed within the 100-year flood zone, it would require the placement of fill to elevate structures above the 100-year floodplain elevation. In order for the development to be considered outside of the floodplain and no longer subject to special flood hazard requirements, the applicant would have to submit an application to FEMA for a Letter of Map Revision – Fill (LOMR-F) after the fill has been placed. After FEMA has revised the FIRM to show that the future development is now outside of the SFHA, the City

---

<sup>25</sup> City of Cupertino, Municipal Code Chapter 16.52, Prevention of Flood Damage.

<sup>26</sup> City of Cupertino, Municipal Code, Chapter 9.19, Water Resource Protection.

## NO PROJECT ALTERNATIVE

would no longer be required to apply the minimum NFIP floodplain management standards to structures built on the land and the mandatory flood insurance requirements would no longer apply. However, as part of its floodplain management strategy, to reduce possible loss of life and property in the event of a flood, the City would encourage compliance with as many of the standards as financially feasible.

Construction within SFHAs is governed by the City's Municipal Code Chapter 16.52 (Prevention of Flood Damage), Section 16.52.040 (General Standards), which sets forth construction requirements for development that would minimize flood hazard risks, including anchoring and flood-proofing; limitations on use for structures below the base flood elevation; use of materials and utility equipment resistant to flood damage; the requirement that electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities be designed and/or located to prevent water from entering or accumulating within the components during flood conditions; and the requirement that all new and replacement water supply and sanitary sewage systems be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from systems into floodwaters.

Because the No Project alternative would not include the placement of housing within the 100-year floodplain, would include planning for management of flood flows, and would require any new construction to comply with General Plan policies, the City Municipal Code, and Santa Clara County water course protection requirements, which limit construction within 50 feet of a stream, the potential for flood hazards would be reduced to *less-than-significant* levels.

**Significance Without Mitigation:** Less than significant.

---

**HYDRO-7      Implementation of the No Project Alternative would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.**

---

According to mapping compiled by ABAG and the Office of Emergency Services (OES),<sup>27</sup> as shown on Figure 4.8-5, in Chapter 4.8, Hydrology and Water Quality, of this Draft EIR, portions of Cupertino are within the Stevens Creek Reservoir inundation zone.

Dam inundation zones are based on the highly unlikely scenario of a total catastrophic dam failure occurring in a very short period of time. Existing state and local regulations address the potential for flood hazards as a result of dam failure. The Stevens Creek Reservoir is under the jurisdiction of the California Department of Water Resources Division of Safety of Dams (DSOD), which conducts annual inspections and reviews all aspects of dam safety. The dam has been assessed for seismic stability and will withstand the maximum credible earthquake. The SCVWD is also planning to implement additional remedial measures to assure the continued safe operation of the dam. Dam owners are also required to maintain EAPs that include procedures for damage assessment and emergency warnings. In addition, the City of Cupertino in

---

<sup>27</sup> Association of Bay Area Governments, 2003. Dam Inundation Hazard Map for Cupertino, Website [www.abag.ca.gov/cgi-bin/pickdamx.pl](http://www.abag.ca.gov/cgi-bin/pickdamx.pl) (accessed April 9, 2014).

## NO PROJECT ALTERNATIVE

conjunction with Santa Clara County addresses the possibility of dam failure in the Local Hazard Mitigation Plan (LHMP), which also provides emergency response actions.

The probability of dam failure is extremely low and the City of Cupertino and Santa Clara County have never been impacted by a major dam failure. Furthermore, the General Plan includes policies and strategies that, once adopted, would aim to reduce impacts from dam failure. Within the Health and Safety Element, Policy 6-44, Emergency Response to Dam Failure, requires the City to ensure that Cupertino is prepared to respond to a potential dam failure. Supporting Strategy 1 and 2 require the City to maintain a dam emergency and evacuation plan and coordinate dam-related evacuation plans with the City of Sunnyvale to ensure that traffic management between the two cities facilitates life safety. Policy 6-49, Stability of Existing Water Storage Facilities, requires the City to assure the structural integrity of water storage facilities. Strategy, Coordination with other Agencies, requires the City to work closely with the San Jose Water Company and owners of other water storage facilities to develop and implement a program to monitor the stability of all existing water storage facilities and related improvements, such as: distribution lines, connections and other system-components.

Therefore, given these policies and strategies and adherence to the Joint Stevens Creek Dam Failure Plan together with the very low probability of dam failure and that the dam has been assessed for seismic stability and will withstand the maximum credible earthquake, implementation of the L would not expose people or structures to a significant risk of loss, injury, or death in the case of dam failure and impacts are considered to be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

### **HYDRO-8      Implementation of the No Project Alternative would not be impacted by inundation as a result of a seiche, tsunami, or mudflow.**

---

Because the City of Cupertino is more than 8 miles south of San Francisco Bay and is more than 100 feet above mean sea level (msl), there is no potential for a tsunami to impact the Project Study Area.<sup>28</sup> There are no large bodies of water within the City of Cupertino that could generate seiches, but the City is located just north of Stevens Creek Reservoir. A seiche could theoretically occur in this reservoir as the result of an earthquake or other disturbance, but the flooding impact would be less than that of the dam inundation zone. Although limited portions of the southern tip of Cupertino are within areas that could result in landslides and debris flows, these areas are primarily open space or very low-density hillside homes. None of the Project Component locations are within ABAG mapped rainfall-induced landslide or earthquake-induced landslide zones. Therefore, impacts due to seiches, tsunamis, or mudflows would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<sup>28</sup> Association of Bay Area Governments (ABAG), 2014. *Interactive Tsunami Inundation Map*. Accessed at: <http://gis.abag.ca.gov/website/Tsunami/index.html> on April 5, 2014.

**NO PROJECT ALTERNATIVE**

---

**HYDRO-9      Implementation of the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would/would not result in less than significant cumulative impacts with respect to water quality.**

---

As discussed in Chapter 4, Environmental Evaluation, of this Draft EIR, this EIR takes into account growth projected by the No Project Alternative within the Cupertino city boundary and SOI, in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the ABAG. The geographic context used for the cumulative assessment of water quality and hydrology impacts encompasses the six watersheds, which encompass the City of Cupertino. Cumulative impacts can occur when impacts that are significant or less than significant from a No Project Alternative combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area.

As discussed previously, implementation of the No Project Alternative would require conformance with State and local policies that would reduce hydrology and water quality impacts to *less-than-significant* levels. When applicable, any additional new development within the city would be subject, on a project-by-project basis, to independent CEQA review as well as policies in the Cupertino General Plan, design guidelines, Zoning Ordinance, and other applicable City requirements that reduce impacts related to hydrology and water quality. More specifically, potential changes related to storm water quality, storm water flows, drainage, impervious surfaces, and flooding would be minimized via the implementation of storm water control measures, retention, infiltration, and LID measures, and review by the City's Public Works Department to integrate measures to reduce potential flooding impacts.

All cumulative projects would be subject to similar permit requirements and would be required to comply with City ordinances and General Plan policies, as well as numerous water quality regulations that control construction related and operational discharge of pollutants in storm water. The water quality regulations implemented by the San Francisco Bay RWQCB take a basin-wide approach and consider water quality impairment in a regional context. For example, the NPDES Construction Permit ties receiving water limitations and basin plan objectives to terms and conditions of the permit, and the MS4 Permit works with all municipalities to manage storm water systems to be collectively protective of water quality. For these reasons, impacts of the No Project Alternative on hydrology and water quality are not cumulatively considerable and the cumulative impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

### 5.1.6.9 LAND USE AND PLANNING

---

**LU-1      Implementation of the No Project Alternative would not physically divide an established community.**

---

Implementation of the No Project Alternative would result in a significant impact if it would lead to new development or physical features that would divide existing communities. The physical division of an established community typically refers to the construction of a physical feature (such as a wall, interstate highway, or railroad tracks) or the removal of a means of access (such as a local road or bridge) that would

## NO PROJECT ALTERNATIVE

impair mobility within an existing community, or between a community and outlying areas. An example of a physical feature that would divide an existing community is an airport, roadway, or railroad track through an existing community that could constrain travel from one side of the community to another or impair travel to areas outside of the community.

Under this alternative, development allocations would not be replenished, and development would continue to occur and function similar to existing conditions; therefore, would be concentrated on sites either developed and/or underutilized, and/or in close proximity to existing residential and residential-serving development, where future development would have. Future development under the No Project Alternative would retain the existing roadway patterns and do not propose any new major roadways or other physical features through existing residential neighborhoods or other communities that would create new barriers in the Project Study Area. New development in currently developed areas would occur as allowed under current remaining development allocations and would include office, commercial, hotel and residential development without dividing any existing communities.

The designation of sites for office, commercial, hotel and higher density residential development would not physically divide any of the areas where Project Component locations are identified, because the vicinity of the Sites would all retain their predominant existing uses for office, commercial, hotel and residential use, and would not require any new roads or other features that would divide a community. Accordingly, impacts would be *less than significant*.

Furthermore, future development under the No Project Alternative would be required to be consistent with the following General Plan policies promote cohesive and compatible neighborhoods and prevent new development from dividing existing uses where different land uses abut one another.

Within the Land Use and Community Design Element of the General Plan, there are several policies that encourage cohesive development. Policy 2-2, Connections between Special Areas, Employment Centers and the Community, requires the City to provide June 17, 2014 strong connections between the mixed-use Special Areas, employment centers and the surrounding community. Policy 2-5, Distinct Neighborhoods, requires the City to plan for neighborhoods that have distinctive edges, an identifiable center and safe pedestrian and bicycle access to surrounding uses. Policy 2-6, Neighborhood Compatibility, requires the City to minimize potential conflicts between residential neighborhoods and more intense developments with adequate buffering setbacks, landscaping, walls, limitations, site design and other appropriate measures, and create zoning requirements or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through various measures.

Policy 2-13, Urban Building Forms, requires the City to concentrate urban building forms in the mixed-use Special Areas, which would focus development in the Special Areas and away from existing low density residential neighborhoods. Policy 2-16, Single-Family Residential Design, requires the City to preserve the character of residential neighborhoods by requiring new development to be compatible with the existing neighborhood. Policy 2-23, Compatibility of Lot Sizes, requires the City to ensure that zoning, subdivision and lot line adjustment requests related to lot size or lot design consider the need to preserve the existing pattern of lot development which would encourage the development of similar development as opposed to development which would not be compatible with the neighborhood.



## NO PROJECT ALTERNATIVE

Policy 2-24, Monta Vista Neighborhood, requires the City to retain and enhance Monta Vista as a residential, commercial and industrial area, with adequate pedestrian and bicycle access. Under this policy, the commercial district should serve as a neighborhood commercial center for Monta Vista and its adjoining neighborhoods. Mixed-use with residential is encouraged. The industrial area should be retained to provide small-scale light industrial and service industrial opportunities, while remaining compatible with the surrounding residential and commercial uses. Policy 2-30, South Vallco Park Gateway, requires the City to retain and enhance South Vallco Park Gateway as a large-scale commercial area that is a regional commercial (including hotel), office and entertainment center with supporting residential development. Policy 2-31, Homestead Road Special Area, requires the City to create an integrated, mixed-use commercial and housing village along Homestead Road, consisting of three integrated areas. Each area will be master planned, with special attention to the interconnectivity of these areas. Policy 2-47, Big Box Development, requires the City to consider approving big box development if it is compatible with the surrounding area in terms of building mass and traffic, and is consistent with the City's economic development goals.

In order to provide easy access to recreation services, thereby creating an integrated community, the General Plan includes Policy 2-75, Park Walking Distance, which requires the City to ensure that each household is within a half-mile walk of a neighborhood park, or community park with neighborhood facilities, and that the route is reasonably free of physical barriers, including streets with heavy traffic. Under this policy, wherever possible, the City shall also provide pedestrian links between parks. When considering locating public and quasi-public activities in commercial or office land use designated areas, the General Plan provides direction by establishing the following criteria in Policy 2-89, Public and Quasi-Public Activities: The proposed project must have similar building forms, population, traffic, noise and infrastructure impacts as the existing land use categories. Additionally, in order to retain continuity of development, under this policy the proposed project must maintain a commercial interface in commercial designations by offering retail activities, creating a storefront appearance or other design or use options that are similar to commercial activities.

The General Plan includes policies regarding the location and operation of New Drive-up Services (Policy 2-91) and Late Evening Entertainment (Policy 2-92) in order to promote orderly development of such uses such that they do not divide the community. Policy 2-91, New Drive-up Services, requires the City to permit new drive-up service facilities for commercial, industrial or institutional use only when adequate circulation, parking, noise control, architecture features, and landscaping are compatible with the visual character of the surrounding uses and residential areas are adequately buffered, while Policy 2-92, Late Evening Entertainment Activities, requires the City to discourage late-evening entertainment activities such as cocktail lounges, recreational facilities and theaters in the major mixed use corridors where they abut low-density residential properties. Under this policy such uses may be considered with conditional use permit review when the entrances and uses are located away from sensitive receptors/uses and appropriate mitigation measures such as adequate planting, policing, parking designated away from sensitive receptors are incorporated.

Additionally, policies within the Circulation Element also support the cohesive development of the City. Policy 4-8, Roadway Plans that Complement the Needs of Adjacent Land Use, requires the City to design roadways based on efficient alignments, appropriate number and widths of traffic lanes, inclusion of medians, parking and bicycle lanes and the suitable width and location of sidewalks as needed to support the adjacent

## NO PROJECT ALTERNATIVE

properties. Policy 2-7, Defined and Balanced Circulation System, requires the city to balance the roadway system between automobile and pedestrian/bicycle needs. The General Plan encourages designing local streets to satisfy the aesthetic requirements of the area served. In general, the aesthetics of a street will be improved if it can be narrower rather than wider, include significant landscaping with shade trees, and provide safe and convenient places for people to bicycle and walk. Policy 4-14, Limited Street Closures, requires the City to not close streets unless there is a demonstrated safety or over-whelming through traffic problem and there are no acceptable alternatives. The policy recognizes that closures may shift traffic to other local streets, thus moving the problem from one neighborhood to another. Finally, Policy 4-16, Transportation Noise, Fumes and Hazards, requires the City to, in addition to limiting through traffic volume on local streets, protect the community from noise, fumes and hazards caused by the City's transportation system. The quarries on Stevens Canyon Road, Stevens Creek Boulevard and Foothill Boulevard are major sources of transportation noise.

Potential future development in all Zoning Districts would be subject to the City's discretionary review processes, including, as necessary, the issuance of Developmental Permits, and Architectural and Site Approval and Use Permits, in accordance with Section 19.168 of the Zoning Ordinance. This review would ensure that development allocation, architectural and site designs of, as well as the uses located within future development in the Project Study Area promote and are consistent with the goals, policies and strategies identified in the General Plan. The review process will consider the vicinity in which each project is proposed in and will review the intensity of the proposed development.

In addition, future development would also would be required to comply with Design Standards outlined in the Heart of the City Specific Plan, the Vallco Master Plan, and the Monta Vista Design Guidelines and other Conceptual Plans as described in Section 4.9.1.1, Regulatory Framework, of Chapter 4.9, Land Use and Planning, of this Draft EIR, and the General Plan policies outlined above, would promote cohesive and compatible neighborhoods and prevent new development from dividing existing uses where different land uses abut one another.

**Significance Without Mitigation:** Less than significant.

---

**LU-2**                      **Implementation of the No Project Alternative would not conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.**

---

The City of Cupertino General Plan is the primary planning document for the City of Cupertino. No new development potential would occur beyond what is already accounted for in the current General Plan and no changes under the No Project Alternative would result in inconsistency between the General Plan, Housing Element and Zoning Ordinance, and State law; therefore, impacts would be *less than significant*.

For a discussion on the No Project Alternative's consistency with Plan Bay Area as it relates to greenhouse gas emissions, see Chapter 4.6, Greenhouse Gas Emissions, of this Draft EIR.

For a discussion on the No Project Alternative's consistency with regional housing projections and Plan Bay Area, see Chapter 4.11, Population and Housing, of this Draft EIR.

## NO PROJECT ALTERNATIVE

For a discussion on the No Project Alternative's consistency with the 2002 Cupertino Pedestrian Transportation Plan, see Chapter 4.13, Transportation and Traffic, of this Draft EIR.

As discussed in Section 4.9.1.1, Regulatory Framework, of Chapter 4.9, Land Use and Planning, of this Draft EIR, there are no airports or private airstrips within or in the immediate proximity to the city,<sup>29</sup> and the city is not located within any protected airspace zones defined by the Airport Land Use Commission (ALUC)<sup>30</sup> and has no heliports listed by the Federal Aviation Administration (FAA);<sup>31</sup> thus, no conflicts with a Comprehensive Land Use Plan for an airport would occur.

**Significance Without Mitigation:** Less than significant.

---

**LU-3                      Implementation of the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to land use and planning.**

---

The geographic context for the cumulative land use and planning effects occur from potential future development under the General Plan combined with effects of development on lands adjacent to the city within Los Altos and Sunnyvale to the north, Santa Clara and San Jose to the east, and Saratoga to the south, and the unincorporated areas of Santa Clara County to the west and south, and within the region.

The land use analyses find that the No Project Alternative would not divide an established community or conflict with established plans, policies and regulations. The No Project Alternative also would not conflict with any land use plan, policies, or regulations, in or outside the City of Cupertino, adopted for the purpose of avoiding or mitigating an environmental effect. Future development that would be allowed under the proposed Project would not create substantial land use impacts. Development is likely to continue to occur in surrounding cities and in the Santa Clara region as well. However, such development is taking place in already urbanized areas as in-fill development and would not require significant land use changes that would create land use conflicts, nor would they divide communities. Therefore, the proposed Project would not result in a cumulatively considerable contribution to cumulative impacts related to land use changes and impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<sup>29</sup> AirNav, <http://www.airnav.com/airports/us/CA>, accessed on August 27, 2013.

<sup>30</sup> Santa Clara County Airport Land-Use Commission, 2011. Comprehensive Land Use Plan, Santa Clara County, Norman Y. Mineta, San Jose International Airport.

<sup>31</sup> Federal Aviation Administration, 2011. Airport Facilities Data. [www.faa.gov/airports/airport\\_safety/airportdata\\_5010/](http://www.faa.gov/airports/airport_safety/airportdata_5010/), accessed August 13, 2013.

---

## NO PROJECT ALTERNATIVE

### 5.1.6.10 NOISE

---

NOISE-1	<b>Implementation of the No Project Alternative would not result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.</b>
---------	--

---

Standards for noise generation and exposure in the City of Cupertino are determined primarily through: the Land Use Noise Compatibility Guidelines (which would be continued under the noise portion of the existing Health and Safety Section, maintained as part of the No Project Alternative); Chapter 10.48, Noise Control, of the Cupertino Municipal Code; as well as by the interior noise standards set by the Title 24 of the State Building Code. Aside from the guidelines for land use noise compatibility, the City of Cupertino has adopted noise reception limits for particular uses and times of day, and this regulatory approach would continue under the proposed Project. Therefore, there are three subsequent criteria, based on applicable standards and regulations, which may be applied to determine impacts under this significance threshold. Each of these is analyzed in greater detail below.

- **Development of new residential or other noise-sensitive land uses such that those new uses would experience an indoor  $L_{dn}$  exceeding 45 dBA.**

Multiple components of the current General Plan under the No Project Alternative would serve to prevent new residential dwellings, hotels, motels, dormitories, and school classrooms from experiencing interior noise levels in excess of 45 dBA  $L_{dn}$ . Prevention of excessive interior noise levels would be achieved both through adherence to the Land Use Noise Compatibility Standards included in the noise portion of Health and Safety Section of the General Plan, as well as through the performance of acoustical analysis in noisy areas, which would help determine what, if any, noise attenuating features are necessary to achieve the 45 dBA  $L_{dn}$  interior noise standard. As individual projects are proposed under the current General Plan, project proponents would be required to perform site-level acoustic analysis to demonstrate compliance.

General Plan Policy 2-6, Neighborhood Compatibility, directs the City to “Protect residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, activity limitations, site design and other appropriate measures.” Policies 6-64, Building Code Sections on Exterior Noise Intrusion, 6-65, Building Code Sections on Interior Noise, and 6-66, Application of Policy 6-63 to New Single-family Homes, contain provisions that require or encourage construction and other techniques to reduce sound transmission to interior living spaces, consistent with the California Building Code. Additionally Chapter 10.48, Noise Ordinance, and Title 19, Zoning Ordinance, of the Cupertino Municipal code contain multiple provisions to limit the generation and reception of excessive noise. Such provisions include, but are not limited to restrictions on construction activity, strict limitations on noise generation at property lines, and performance standards for the permitting of commercial and industrial uses.

Under the No Project Alternative, in areas where noise levels exceed those that are deemed normally acceptable for a particular land use, development projects would continue to be required to

## NO PROJECT ALTERNATIVE

demonstrate—through project-specific acoustical studies—that interior noise environments would comply with the 45 dBA  $L_{dn}$  State standard.

Together, these policies and regulations would serve to ensure that land use and development decisions consider and seek to prevent potential noise impacts. Through implementation of these existing policies and requirements as part of the current General Plan, the City would ensure compliance with local and State standards for interior noise, and the impact would be *less than significant*.

- **Development of any land use in an area that is characterized by an exterior  $L_{dn}$  which indicates that the establishment of that land use in the area would be “clearly unacceptable,” pursuant to the Land Use Noise Compatibility Guidelines continued under the current General Plan.**

Through adherence to the Land Use Noise Compatibility Guidelines that would be continued under the current General Plan under the No Project Alternative, the City of Cupertino would prohibit the development of particular land uses in areas where the ambient noise level would indicate those land uses would be clearly unacceptable. General Plan Policy 6-49, Land Use Decision Evaluation, would continue to ensure that City land use decisions adhere to the established compatibility guidelines. Through continued implementation of these requirements as part of the No Project Alternative, the City would ensure compliance with local and State standards for land use compatibility, and the impact would be *less than significant*.

- **Development of a new land use that would result in adjacent properties experiencing short- or long-term ambient noise levels that exceed those regarded as compatible, or which exceed levels permitted under the Chapter 10.48 of the Cupertino Municipal Code.**

Under the No Project Alternative, policies of the current General Plan and provisions of the Cupertino Municipal Code would continue to ensure that new land uses do not contribute to excessive noise at existing sensitive receptors. Under the current General Plan, the following policies would remain applicable to future development: Policies 6-58, Commercial Delivery Areas, and 6-59, Delivery Hours, would continue to ensure that commercial deliveries and delivery areas are regulated to prevent noise impacts to adjacent sensitive land uses. Policy 6-60, Noise Control Techniques, would similarly serve to prevent noise impacts from industrial processes and equipment near homes.

Additionally, the maintenance and continued enforcement of the Cupertino Municipal Code, including the Noise Ordinance and Zoning Code, would work in tandem with and reinforce the policies within the current General Plan, and any impact arising from violation of applicable local standards would therefore be *less than significant*.

## Summary

Through adherence to the requirements, policies, and actions continued under the current General Plan and Cupertino Municipal Code, the City of Cupertino would prevent the development of land uses in areas with inappropriately high ambient noise levels; would ensure that any development of noise-sensitive land uses include the study and adequate mitigation of noise impacts; and would prevent activities or new uses that

## NO PROJECT ALTERNATIVE

generate excessive levels of noise at sensitive receptors. Altogether, this would ensure adherence to relevant noise exposure and generation standards, and would prevent noise-sensitive land uses from being exposed to noise exceeding the prescribed standards. Therefore the impact under this criterion would therefore be *less than significant*.

### *Applicable Regulations*

- California Code of Regulations, Title 24, Building Standards
- Title 21, Subchapter 6, of the California Code of Regulations
- General Plan: Health and Safety Section, Land Use Section, Circulation Section, and Environmental Resources/Sustainability Section
- Cupertino Municipal Code:
  - Chapter 10.48: Community Noise Control
  - Title 19: Zoning Ordinance
  - Chapter 2.90: Design Review Committee
  - Title 5 Business Licenses and Regulations
  - Title 10: Public Peace, Safety and Morals
  - Title 11 Vehicles and Traffic
  - Title 14: Streets, Sidewalks and Landscaping

**Significance Without Mitigation:** Less than significant.

---

NOISE-2	<b>Implementation of the No Project Alternative would not expose persons to or generate excessive ground-borne vibration or ground-borne noise levels.</b>
---------	--

---

CEQA does not specify quantitative thresholds for what is considered “excessive” vibration or groundborne noise, nor does the City of Cupertino establish such thresholds. For Light Industrial and Industrial Park zones, the City of Cupertino Municipal Code does specify that “nonaudible” vibrations must not be perceptible without instrumentation, but the Code does not set a specific numeric threshold. Since perception of vibrations varies between individuals, it is necessary to establish a quantitative threshold that reflects levels of vibration typically capable of causing perception, annoyance, or damage. Therefore, based on criteria from the FTA, which are regarded as standard practice, a significant impact would occur if:

- Implementation of the No Project Alternative would result in ongoing exceedance of the criteria for annoyance presented in Table 4.10-3, in Chapter 4.10, Noise, of this Draft EIR.
- Implementation of the No Project Alternative would result in vibration exceeding the criteria presented in Table 4.10-3, in Chapter 4.10, Noise, of this Draft EIR, that could cause buildings architectural damage.

The following discusses potential vibration impacts generated by short-term construction and long-term operations that may occur under implementation of the No Project Alternative.

**NO PROJECT ALTERNATIVE**

**Short-Term Construction-Related Vibration Impacts**

The effect on buildings in the vicinity of a construction site varies depending on soil type, ground strata, and receptor-building construction. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Vibration from construction activities rarely reaches the levels that can damage structures, but groundborne vibration and groundborne noise can reach perceptible and audible levels in buildings that are close to the construction site. Table 5.1-7 lists vibration levels for construction equipment.

As shown in Table 5.1-7, vibration generated by construction equipment has the potential to be substantial. Significant vibration impacts may occur from construction activities associated with ongoing development under the No Project Alternative. Implementation of the No Project Alternative anticipates new development in certain areas, in the absence of information about specific development proposals.

TABLE 5.1-7 GROUNDBORNE VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT

<b>Equipment</b>	<b>Approximate Velocity Level at 25 Feet (VdB)</b>	<b>Approximate RMS<sup>a</sup> Velocity at 25 Feet (inch/sec)</b>
Pile Driver (Impact) Upper Range	112	1.518
Pile Driver (Impact) Lower Range	104	0.644
Pile Driver (Sonic) Upper Range	105	0.734
Pile Driver (Sonic) Lower Range	93	0.170
Large Bulldozer	87	0.089
Caisson Drilling	87	0.089
Jackhammer	79	0.035
Small Bulldozer	58	0.003
Loaded Trucks	86	0.076
FTA Criteria – Human Annoyance (Daytime)	78 to 90 <sup>b</sup>	—
FTA Criteria – Structural Damage	—	0.2 to 0.5 <sup>c</sup>

a. RMS velocity calculated from vibration level (VdB) using the reference of 1 micro-inch/second.

b. Depending on affected land use. For residential 78VdB, for offices 84 VdB, workshops 90 VdB.

c. Depending on affected building structure, for timber and masonry buildings 0.2 in/sec, for reinforced-concrete, steel, or timber 0.5 in/sec.

Source: Federal Transit Administration, Transit Noise, and Vibration Impact Assessment, 2006.

Construction would be localized and would occur intermittently for varying periods of time. Because specific, project-level information is not available at this time, it is not possible to quantify the construction vibration impacts at specific sensitive receptors. Grading and demolition activity typically generate the highest vibration levels during construction. Except for pile driving, maximum vibration levels measured at

## NO PROJECT ALTERNATIVE

a distance of 25 feet from an individual piece of typical construction equipment do not exceed the thresholds for human annoyance for industrial uses, nor the thresholds for architectural damage.

Methods to reduce vibration during construction would include the use of smaller equipment, use of well-maintained equipment, use of static rollers instead of vibratory rollers, and drilling of piles as opposed to pile driving. Methods to reduce human impacts of vibration from construction include limitations on construction hours and/or guidelines for the positioning of vibration-generating construction equipment.

Overall, vibration impacts related to construction would be short-term, temporary, and generally restricted to the areas in the immediate vicinity of active construction equipment. Construction would be localized and would occur intermittently for varying periods of time. Because specific, project-level information is not available at this time, it is not possible to quantify the construction vibration impacts at specific sensitive receptors. These approaches would thereby serve to ensure that construction activities do not result in sustained levels of vibration that could result in architectural damage or ongoing annoyance. Therefore, implementation of the No Project Alternative would not result in levels of construction-related groundborne noise or vibration that would exceed the thresholds for annoyance or architectural damage, and the impact would therefore be *less than significant*.

### Long-Term Vibration Impacts

Development under the No Project Alternative could result in long-term, operations-related vibration impacts to sensitive receptors if sensitive land uses such as residential, educational facilities, hospitals, or places of worship were to be located in close proximity to industrial land uses that could have equipment with the potential to generate significant vibration levels. There are limited areas of Cupertino where residential or other sensitive land uses would interface to a certain degree with light industrial operations under the land use designations implemented as part of the No Project Alternative. Some prominent examples of such areas include the Monta Vista, Bubb Road, and North De Anza Special Areas.

Despite the potential for vibration impacts from the juxtaposition of sensitive land uses and land uses with the potential to generate vibration, appropriate setbacks, buffers, use restrictions, and/or other measures can largely eliminate these impacts. As discussed above, vibration impacts are highly dependent on a variety of localized factors, including geology, soil conditions, and building construction techniques; however, in most cases vibration attenuates relatively rapidly with distance, making setbacks and buffering particularly effective approaches to avoid vibration impacts. Moreover, high levels of vibration are usually associated with heavy industrial uses. The light industrial uses of the sort that would continue to be permitted in Cupertino under the No Project Alternative are very rarely associated with vibration that is sufficiently intense or sustained so as to cause human discomfort or architectural/structural damage.

Although there are no State or federal regulations to limit perception of vibration by sensitive receptors, the No Project Alternative would continue an array of policies that would employ the previously mentioned strategies to prevent vibration impacts. Policy 2-6, Neighborhood Compatibility, directs the City to “Protect residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments. with adequate buffering setbacks, landscaping, walls, activity limitations, site design and other appropriate measures.” Policy 6-50, Land Use Decision Evaluation, requires the City to “use the Land



## NO PROJECT ALTERNATIVE

Use Compatibility for Community Noise Environments chart and the City Municipal Code to evaluate land use decisions.” Section 10.48.062, Nighttime Deliveries and Pickups, of the Municipal Code serves to regulate acceptable freight pickup and delivery times for commercial and industrial land uses. Although aimed at noise compatibility, these restrictions would also serve to reduce the intensity, frequency, and duration of potential vibration from such activities, thereby reducing or preventing perception of vibration at nearby receptors. Additionally, Title 19, Zoning, of the Municipal Code contains general restrictions on commercial and industrial uses. In the case of industrial uses, it is prohibited to generate vibration that is perceptible without instruments beyond the boundary of the industrial zone. In the case of commercial uses, permitting of the use is contingent upon that use not emitting excessive vibration. By ensuring general land use compatibility and by requiring, where necessary, approaches to reduce the generation or transmission of vibration, these policies and ordinances would serve to ensure sufficient attenuation of vibration to preclude impacts at sensitive receptors. Together, these policies would serve to ensure that land use and development decisions consider and seek to prevent potential vibration impacts.

Together, these policies and actions would ensure that buildout of land uses under the No Project Alternative would not result in perception of excessive noise and vibration by sensitive receptors in new developments. These policies and actions would also serve to ensure that new uses developed under the current General Plan would not result in the perception of excessive vibration by individuals living or working in areas of existing sensitive land uses. Through consideration of land use compatibility, project-level review, and requirements for mitigation of noise and vibration, the current General Plan would prevent or reduce exposure to long-term, operations-related vibration. Therefore implementation of No Project Alternative would not result in levels of long-term operation-related groundborne noise or vibration that would exceed the thresholds for annoyance or architectural damage, and the impact would therefore be *less than significant*.

### *Applicable Regulations*

- California Code of Regulations, Title 24, Building Standards
- General Plan: Health and Safety Section, Land Use Section, Circulation Section, and Environmental Resources/Sustainability Section
- Cupertino Municipal Code:
  - Chapter 10.48: Community Noise Control
  - Title 19: Zoning Ordinance

**Significance Without Mitigation:** Less than significant.

---

NOISE-3

**Implementation of the No Project Alternative would result in a substantial permanent increase in ambient noise levels in the Project vicinity.**

---

Implementation of the No Project Alternative would have a significant impact if it results in a substantial permanent increase in ambient noise levels in the project vicinity above existing levels. The Municipal Code identifies volume levels and durations that constitute unacceptable noise increases during 2-hour periods; however, the City of Cupertino has not adopted a specific, quantitative threshold for what constitutes a significant permanent increase in ambient noise levels. The smallest increase in loudness perceptible by the

## NO PROJECT ALTERNATIVE

human ear is 3 dBA and increases of 5 dBA or greater are easily noticed.<sup>32</sup> However, ongoing implementation of the General Plan and changes in the ambient noise environment will occur over a period of more than 20 years. Therefore, in the absence of quantitative ambient noise level increase thresholds adopted by the City, a substantial increase in ambient noise levels would be defined as either: a 5 dBA increase, if after the increase the ambient noise level remains in the range of what would be “normally acceptable” at the land use where the noise is being received; or a 3 dBA increase, if after the increase the ambient noise level exceeds the range of what would be “normally acceptable” at the land use where the noise is being received.

### Long-Term Operational Noise

A portion of the substantial permanent increases to ambient noise levels that could result from implementation of the No Project Alternative would be attributable to ongoing operations on land uses developed under the current General Plan. Residential, open space, and most passive recreational land uses (i.e. trails, rests areas, picnic areas) are generally not associated with substantial permanent increases in ambient noise. In the case of these land uses, very specific sources of noise, such as lawn equipment or social gatherings, would be the most likely source of excessive noise; addressing impacts from these noise sources would be handled on a complaint basis by Cupertino’s noise ordinance. Noise sources associated with residential, open space, and passive recreational land uses are generally not sufficiently frequent or sustained so as to result in permanent substantial increases to ambient noise levels. Instead, substantial permanent increases in ambient noise levels would be most likely to result from development of commercial, industrial, mixed-use, and certain institutional or active recreational land uses (i.e. ball fields, skate-parks, dog parks).

The noise portion of the Health and Safety Section of the current General Plan contains multiple policies that would serve to prevent or mitigate substantial permanent increase to ambient noise levels from long-term operations. All of the General Plan policies discussed under Impact NOISE-1 and Impact NOISE-2 would likewise serve to prevent substantial permanent increases to ambient noise levels. Key provisions of these previously discussed policies include, among others: limits on hours of operation, protections for residential neighborhoods, and project level review to ensure compliance with indoor/outdoor noise standards for sensitive uses. Together, these policies would serve to ensure that the development of land uses under the No Project Alternative would not result in substantial permanent increases in the ambient noise level in the project vicinity, and the impact in this regard would be *less than significant*.

### Transportation-Related Noise

As a result of continued implementation of the current General Plan and ongoing regional growth, it is anticipated that there would be substantial permanent increases to the ambient noise levels throughout Cupertino, and that these increases would primarily result from increases to transportation-related noise, especially that of automobile traffic. Because Cupertino has only one railway with very limited freight service, does not host any airports or heliports, and is not located within two miles of any airports or heliports, increases in ambient noise levels from rail and air traffic are not anticipated. Nevertheless,

---

<sup>32</sup> Bies, David and Hansen, Colin, 2009, *Engineering Noise Control: Theory and Practice, Fourth Edition*, New York: Spon Press.

**NO PROJECT ALTERNATIVE**

increases to ambient noise from car and rail traffic would result in substantial permanent increase in ambient noise levels.

Development of land uses under ongoing implementation of the current General Plan, as well as development in adjacent communities, would result in increases in traffic that would cause substantial permanent increases in ambient noise levels in the project vicinity. Table 5.1-8 shows major roadway segments in Cupertino with estimated increases in the ambient noise level at a distance of 100 feet from the roadway centerline.

**TABLE 5.1-8 INCREASES TO AMBIENT NOISE LEVELS ALONG MAJOR ROADWAY SEGMENTS – NO PROJECT ALTERNATIVE**

Roadway	Segment	Ambient Noise Level at 100 feet from Roadway Centerline CNEL dBA		
		Existing Conditions	2040 Conditions	Increase (dBA)
Homestead Rd	From City Boundary to SR 85	65.0	66.2	1.2
	From SR 85 to N Stelling Rd	67.8	69.2	1.4
	From N Stelling Rd to N De Anza Blvd	69.6	69.9	0.3
	From N De Anza Blvd to N Blaney Ave	68.7	70.6	1.9
	From N Blaney Ave to N Wolfe Rd	68.9	70.7	1.8
	From N Wolfe Rd to N Tantau Ave	69.1	71	1.9
	From N Tantau Ave to City Boundary	68.9	70.9	2.0
Pruneridge Ave	From N Wolfe Rd to N Tantau Ave	63.1	64.2	1.1
	From N Tantau Ave to Lawrence Expwy	63.6	68.9	<b>5.3</b>
I-280	From City Boundary to Foothill Blvd	81.2	81.9	0.7
	From Foothill Blvd to SR 85	82.2	82.8	0.6
	From SR 85 to N Stelling Rd	81.8	82	0.2
	From N Stelling Rd to N De Anza Blvd	81.8	82	0.2
	From N De Anza Blvd to N Blaney Ave	81.8	82.3	0.5
	From N Blaney Ave to N Wolfe Rd	81.8	81.9	0.1
	From N Wolfe Rd to N Tantau Ave	81.9	82	0.1
	From N Tantau Ave to I-280	81.9	82	0.1
From I-280 to Lawrence Expwy	80.2	82.3	2.1	
Stevens Creek Blvd	From City Boundary to Foothill Blvd	60.0	61.7	1.7
	From Foothill Blvd to Bubb Rd	67.3	68.7	1.4
	From Bubb Rd to SR 85	70.1	71.5	1.4
	From SR 85 N Stelling Rd	70.4	70.9	0.5
	From N Stelling Rd to N De Anza Blvd	69.2	70.8	1.6

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-8 INCREASES TO AMBIENT NOISE LEVELS ALONG MAJOR ROADWAY SEGMENTS – NO PROJECT ALTERNATIVE**

Roadway	Segment	Ambient Noise Level at 100 feet from Roadway Centerline CNEL dBA		
		Existing Conditions	2040 Conditions	Increase (dBA)
	From N De Anza Blvd to N Blaney Ave	68.9	70.9	2.0
	From N Blaney Ave to N Wolfe Rd	68.8	71.2	2.4
	From N Wolfe Rd to N Tantau Ave	70.6	71.8	1.2
	From S Tantau Ave to I-280	70.9	71.5	0.6
	From I-280 to Lawrence Expwy	70.6	72.3	1.7
McClellan Rd	From Foothill Blvd/Stevens Canyon Rd to Bubb Rd	60.8	63.2	2.4
	From Bubb Rd to SR 85	63.3	64.5	1.2
	From SR 85 to S Stelling Rd	64.0	65.1	1.1
	From S Stelling Rd to S De Anza Blvd	64.6	64.5	-0.1
Bollinger Rd	From S De Anza Blvd to S Blaney Ave	67.6	69.6	2.0
	From S Blaney Ave to Miller Ave	65.1	67.3	2.2
	From Miller Ave to S Tantau Ave	64.4	68.1	<b>3.7</b>
	From S Tantau Ave to Lawrence Expwy	68.9	71.1	2.2
Rainbow Dr	From Bubb Rd to S Stelling Rd	58.9	61.7	2.8
	From S Stelling Rd to S De Anza Blvd	65.5	65.9	0.4
Prospect Rd	From S Stelling Rd to S De Anza Blvd	65.1	65.9	0.8
Foothill Blvd	From City Boundary to I-280	71.7	73.2	1.5
	From I-280 to Stevens Creek Blvd	70.6	69.7	-0.9
	From McClellan Rd to Stevens Creek Blvd	65.2	66	0.8
Stevens Canyon Rd	From City Boundary to McClellan Rd	61.8	63.5	1.7
Bubb Rd	From Stevens Creek Blvd to McClellan Rd	67.6	68.5	0.9
	From Rainbow Dr to McClellan Rd	62.5	63.7	1.2
SR 85	From City Boundary to Homestead Rd	80.8	80.8	0.0
	From Homestead Rd to I-280	80.8	80.7	-0.1
	From I-280 to Stevens Creek Blvd	81.4	81.8	0.4
	From Stevens Creek Blvd to McClellan Rd	80.7	80.6	-0.1
	From McClellan Rd to S Stelling Rd	80.7	80.6	-0.1
	From S Stelling Rd to S De Anza Blvd	80.7	80.6	-0.1
	From S De Anza Blvd to Prospect Rd	80.5	80.5	0.0

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-8 INCREASES TO AMBIENT NOISE LEVELS ALONG MAJOR ROADWAY SEGMENTS – NO PROJECT ALTERNATIVE**

Roadway	Segment	Ambient Noise Level at 100 feet from Roadway Centerline CNEL dBA		
		Existing Conditions	2040 Conditions	Increase (dBA)
Hollenbeck Ave (N. Stelling Rd)	From City Boundary to Homestead Rd	60.0	60.3	0.3
N Stelling Rd	From Homestead Rd to I-280	63.2	65.3	2.1
	From I-280 to Stevens Creek Blvd	63.1	65.3	2.2
S Stelling Rd	From Stevens Creek Blvd to McClellan Rd	61.7	68.7	<b>7.0</b>
	From McClellan Rd to SR 85	59.0	62.8	<b>3.8</b>
	From SR 85 to Rainbow Dr	58.8	62	<b>3.2</b>
	From Rainbow Dr to Prospect Rd	59.7	61.2	1.5
N De Anza Blvd	From City Boundary to Homestead Rd	73.1	73.6	0.5
	From Homestead Rd to I-280	74.5	74.5	0.0
	From I-280 to Stevens Creek Blvd	72.9	73.6	0.7
S De Anza Blvd	From Stevens Creek Blvd to McClellan Rd	71.9	73	1.1
	From McClellan Rd to Bollinger Rd	72.0	73.5	1.5
	From Bollinger Rd to SR 85	71.7	72.2	0.5
	From SR 85 to Rainbow Dr	72.2	73	0.8
	From Rainbow Dr to Prospect Rd	72.5	72.6	0.1
N Blaney Ave	From Homestead Rd to I-280	60.8	63.6	2.8
	From I-280 to Stevens Creek Blvd	61.0	59.2	-1.8
S Blaney Ave	From Stevens Creek Blvd to Bollinger Rd	55.7	55.6	-0.1
	From Bollinger Rd to Prospect Rd	59.1	59.3	0.2
N Wolfe Rd	From City Boundary to Homestead Rd	67.6	70.4	2.8
	From Homestead Rd to Pruneridge Ave	69.7	71.2	1.5
	From Pruneridge Ave to I-280	70.2	71.8	1.6
	From I-280 to Stevens Creek Blvd	68.3	70.6	2.3
Miller Ave	From Stevens Creek Blvd to Bollinger Rd	65.5	68.6	<b>3.1</b>
	From Bollinger Rd to City Boundary	65.4	66.5	1.1
N Tantau Ave	From Homestead Rd to Pruneridge Ave	47.4	63.5	<b>16.1</b>
	From Pruneridge Ave to I-280	50.3	61	<b>10.7</b>
	From I-280 to Stevens Creek Blvd	61.2	63	1.8
S Tantau Ave	From Stevens Creek Blvd to Bollinger Rd	58.7	58.5	-0.2

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-8 INCREASES TO AMBIENT NOISE LEVELS ALONG MAJOR ROADWAY SEGMENTS – NO PROJECT ALTERNATIVE**

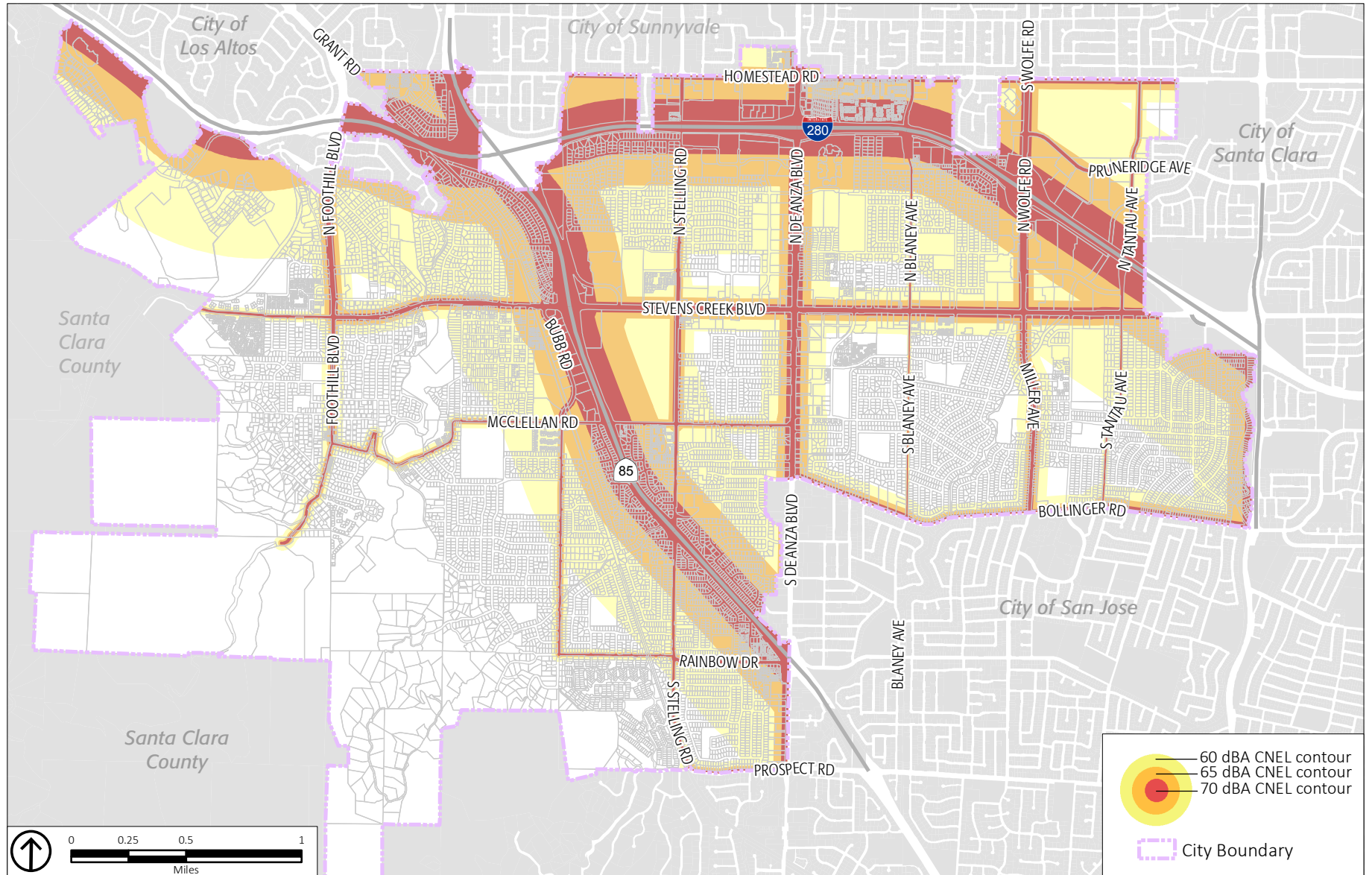
Roadway	Segment	Ambient Noise Level at 100 feet from Roadway Centerline CNEL dBA		
		Existing Conditions	2040 Conditions	Increase (dBA)
Lawrence Expwy	From Pruneridge Ave to Stevens Creek Blvd	75.4	77.2	1.8
	From Stevens Creek Blvd to I-280	74.9	76.9	2.0
	From I-280 to Bollinger Rd	75.5	77.4	1.9

Bold numbers indicate increases in CNEL which would constitute substantial permanent increase in ambient noise level.  
Source: Hexagon Transportation Consultants, Inc., 2014; PlaceWorks, 2014

As discussed above, increases greater than 5.0 dBA would automatically constitute a substantial permanent increase to the ambient noise level, therefore an increase would be readily noticeable. Increases greater than 3.0 dBA would be considered substantive and permanent if the resulting CNEL would exceed that which is considered normally acceptable for the receiving land use. The ambient noise level increases shown in Table 5.1-8 and the future 2040 Noise Contours in Figure 5.1-1 demonstrate that there would be multiple major road segments that would experience substantial permanent increases in ambient noise levels, including at sensitive receiving land uses.

The General Plan contains numerous policies to address the reception of excessive roadway noise at existing sensitive land uses, which would be continued under the No Project Alternative. For instance, Policy 6-52, Stricter State Noise Laws, would direct the City to continue enforcement of existing street laws regarding vehicle noise, and to support enactment of stricter State standards. Policy 6-54, Traffic Calming Solutions to Street Noise, directs the City to explore traffic calming approaches for residential streets. Policies 6-55, Noise Improvement by Restricting Trucks, 6-56, Reduction of Noise from the Hanson Permanente Trucks, and 6-57, Road Improvements to Reduce Truck Impacts, direct the City to use a combination of restrictions and street improvements to reduce noise from trucks. Altogether, these policies would serve to reduce noise from vehicles at the source and to otherwise shield sensitive uses from excessive noise.

Although these policies could in certain cases reduce or prevent significant increases in ambient noise at sensitive land uses under implementation of the No Project Alternative, the measures described in these policies would not be universally feasible, and some of the most effective noise-attenuation measures, including sound walls and berms, would be infeasible or inappropriate in a majority of locations where sensitive land uses already exist. Factors which would render these mitigations infeasible include but are not limited to cost, aesthetic considerations, and negative impacts to pedestrian and bicycle connectivity. Therefore, even after the application of relevant, feasible regulations and General Plan policies, the impact to ambient noise levels would remain *significant*.



Source: City of Cupertino, 2013; MIG, Inc, 2014; PlaceWorks, 2014; ESRI, 2010.

Figure 5.1-1  
2040 Noise Contours – No Project Alternative

## NO PROJECT ALTERNATIVE

### *Applicable Regulations*

- California Code of Regulations, Title 24, Building Standards
- General Plan: Health and Safety Section, Land Use Section, Circulation Section, and Environmental Resources/Sustainability Section
- Cupertino Municipal Code:
  - Chapter 10.48: Community Noise Control
  - Title 19: Zoning Ordinance
  - Chapter 2.90: Design Review Committee
  - Title 5 Business Licenses and Regulations
  - Title 10: Public Peace, Safety and Morals
  - Title 11 Vehicles and Traffic
  - Title 14: Streets, Sidewalks and Landscaping

### Mitigation Measures

The following mitigation measures were considered, but as described below, were found to be infeasible.

#### *Technological Advances for Noise-Generating Vehicles and Machinery*

Most urban noise results from the use of machinery or vehicles, including manufacturing equipment, HVAC units, automobiles, motorcycles, trains, and aircraft, among others. The implementation of improved technologies for the prevention or muffling of noise from these sources could theoretically prevent substantial increases to ambient noise levels; however, this approach would be infeasible as much of this implementation is beyond the jurisdiction of the City.

Beyond currently-accepted State and industry standards and best practices, developing and/or requiring novel technological improvements for noise-generating vehicles and machinery would not be affordable, scientifically plausible, or within the City's jurisdiction. Therefore, this potential mitigation measure is regarded as infeasible.

#### *Universal Use of Noise-Attenuating Features*

The universal use of noise attenuating features, such as rubberized asphalt, soundwalls, berms, and improved building sound-insulation, could prevent transmission of excessive noise to the outdoor and indoor areas of sensitive land uses and/or could prevent projected increases in ambient noise levels; however, this approach would be infeasible.

Rubberized asphalt reduces tire-pavement noise and, when new, achieves a reduction of approximately 4 dBA when compared to normal pavement surfaces.<sup>33</sup> However, the noise reduction properties degrade over time, and the noise reduction would not be sufficient to reduce noise impacts in many areas of Cupertino. In many cases, aesthetic concerns, costs, physical constraints, or other issues would prevent the universal

---

<sup>33</sup> Sacramento County, Department of Environmental Review and Assessment, 1999, *Report of the Status of Rubberized Asphalt Traffic Noise Reduction in Sacramento County*.



## NO PROJECT ALTERNATIVE

implementation of adequate noise-attenuating features. In addition to their expense, soundwalls often block views and are regarded as unsightly. Moreover, the construction of soundwalls can result in reduced pedestrian and vehicle connectivity, which would contravene other goals of the General Plan and have negative social, economic, and even environmental consequences. Although improved building construction and insulation beyond that which is required by California Title 24 and the current General Plan could further reduce indoor exposure to excessive noise, substantial outdoor increases to ambient noise levels would remain. Therefore, this potential mitigation measure is regarded as infeasible.

For this noise impact, there is no feasible mitigation for preventing substantial increases in ambient noise levels, since all conceivable mitigations would be economically impractical, scientifically unachievable, outside the City's jurisdiction, and/or inconsistent with City planning goals and objectives. Impacts would remain significant and unavoidable because no feasible mitigation measures are available to mitigate noise impacts to a less than significant level, resulting in a *significant and unavoidable* impact.

**Significance With Mitigation:** Significant and Unavoidable.

---

<b>NOISE-4</b>	<b>Implementation of the No Project Alternative would result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity.</b>
----------------	---

---

Ongoing implementation of the current General Plan would have a significant impact if it results in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above existing levels.

Noise from construction equipment and various construction-related activities is frequently a cause of temporary or periodic increases in ambient noise levels. Table 5.1-9, below, shows typical noise levels generated by commonly-used pieces of construction equipment. Although the policies and actions of the General Plan Amendment and the provisions of the noise ordinance would serve to prevent or reduce noise generation from construction equipment, it is likely that in certain cases these and other available methods to reduce noise would be inadequate to prevent a significant impact.

By restricting hours of construction (with limited exceptions for urgent or emergency maintenance work) and directing the City to review project noise impacts as part of the planning and permitting processes, the policies of the current General Plan would serve to reduce temporary or periodic increases to ambient noise. The Noise Portion of the Health and Safety Section of the General Plan directs the City to consider project-level noise impacts as part of the environmental evaluation and approval process for individual development proposals. Specifically, Policies 6-61, Hours of Construction, and 6-62, Construction and Maintenance Activities, of the General Plan, respectively, direct the City to limit the hours for construction activities and to regulate construction and maintenance activities, such as through requirements for up-to-date construction equipment. Through continued implementation of these policies, the current General Plan would serve to minimize temporary or periodic impacts to ambient noise levels from construction activities.

**NO PROJECT ALTERNATIVE**

**TABLE 5.1-9 CONSTRUCTION EQUIPMENT NOISE EMISSION LEVELS**

Construction Equipment	Typical Noise Level (dBA) at 50 Feet	Construction Equipment	Typical Noise Level (dBA) at 50 Feet
Air Compressor	81	Pile-Driver (Impact)	101
Backhoe	80	Pile-Driver (Sonic)	96
Ballast Equalizer	82	Pneumatic Tool	85
Ballast Tamper	83	Pump	76
Compactor	82	Rail Saw	90
Concrete Mixer	85	Rock Drill	98
Concrete Pump	71	Roller	74
Concrete Vibrator	76	Saw	76
Crane, Derrick	88	Scarifier	83
Crane, Mobile	83	Scraper	89
Dozer	85	Shovel	82
Generator	81	Spike Driver	77
Grader	85	Tie Cutter	84
Impact Wrench	85	Tie Handler	80
Jack Hammer	88	Tie Inserter	85
Loader	85	Truck	88
Paver	89		

Source: Federal Transit Administration, Transit Noise, and Vibration Impact Assessment, 2006.

Section 10.48.053, Grading, Construction, and Demolition, of the Cupertino Municipal Code, also serves to regulate noise from construction and related activities in Cupertino. Subsection A places an 87 dBA limit on noise levels from construction equipment at a distance of 25 feet, as well as an 80 dBA limit on noise levels at nearby properties. Additionally, Subsections C and D limit construction activities to weekdays, non-holidays, and daytime hours, with limited exceptions. The noise chapter thus limits construction activities to 7:00 a.m. to 8:00 p.m. on weekdays, and 9:00 a.m. to 6:00 p.m. on weekends. However, the ordinance allows exceptions under Sections 10.48.030 and 10.48.031, which allow construction outside of these hours, under certain conditions. However, these are used in very special circumstances such as emergencies or when are unavoidable as a result of necessary construction techniques. Subsection E places additional restrictions on the use of helicopters for construction purposes, including noticing requirements.

Although it is possible that certain construction activities may in some cases, lead to substantial temporary or periodic increases to ambient noise levels, the current and proposed policies and regulations included

## NO PROJECT ALTERNATIVE

under the proposed Project and the Municipal Code would serve to reduce these impacts. With appropriate noise reduction and shielding measures, temporary or periodic increases to the ambient noise level that could be substantially reduced. The policies of the General Plan and regulations of the Municipal Code, would thereby reduce the impacts from temporary or periodic increases to ambient noise levels, and the impact would be *less than significant*.

### *Applicable Regulations*

- California Code of Regulations, Title 24, Building Standards
- General Plan: Health and Safety Section, Land Use Section, Circulation Section, and Environmental Resources/Sustainability Section
- Cupertino Municipal Code:
  - Chapter 10.48: Community Noise Control
  - Title 19: Zoning Ordinance

**Significance Without Mitigation:** Less than significant.

---

**NOISE-5                      Implementation of the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would result in significant cumulative impacts with respect to noise.**

---

The analysis of the No Project Alternative, discussed above, addresses cumulative impacts in regard to noise, as well as groundborne noise and vibration. Although multiple simultaneous nearby noise sources may, in combination, result in higher overall noise levels, this effect is captured and accounted for by the ambient noise level metrics which form the basis of the Thresholds of Significance for noise analysis. Any measurement of sound or ambient noise, whether for the purpose of evaluating land use compatibility, establishing compliance with exterior and interior noise standards, or determining point-source violations of a noise ordinance, necessarily will incorporate noise from all other nearby perceptible sources.

Additionally, although noise attenuation is influenced by a variety of topographical, meteorological, and other factors, noise levels decrease relatively rapidly with distance, and vibration impacts decrease even more rapidly. Therefore, site-level cumulative noise or vibration impacts across city boundaries occur only infrequently. The City of Cupertino shares borders with other incorporated communities and similarly urbanized areas, which makes cross-border cumulative noise and vibration impacts possible. Nevertheless, given the General Plan policies and Municipal Code requirements discussed above, it is unlikely that operations-related noise would, in combination with noise sources from adjacent cities, result in cumulative noise impacts. Additionally, because any noise measurements taken in conjunction with General Plan policies or Municipal Code requirements would necessarily account for noises received from outside the boundaries of the City of Cupertino, the ongoing implementation of these policies and regulations under the No Project Alternative would serve to prevent site-based cumulative noise impacts.

Similarly, the noise contours and traffic-related noise levels developed for the No Project Alternative include and account for regional travel patterns as they affect traffic levels in Cupertino. Noise contours were based upon both existing and projected future traffic volumes that incorporate cumulative regional effects and

## NO PROJECT ALTERNATIVE

trends. Existing noise contours were derived from traffic volumes based on counts of current traffic, and these traffic counts inherently include cumulative traffic, as generated by regional trips. In regard to future noise, projected noise contours were determined using projected 2040 traffic volumes; these data account for growth both within Cupertino under the No Project Alternative, as well as anticipated regional growth. The future noise modeling which served as the foundation for the overall analysis was therefore based on future, cumulative conditions. Impacts NOISE-3 and NOISE-4 therefore encompasses and addresses cumulative noise impacts from implementation of the No Project Alternative. As discussed above, even after the application of pertinent policies and action of the General Plan, as well as all mitigation measures considered but determined to be infeasible described above under Impact NOISE-3, impacts would remain *significant and unavoidable*.

**Significance With Mitigation:** Significant and unavoidable.

### 5.1.6.11 POPULATION AND HOUSING

---

<b>POP-1</b>	<b>Implementation of the proposed Project would not induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).</b>
--------------	--

---

The No Project Alternative would result in a significant impact related to population growth if it would lead to substantial unplanned growth, either directly or indirectly. The No Project Alternative does not specifically propose any new development or redevelopment, and therefore would not result in direct growth; however, implementation of the No Project Alternative would facilitate growth in the Project Study Area, and therefore would have indirect effects related to growth. Potential impacts stemming from the indirect inducement of unplanned population growth are discussed below in relation to both local and regional planning efforts.

#### Local Planning

The developable area of Cupertino is already largely built out and the Project Study Area is well served by utility and transportation infrastructure. Future housing development and redevelopment under this alternative would be infill development and would be concentrated on sites previously developed. The General Plan includes policies and strategies that, once adopted, would serve to accommodate future growth through 2040. Within the Land Use and Community Design Element, Policy 2-1, Focus Development in Mixed-Use Special Areas, requires the City to, in the mixed-use Special Areas where office, commercial and residential uses are allowed, focus higher intensity development and increased building heights where appropriate in designated corridors, gateways and nodes. Policy 2-15, Multi-Family Residential Design, requires the City to maintain a superior living environment for multi-family dwellings. Strategy 1, Relationship to Street, directs the City to relate building entrances to the street, utilizing porches or stoops. Strategy 2, Provision of Outdoor Areas, requires the City to provide outdoor areas, both passive and active, and generous landscaping to enhance the surroundings for multi-family residents. Allow public access to the common outdoor areas whenever possible. Policy 2-19, Jobs/Housing Balance, requires the City to strive for a more balanced ratio of jobs and housing units. Strategy 1, Housing and Mixed-Use,

**NO PROJECT ALTERNATIVE**

calls for the City to strive to achieve a balanced jobs/housing ratio based on the policies and strategies contained in the Housing Element. Strategy 2, Housing Impact on Local Schools, recognizes that since the quality of Cupertino schools (elementary and high school) is a primary asset of the City, care shall be taken to ensure any new housing will not adversely impact these systems.

Within the Environmental Resources Element, Policy 5-48, New Development Public Infrastructure Requirements, calls for the City to require new development to provide adequate public facilities or pay its fair share of the cost for public facilities needed to provide services to accommodate growth without adversely impacting current service levels. Strategy 1, Design Capacity, requires the City to ensure that public facilities and infrastructure are designed and constructed to meet ultimate capacity needs to avoid the need for future upsizing. For facilities subject to incremental upsizing, initial design shall include adequate land area and any other elements not easily expanded in the future. Infrastructure and facility planning should discourage over-sizing of infrastructure which could contribute to growth beyond what was anticipated in the General Plan. Strategy 2, Utility Undergrounding, calls for the City to require undergrounding of all new publicly owned utility lines. Encourage undergrounding of all privately owned utility lines in new developments. Work with electricity and telecommunications providers to underground existing overhead lines. Policy 5-2 would require the City to “coordinate with regional and local agencies to prepare updates to regional growth plans and strategies.” Strategy 1 under this policy would direct the City to maintain local plans and strategies that are consistent with regional transportation and housing plans. Policy 5-47, Sewer Tributary Lines, requires the City to recognize that new high discharge users in the Vallco, Stevens Creek Boulevard and Blaney Avenue areas will require private developers to pay for the upgrading of tributary lines. Strategy 1, Cost Estimates, calls for the City to develop preliminary cost estimates for the upgrading of the sewer tributary lines to discuss with prospective developers.

The City currently has the capacity to accommodate 1,895 housing units. Implementation of these General Plan policies would ensure that local planning is adequate to accommodate future growth in Cupertino.

### *Regional Planning*

ABAG and Metropolitan Transportation Commission (MTC) have responsibility for regional planning in the nine county Bay Area, which includes Cupertino. ABAG and MTC have developed regional growth forecasts for the Bay Area as a whole and for constituent jurisdictions. Future development under the No Project Alternative would be considered to induce substantial growth if the estimated buildout resulting from future development permitted under the current General Plan would exceed these regional growth projections for Cupertino. The No Project 2040 buildout estimates are shown in Table 5.1-1.

Implementation of the No Project Alternative would not result in the replenishment of development allocation; therefore, future development would continue to occur and function under the remaining development allocation, similar to existing conditions. Given the ABAG projections currently account for the growth in Cupertino as it planned for in the current General Plan, implementation of the No Project Alternative would not induce substantial unexpected population growth or growth for which inadequate planning has occurred, either directly or indirectly and *no impact* would occur.

Additionally, growth under this alternative would come incrementally over a period of approximately 26 years and would be guided by a policy framework that is generally consistent with many of the principal

## NO PROJECT ALTERNATIVE

goals and objectives established in regional planning initiatives for the Bay Area. One of the key concepts of the Plan Bay Area is the idea of focusing future growth into transit-oriented, infill development opportunity areas within existing communities that are expected to host the majority of future development.

**Significance Without Mitigation:** No impact.

---

<b>POP-2</b>	<b>Implementation of the No Project Alternative would not displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere.</b>
--------------	--

---

Implementation of the No Project Alternative would not include General Plan land use designation, Zoning designation and development standard changes; therefore, future development would continue to occur and function similar to existing conditions. Under this alternative, development allocations would not be replenished; however, the city has a remaining residential unit allocation of 1,895, which would provide additional housing units. Further, future development would primarily be concentrated on sites that have previously been developed, and therefore, would not displace substantial numbers of existing housing units.

Additionally, because this alternative would continue to develop and function similar to existing conditions, the General Plan land use designation, Zoning designation and development standards on the Housing Element Sites would not result in the displacement of housing necessitating the construction of replacement housing elsewhere.

Implementation of the No Project Alternative would not result in an increase to residential development allocation; therefore, under this Alternative, the maximum number of residential units that could be built would remain at 1,895. Therefore, construction of replacement housing elsewhere would not be necessary and the impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>POP-3</b>	<b>Implementation of the No Project Alternative would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.</b>
--------------	--

---

Under this alternative, there would be no replenishment of development allocations, including residential. Therefore, future development under this alternative would occur and function similar to existing conditions, and no land use designations, or development standards would be changed. Therefore, future development under the No Project Alternative would occur as permitted under the current remaining development allocations. Because no land use designations, development standards, and Zoning designations would be changed, implementation of this alternative would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

However, as development occurs, Section 19.116.030, General Regulations, of the Municipal Code, would ensure that a relocation/displacement plan is prepared, which would illustrate that sufficient replacement

## NO PROJECT ALTERNATIVE

housing is available at a similar price range in the same general area. Therefore, not only is the No Project Alternative anticipated to result in up to 1,895 residential units, but also, should some types of individual development projects be permitted under the No Project Alternative that would potentially displace people, provisions of the Cupertino Municipal Code would serve to minimize impacts. Therefore, the construction of replacement housing elsewhere would not be warranted and the impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**POP-4**                    **Implementation of the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to population and housing.**

---

Impacts from cumulative growth are considered in the context of their consistency with regional planning efforts. As described above, the No Project Alternative would not induce a substantial amount of growth or require the construction of replacement housing elsewhere. Cumulative growth would be consistent with regional planning efforts. Thus, when considered along with the No Project Alternative, which, as described in the above sections, would not exceed regional growth projections, cumulative growth would not displace substantial numbers of people or housing or exceed planned levels of growth and cumulative impacts, would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

### 5.1.6.12 PUBLIC SERVICES AND RECREATION

#### Fire Protection Services

---

**PS-1**                    **Implementation of the No Project Alternative would not result in the provision of or need for new or physically altered fire protection facilities, the construction or operation of which could cause significant environmental impacts.**

---

The No Project Alternative would facilitate new development under the current General Plan, including residential, mixed-use, and commercial, within Cupertino, which could result in the provision of or need for new or physically altered fire protection facilities, the construction or operation of which could cause a significant environmental impact.

Future development permitted under the current General Plan would likely result in an increase in the number of calls for fire protection, and emergency medical services, which could result in expansion or construction of new or physically altered fire protection facilities, of which could result in significant environmental impacts; however, development allocation under this alternative would not be replenished, and is largely depleted, therefore, resulting in limited office, commercial, hotel, and residential development throughout the 26-year horizon.

## NO PROJECT ALTERNATIVE

Additionally, compliance with Subsections 105.1.4, Construction permit fees, and 105.1.5, Operational permit fees, under Section 16.40.065, Permits, of the Municipal Code, as described in Section 4.12.1.1, Environmental Setting, Chapter 4.12, Public Services and Recreation, in this Draft EIR, would require future development to undergo plan review and approval by the Santa Clara County Fire District (SCCFD) to ensure that future projects comply with State, and local fire codes, as well as ensure adequate safety features are incorporated into building design to minimize risk of fire. Further, the General Plan includes policies and strategies that, once adopted, would ensure adequate fire protection services are available for the residents of Cupertino. Within the Health/Safety Element, Policy 6-3, Wild Fire Prevention Efforts, requires the City to coordinate wild fire prevention efforts with adjacent jurisdictions. Policy 6-7, Early Project Review, requires the City to involve the Fire Department in the early design stage of all projects requiring public review to assure Fire Department input and modifications as needed. Policy 6-8, Commercial and Industrial Fire Protection Guidelines, requires the City to coordinate with the Fire Department to develop new guidelines for fire protection for commercial and industrial land uses. Policy 6-10, Multi-Story Buildings Fire Risks, requires the City to recognize that multi-story buildings of any land use type increase risks of fire, to ensure that adequate fire protection is built into the design, and require on-site fire suppression materials and equipment to ensure the safety of the community. Policy 6-12, Smoke Detectors, requires the City to require smoke detectors in all new residential units and in all residential units at the time of sale or rental, in conformance with State law, and to continue to use the Cupertino Scene to publicize fire hazards correction methods. Policy 6-14, Roadway Design, requires the City to involve the Fire Department in the design and review of public roadways for review and comments, and to attempt to ensure that roadways have frequent median breaks for timely access to properties. Policy 6-16, Hillside Access Routes, requires the City to require new hillside development to have frequent grade breaks in access routes to ensure a timely response from fire personnel. Policy 6-17, Hillside Road Upgrades, requires the City to require new hillside development to upgrade existing access roads to meet Fire Code and City standards. Policy 6-20, Growth Cooperation, requires the City to encourage cooperation between water utility companies and the Fire Department in order to keep water systems in pace with growth and firefighting service needs. Policy 6-21, Fire Fighting Upgrades Needs, requires the City to encourage utilities to consider Fire Department firefighting needs when upgrading water systems. Policy 6-22, Residential Fire Sprinklers, requires the City to require fire sprinklers in new residential construction located in hillside areas and flag lots.

Future development would also be required to comply with the City's Fire Code per Chapter 16.40 (Fire Code), including compliance with the permit processes, emergency access, hazardous material handling, and fire protection systems, including automatic sprinkler systems, fire extinguishers, and fire alarms. Further, future development would be required to comply with the City adopted the 2010 California Fire Code (CFC) and 2009 International Fire Code. Consequently, compliance with the State and local regulations, in conjunction with compliance with the above listed General Plan policies, would ensure that potential impacts under the No Project Alternative remain *less than significant*.

**Significance Without Mitigation:** Less than significant.



**NO PROJECT ALTERNATIVE**

---

**PS-2                      Implementation of the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to fire protection service.**

---

The No Project Alternative would facilitate new development under the current General Plan, including residential, mixed-use, and commercial, within Cupertino, which could result in the provision of or need for new or physically altered fire protection facilities, the construction or operation of which could cause a significant environmental impact, in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecasted by the ABAG. Cumulative impacts are considered in the context of the growth from development under this alternative within the city combined with the estimated growth in the service area of the SCCFD, which includes the cities of Campbell, Los Altos, Monte Sereno, Saratoga, and towns of Los Altos Hills and Los Gatos. A significant cumulative environmental impact would result if this cumulative growth would exceed the ability of SCCFD to adequately serve their service area, thereby requiring construction of new facilities or modification of existing facilities.

The No Project Alternative is unlikely to create a need for new or physically altered facilities in order for the SCCFD to provide fire protection services to its service area, as a result of limited remaining development allocation. Compliance with State and local laws, as described in Section 4.12.1.1, Environmental Setting, in Chapter 4.12, Public Services and Recreation, of this Draft EIR, as well as the General Plan policies listed in Impact PS-1, would ensure that fire protection services are adequate as future development is proposed as a result of implementation of the current General Plan. Therefore, the cumulative impact on the provision of fire services would likewise be *less than significant*.

**Significance Without Mitigation:** Less than significant.

## **Police Protection Services**

---

**PS-3                      Implementation of the No Project Alternative would not result in the provision of or need for new or physically altered police protection facilities, the construction or operation of which could cause significant environmental impacts.**

---

The No Project Alternative still would facilitate new development under the current General Plan, including residential, mixed-use, and commercial, within Cupertino, which could result in the provision of or need for new or physically altered police protection facilities, the construction or operation of which could cause a significant environmental impact.

These changes would likely result in the number of calls for police protection services, which could result in the expansion or construction of new or physically altered police protection facilities, of which could result in significant environmental impacts. However, development allocation under the current General Plan is largely depleted, therefore, resulting in limited office, commercial, hotel, and residential development through the 26-year horizon.

## NO PROJECT ALTERNATIVE

Additionally, if future expansion of the police station were necessary, the project would be subject to the provisions of CEQA, which would require that all potentially significant impacts be mitigated to a less-than-significant level, when feasible.

The General Plan includes Policies and strategies that, once adopted, would ensure adequate police protection services are available for the residents of Cupertino. Within the Health/Safety Element, Policy 6-23, Neighborhood Awareness Programs, requires the City to support the Neighborhood Watch Program and others intended to help neighborhoods prevent crime through social interaction. Policy 6-25, Crime Prevention in Building Design, requires the City to consider the relationship between building design and crime prevention in reviewing all developments. Policy 6-26, Fiscal Impacts, requires the City to recognize fiscal impacts to the County Sheriff and City of Cupertino when approving various land use mixes. Policy 6-27, Pre-hearing Review, requires the City to continue to request County Sheriff review and comment on development applications for security measures.

Therefore, compliance with the General Plan policies listed above would ensure that a *less-than-significant* impact would occur with respect to the need for new or physically altered police protection facilities.

**Significance Without Mitigation:** Less than significant.

---

<b>PS-4</b>	<b>Implementation of the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to police protection service.</b>
-------------	--

---

Cumulative impacts are considered in the context of the growth from development under the current General Plan within the city combined with the estimated growth in the service areas of the Santa Clara County Sheriff's Department, including the cities of Los Altos Hills, Saratoga, and unincorporated areas of Santa Clara County. A significant cumulative environmental impact would result if this cumulative growth would exceed the ability of Sheriff's Department to adequately serve the vicinity, thereby requiring construction of new facilities or modification of existing facilities.

Since police protection services in Cupertino are provided through a Memorandum of Understanding (MOU) between the City of Cupertino and the Santa Clara County Sheriff's Office, changes and growth anticipated under the No Project Alternative would not have any cumulative impact beyond Cupertino's SOI. Further, it is unlikely that implementation of this alternative would significantly increase the degree or incidence of need for mutual aid from neighboring agencies because anticipated growth under the No Project Alternative is limited as a result of limited development allocation remaining. Additionally, compliance with the General Plan policies listed above in impact discussion PS-3 would require the City to recognize fiscal impacts to the County Sheriff and City of Cupertino when approving various land use mixes and to continue to request County Sheriff review and comment on development applications for security and public safety measures. Therefore, the No Project Alternative would have a *less-than-significant* cumulative effect with respect to police protection services.

**Significance Without Mitigation:** Less than significant.

**NO PROJECT ALTERNATIVE**

**School Services**

---

**PS-5                      Implementation of the No Project Alternative would/would not result in the provision of or need for new or physically altered school facilities, the construction or operation of which could cause significant environmental impacts.**

---

Under the No Project Alternative, no new development potential would occur beyond what has already been accounted for under the current General Plan and Housing Element. Therefore, the buildout of the City is currently accounted for in the facility planning efforts of the Cupertino Union High School District, Fremont Unified High School District, and the Santa Clara Unified High School District.

Furthermore, the General Plan includes policies and strategies that, once adopted, would preserve and support Cupertino’s excellent public education system by partnering with local school districts and De Anza College to improve school facilities and infrastructure. Policy 2-22, Neighborhood Street Planning, requires the City to develop pedestrian-friendly street environments in each neighborhood that help create neighborhood identity, improve safety, increase opportunities for social interaction and connections to shopping, schools, recreation and other destinations. Supporting Strategy 2, Public Facilities, requires the City to evaluate existing and planned public facilities, such as schools and parks, to improve pedestrian access. Strategy 2, Public Facilities, requires the City to evaluate existing and planned public facilities, such as schools and parks, to improve pedestrian access. Policy 2-19, Jobs/Housing Balance, requires the City to strive for a more balanced ratio of jobs and housing units. Supporting Strategy 1, Housing and Mixed-Use, requires the City to strive to achieve a balanced jobs/housing ratio based on the policies and strategies contained in the Housing Element. Strategy 2, Housing Impact on Local Schools, recognizes that the quality of Cupertino schools (elementary and high school) is a primary asset of the City and directs the City to ensure that any new housing pays the statutorily mandated impact fees to mitigate any adverse impact to these systems. Policy 2-55, Planning for Schools, requires the City to recognize the financial impact of increased development on the school districts’ ability to provide staff and facilities. Work with the districts to assure that the continued excellence of school services can be provided prior to granting approval for new development. Policy 2-84, School Playing Fields, requires the City to preserve school playing fields for school and community recreational uses. Strategy 1, School Expansion, requires the City to encourage schools to meet their expansion needs by building upward instead of outward into recreation fields. Strategy 2, School Parking Lots, requires the City to encourage schools to seek alternate parking or transportation solutions, rather than building new parking lots that infringe on playing fields.

Therefore, given the mandatory payment of developer impact fees pursuant to SB 50 together with implementation of the General Plan policies and strategies that support the schools within Cupertino and that no new development potential would occur under this alternative, impacts to the CUSD, FUHSD and SCUSD would be less than significant.

**Significance With/Without Mitigation:** Less than significant.

## NO PROJECT ALTERNATIVE

---

**PS-6 Implementation of the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would/would not result in less than significant cumulative impacts with respect to schools.**

---

Regional growth resulting from past, present, and reasonably foreseeable projects would result in increased demand for additional school facilities within all three school districts serving the City of Cupertino. Similar to development in Cupertino, the schools are expected to receive development impact fees from other development outside of Cupertino, which would mitigate the current and future capacity issues, which would help expand their facilities to accommodate future students. Therefore, the proposed Project would have a *less-than-significant* impact on school facilities.

**Significance Without Mitigation:** Less than significant.

## Libraries

---

**PS-7 Implementation of the No Project Alternative would not result in the provision of or need for new or physically altered library facilities, the construction or operation of which could cause significant environmental impacts.**

---

The No Project Alternative still would facilitate new development, including residential, mixed-use, and commercial, within Cupertino, which could result in an increase to residents and employees as a result of future development allowed under the remaining development allocation. Although the No Project Alternative would result in an increase in employees throughout Cupertino, only residents within Santa Clara County can apply for a library card; therefore, the following analysis considers expected population increases, and not employment generation as a result of continued implementation of this alternative.<sup>34</sup> Therefore, expected increases in employees in the city need not be further considered.

While an overall increase in residents is expected, growth under the No Project Alternative would occur incrementally throughout the 26-year horizon; therefore, potential impacts resulting from increased demand for library services would not occur in the immediate future. It was confirmed that the existing 75 employees, as well as existing library facilities, would be sufficient to accommodate increased demand for library services, and no expansions would be required for the proposed Project; therefore, there would be adequate capacity at the library for the No Project Alternative.<sup>35</sup> Additionally, the General Plan includes policies and strategies that, once adopted, would ensure adequate library services are available for the residents of Cupertino. Policy 2-59, Library Service Level, requires the City to recognize that if the community desires a higher level of library service, cooperation between the County of Santa Clara and City of Cupertino in expanding library services and facilities is required. Policy 2-60, Library Planning, requires

---

<sup>34</sup> Santa Clara County Library District, Santa Clara County Library District website, <http://www.sccl.org/about/joining/eligibility>, accessed April 8, 2014.

<sup>35</sup> Personal communications between Ricky Caperton (PlaceWorks) and Derek Wolfgram, Deputy County Librarian for Community Libraries, April 4, 2014.

## NO PROJECT ALTERNATIVE

the City to integrate and coordinate any library facility planning into all applicable General Plan policies, such as transportation, pedestrian and bike trails. Policy 2-61, Improving Library Service, requires the City to encourage the library to continue to incorporate new technology to enhance service levels within the library system, and to encourage the continued evolution of library collections and services to meet the needs of Cupertino residents of all ages, its richly diverse population, and its local businesses.

Moreover, the Santa Clara County Library Strategic Plan (2008) also aims to ensure adequate library facilities are provided to sufficiently meet the demands of the City through the identification of goals and objectives, such as increasing the library's technology and increasing access to the library's physical space.

Therefore, although development allocations would not be replenished under this alternative, future development occurring under the existing remaining development allocations would be required to comply with the General Plan policies, which would ensure impacts to library facilities remain *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**PS-8                      Implementation of the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to libraries.**

---

Cumulative impacts are considered in the context of the growth from development under the No Project Alternative within the city combined with the estimated growth in the service areas of the Santa Clara County Library District (SCCLD), which includes all unincorporated portions of Santa Clara County in addition to the incorporated portions of Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Milpitas, Monte Sereno, Morgan Hill, and Saratoga.<sup>36</sup> A significant cumulative environmental impact would result if this cumulative growth would exceed the ability of SCCLD to adequately serve their service area, thereby requiring construction of new facilities or modification of existing facilities.

Implementation of the No Project Alternative could result in an increase to population as a result of future development allowed under the remaining development allocation; however, the Santa Clara County Library Strategic Plan (2008), described in more detail in Section 4.12.5.1, Environmental Setting, of Chapter 4.12, Public Services and Recreation, of this Draft EIR, accounts for the entire SCCLD service area and provides a basis for analyzing the most efficient allocation of funds both for the district as a whole as well as among the different libraries in the SCCLD service area. This would not only allow for adequate funding to satisfy demand at the Cupertino library, but also, it would ensure that surrounding libraries are adequate to fulfill demand which in turn would reduce the demand at the Cupertino library by reducing deficiencies at surrounding facilities. As a result, the No Project Alternative would result in a *less-than-significant* cumulative impact associated with libraries.

**Significance Without Mitigation:** Less than significant.

---

<sup>36</sup> Santa Clara Library District, Santa Clara Library District website, <http://www.sclcl.org/about/joining/eligibility>, accessed April 8, 2014.

## NO PROJECT ALTERNATIVE

### Parks and Recreation

---

**PS-9**                    **Implementation of the No Project Alternative would not increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur, or be accelerated.**

---

The City is not currently meeting its adopted standard of parkland per 1,000 residents. An increase to population would occur as implementation of the No Project Alternative would still allow for development; however, development allocations under this alternative would not be replenished and would be required to comply with Municipal Code Chapter 14.05, Park Maintenance Fee, described in Section 4.12.5.1, Environmental Setting, of Chapter 4.12, Public Services, which requires developers to pay impact fees to mitigate potential impacts to and existing parklands and recreation facilities. Fees collected under Chapter 14.05 could be applied to acquisition, improvement, maintenance, rehabilitation, or expansion of existing parkland or recreation facilities. Therefore, while the population increase as a result implementation of this alternative could still result in an increase to demand for parks and recreational facilities, compliance with the provisions of Chapter 14.05, would serve to minimize impacts to existing parklands and recreation facilities. Therefore, it is not anticipated that a substantial deterioration of facilities would occur as a result of the No Project Alternative impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**PS-10**                    **Implementation of the No Project Alternative would not include or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.**

---

As discussed above in Impact PS-9, the City is not currently meeting its adopted standard of parkland per 1,000 residents. An increase to population would occur as result of continued implementation of the No Project Alternative; however, because development allocation would not be replenished under this alternative, the potential increase in population and demand for parks and recreation services would be limited. Additionally, future development under this alternative would be subject to project-level environmental review to identify potential impacts and mitigation measure to ensure that potential impacts would be reduced to a less-than-significant level with regards to the future construction or expansion of recreational facilities as a result of the No Project Alternative. Further, compliance with the General Plan policies listed above in impact discussion PS-9, as well as compliance with the regulations as described in Section 4.12.5.1, Environmental Setting, of Chapter 4.12, Public Services and Recreation, of this Draft EIR, would ensure potential impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

**NO PROJECT ALTERNATIVE**

---

**PS-11                    Implementation of the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to parks and recreational facilities.**

---

The geographic scope for this discussion includes park and recreation facilities within the city boundary, as well as Santa Clara County, and the Midpeninsula Regional Open Space District. As described above, the City would require subdivision development to fund park improvements and dedicate land through compliance with Municipal Code Chapter 14.05 and Title 18, which would help to ensure the provision of adequate parklands in compliance with the City standard of providing three acres per 1,000 residents.

The No Project Alternative would still allow for development to occur under the current General Plan, which would cumulatively increase the demand for park and recreational services in the city; however, compliance with the City’s Municipal Code, along with the policies listed above in impact discussion PS-9, would ensure that adequate parklands and recreational facilities are provided through in-lieu fees, maintenance fees, or parkland dedication in order to meet the City standards, which would mitigate potential impacts that future development would have on park and recreation services in the city.

Further, potential future impacts to Santa Clara Parks, as well as the Midpeninsula Regional Open Space District, would be mitigated through the contribution of property taxes to ensure facilities at these locations are adequately maintained and sufficient to accommodate growth associated with continued implementation of the current General Plan under this alternative.

Overall, the No Project Alternative would not contribute to any potential cumulative impacts to park and cumulative impacts to park and recreational services would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

### **5.1.6.13      TRANSPORTATION AND TRAFFIC**

---

**TRAF-1                    Implementation of the No Project Alternative would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.**

---

#### **Intersection Operations**

The results of the level of service analysis under 2040 No Project conditions are summarized in Table 5.1-10. The results show that, measured against the various signalized intersection level-of-service standards described in Section 4.13.3, Methodology and Level of Service Standards, of Chapter 4.13, Transportation and Traffic, of the Draft EIR, 34 of the 41 study intersections would continue to operate at acceptable levels

## NO PROJECT ALTERNATIVE

of service during the AM and PM peak hours under the 2040 No Project scenario. The level-of-service calculation sheets are included in Appendix G, Transportation and Traffic Data, of this Draft EIR.

**TABLE 5.1-10 2040 NO PROJECT AM AND PM PEAK HOUR LEVEL OF SERVICE RESULTS**

Study Intersection	Intersection	LOS Standard	Peak Hour	Average Delay	No Project LOS
1	SR 85 SB Ramps and Stevens Creek Boulevard <sup>a</sup>	D	AM	29.2	C
			PM	29.1	C
2	SR 85 NB Ramps and Stevens Creek Boulevard <sup>a</sup>	D	AM	51.1	D-
			PM	20.9	C+
3	Stelling Road and Stevens Creek Boulevard <sup>a</sup>	E+	AM	46.2	D
			PM	52.9	D-
4	Sunnyvale-Saratoga Road and Fremont Avenue <sup>b</sup>	E	AM	42.8	D
			PM	52.5	D-
5	Sunnyvale-Saratoga Road/De Anza Boulevard and Homestead Road <sup>a</sup>	D	AM	51.2	D-
			PM	<b>66.1</b>	<b>E</b>
6	De Anza Boulevard and I-280 NB Ramp <sup>a</sup>	D	AM	46.4	D
			PM	<b>71.7</b>	<b>E</b>
7	De Anza Boulevard and I-280 SB Ramp <sup>a</sup>	D	AM	47.0	D
			PM	35.3	D+
8	De Anza Boulevard and Stevens Creek Boulevard <sup>a</sup>	E+	AM	45.8	D
			PM	<b>76.2</b>	<b>E-</b>
9	De Anza Boulevard and McClellan Road/Pacifica Drive	D	AM	33.0	C-
			PM	<b>70.7</b>	<b>E</b>
10	De Anza Boulevard and Bollinger Road <sup>a</sup>	E+	AM	44.0	D
			PM	25.1	C
11	De Anza Boulevard and SR 85 NB Ramp <sup>a</sup>	D	AM	32.9	C-
			PM	16.4	B
12	De Anza Boulevard and SR 85 SB Ramp <sup>a</sup>	D	AM	23.9	C
			PM	22.2	C+
13	Blaney Avenue and Homestead Road	D	AM	34.9	C-
			PM	16.4	B
14	Wolfe Road and El Camino Real (SR 82) <sup>b</sup>	E	AM	47.6	D
			PM	51.8	D-
15	Wolfe Road and Fremont Avenue <sup>c</sup>	E	AM	45.8	D
			PM	51.8	D-
16	Wolfe Road and Homestead Road	D	AM	36.3	D+
			PM	51.9	D-
17	Wolfe Road and Pruneridge Avenue	D	AM	17.0	B
			PM	26.9	C
18	Wolfe Road and I-280 NB Ramp <sup>a</sup>	D	AM	<b>88.3</b>	<b>F</b>
			PM	36.5	D+



**NO PROJECT ALTERNATIVE**

**TABLE 5.1-10 2040 NO PROJECT AM AND PM PEAK HOUR LEVEL OF SERVICE RESULTS**

Study Intersection	Intersection	LOS Standard	Peak Hour	Average Delay	No Project LOS
19	Wolfe Road and I-280 SB Ramp <sup>a</sup>	D	AM	38.9	D+
			PM	24.7	C
20	Wolfe Road and Vallco Pkwy	D	AM	26.4	C
			PM	51.2	D-
21	Wolfe Road/Miller Avenue & Stevens Creek Boulevard <sup>a</sup>	D	AM	46.5	D
			PM	<b>72.2</b>	<b>E</b>
22	Miller Avenue and Bollinger Road <sup>b</sup>	D	AM	42.0	D
			PM	44.2	D
23	Finch Avenue and Stevens Creek Boulevard	D	AM	26.6	C
			PM	41.8	D
24	North Tantau Avenue/Quail Avenue and Homestead Road	D	AM	49.6	D
			PM	43.6	D
25	North Tantau Avenue and Pruneridge Avenue	D	AM	29.2	C
			PM	16.6	B
26	North Tantau Avenue and Vallco Pkwy	D	AM	29.2	C
			PM	34.6	C-
27	Tantau Avenue and Stevens Creek Boulevard	D	AM	47.4	D
			PM	<b>56.8</b>	<b>E+</b>
28	Lawrence Expressway and Homestead Road <sup>d</sup>	E	AM	59.0	E+
			PM	58.0	E+
29	I-280 SB Ramp and Stevens Creek Boulevard <sup>e</sup>	E	AM	34.8	C-
			PM	<b>84.9</b>	<b>F</b>
30	Agilent Tech Driveway and Stevens Creek Boulevard <sup>f</sup>	D	AM	52.9	D-
			PM	29.8	C
31	Lawrence Expressway SB Ramp and Stevens Creek Boulevard <sup>d</sup>	E	AM	72.8	E
			PM	29.9	C
32	Lawrence Expressway NB Ramp and Stevens Creek Boulevard <sup>d</sup>	E	AM	53.9	D-
			PM	30.1	C
33	Lawrence Expressway and Calvert Drive/I-280 SB Ramp <sup>d</sup>	E	AM	48.6	D
			PM	50.6	D
34	Lawrence Expressway and Bollinger Road/Moorpark Avenue <sup>d</sup>	E	AM	60.5	E
			PM	46.0	D
35	De Anza Boulevard and Rainbow Drive (south)	D	AM	20.2	C+
			PM	19.2	B-
36	Bubb Road/Peninsula Boulevard and Stevens Creek Boulevard	D	AM	31.0	C
			PM	31.1	C
37	North Stelling Road/Hollenbeck Avenue and Homestead Road	D	AM	38.5	D+
			PM	43.6	D
38	Blaney Avenue and Stevens Creek Boulevard	D	AM	34.1	C-
			PM	40.0	D

## NO PROJECT ALTERNATIVE

TABLE 5.1-10 2040 NO PROJECT AM AND PM PEAK HOUR LEVEL OF SERVICE RESULTS

Study Intersection	Intersection	LOS Standard	Peak Hour	Average Delay	No Project LOS
39	Foothill Boulevard and Stevens Creek Boulevard	D	AM	48.7	D
			PM	25.2	C
40	Stelling Road and McClellan Road	D	AM	32.1	C-
			PM	35.6	D+
41	Wolfe Road and Apple Campus Access <sup>h</sup>	D	AM	18.9	B-
			PM	36.8	D+

Note: **Bold and underlined** indicates a substandard level of service.

- a. This is a CMP intersection within the City of Cupertino. Cupertino applies its own standard of LOS D to CMP intersections.
- b. This is a CMP intersection within the City of Sunnyvale. The CMP's standard of LOS E applies.
- c. The City of Sunnyvale is the controlling jurisdiction for the intersection.
- d. This is a CMP Intersection on a County Expressway. The CMP and County's standard of LOS E applies.
- e. This is a CMP intersection within the City of Santa Clara. The CMP's standard of LOS applies.
- f. The City of Santa Clara is the controlling jurisdiction for the intersection.
- g. The City of San Jose is the controlling jurisdiction for the intersection.
- h. This is a future intersection.

As shown on Table 5.1-10 and listed below, the No Project Alternative would result in significant impacts to eight (8) intersections during the AM peak hour, the PM peak hour or both peak hours. The intersection number, as used within the Table 5.1-10, is shown in parentheses.

- Homestead Road and De Anza Boulevard/Saratoga-Sunnyvale Road (#5): LOS E – PM peak hour
- De Anza Boulevard and I-280 Northbound Ramp (#6): LOS E – PM peak hour
- De Anza Boulevard and Stevens Creek Boulevard (#8): LOS E – PM peak hour
- De Anza Boulevard and McClellan Road/Pacifica Drive (#9): LOS E – PM peak hour
- Wolfe Road and I-280 Northbound Ramp (#18): LOS F – AM peak hour
- Wolfe Road/Miller Avenue and Stevens Creek Boulevard (#21): LOS E – PM peak hour
- Tantau Avenue and Stevens Creek Boulevard (#27): LOSE – PM peak hour
- Stevens Creek Boulevard and I-280 SB Ramps/Calvert Drive (#29): LOS F – PM peak hour

## Mitigation Measures

**Mitigation Measure TRAF-1:** The City of Cupertino shall commit to preparing and implementing a Traffic Mitigation Fee Program to guarantee funding for roadway and infrastructure improvements that are necessary to mitigate impacts from future projects based on the then current City standards. As part of the preparation of the Traffic Mitigation Fee Program, the City shall also commit to preparing a "nexus" study that will serve as the basis for requiring development impact fees under AB 1600 legislation, as codified by California Code Government Section 66000 et seq., to support implementation of the proposed Project. The established procedures under AB 1600 require that a "reasonable relationship" or nexus exist between the traffic improvements and facilities required to mitigate the traffic impacts of new development pursuant to the proposed Project. The following examples of traffic improvements and facilities would reduce impacts to acceptable level of service standards and these, among other improvements, could be included in the development impact fees nexus study:

## NO PROJECT ALTERNATIVE

- **Sunnyvale-Saratoga Road/De Anza Boulevard and Homestead Road (#5):** Widen De Anza Boulevard to four lanes in each direction or the installation of triple left-turn lanes.
- **De Anza Boulevard and I-280 Northbound Ramp (#6):** Restriping of De Anza Boulevard in the southbound direction to provide room for right turn vehicles to be separated from through traffic may be required. The bike lane would be maintained, and right turns would occur from the bike lane. The right turns would continue to be controlled by the signal and would need to yield to pedestrians. Painting a bike box at the front of the lane to provide space for bikes wait at red lights may enhance the bicycle experience.
- **De Anza Boulevard and Stevens Creek Boulevard (#8):** Restripe westbound Stevens Creek Boulevard to provide room for right turn vehicles to be separated from through vehicles may be required. The right turn vehicles will share the bike lane and will still be controlled by the traffic signal. Paint a bike box at the front of the lane to provide bikes a place to wait at red lights. The pedestrian crossings will not be affected may enhance the bicycling experience.
- **De Anza Boulevard and McClellan Road/Pacifica Drive (#9):** Realign the intersection that is currently offset resulting in inefficient signal timing such that the McClellan Road and Pacifica Drive legs are across from each other may be required. In addition, double left turn lanes may be required to be added to De Anza Boulevard with sections of double lanes on McClellan Road and Pacifica Drive to receive the double left turn lanes. These improvements will require the acquisition of right-of-way and demolition of existing commercial buildings. However, some existing right-of-way could be abandoned, which would reduce the net right-of-way take.
- **Wolfe Road and I-280 Northbound Ramp (#18):** An additional northbound through lane for a total of three through-movement lanes may be required. This will require widening the Wolfe Road overcrossing. The lane needs to be extended north of the interchange so that there are a continuous three lanes northbound. Right-of-way acquisition may be required. In addition to widening the overcrossing, the City may wish to pursue a redesign of the interchange to go from a partial cloverleaf design to a diamond design. This could help with heavy volumes in the right lane, which contributes to the level-of-service deficiency.
- **Wolfe Road/Miller Avenue and Stevens Creek Boulevard (#21):** The restriping of the westbound leg of the intersection to provide room so that right turn vehicles can be separated from through vehicles may be required. Right turn vehicles would share the bike lane. Right turn vehicles would still be controlled by the signal, and pedestrian crossings would not be affected. Paint a bike box at the front of the lane to provide bikes a place to wait at red lights may enhance the bicycling experience.
- **Tantau Avenue and Stevens Creek Boulevard (#27):** The addition of a separate left-turn lane to northbound Tantau Avenue may be required. Right-of-way acquisition and demolition of existing commercial buildings would be required.
- **Stevens Creek Boulevard and I-280 SB Ramps/Calvert Drive (#29):** Make the eastbound to southbound right turn a free movement. This would require building an island and separating the right turn from signal control. It also would require building a third southbound lane on Calvert Drive to receive the right turn traffic.

## NO PROJECT ALTERNATIVE

The fees shall be assessed when there is new construction, an increase in square footage in an existing building, or the conversion of existing square footage to a more intensive use. The fees collected shall be applied toward circulation improvements and right-of-way acquisition. The fees shall be calculated by multiplying the proposed square footage, dwelling unit, or hotel room by the appropriate rate. Traffic mitigation fees shall be included with any other applicable fees payable at the time the building permit is issued. The City shall use the traffic mitigation fees to fund construction (or to recoup fees advanced to fund construction) of the transportation improvements identified above, among other things that at the time of potential future development may be warranted to mitigate traffic impacts.

While implementation of Mitigation Measure TRAF-1 would secure a funding mechanism for future roadway and infrastructure improvements that are necessary to mitigate impacts from future projects based on then current standards, impacts would remain *significant and unavoidable*, because the City cannot guarantee improvements at these intersections at this time. This is in part because the nexus study has yet to be prepared and because some of the impacted intersections are under the jurisdictions of the Cities of Sunnyvale and Santa Clara and Caltrans. Specifically, the following intersections are outside the jurisdiction of Cupertino:

- De Anza Boulevard and I-280 Northbound Ramp (#6)
- Wolfe Road and I-280 Northbound Ramp (#18)

However, the City of Cupertino will continue to cooperate with these jurisdictions to identify improvements that would reduce or minimize the impacts to intersections and roadways as a result of implementation of future development projects in Cupertino.

**Significance with Mitigation:** Significant and Unavoidable.

## Freeway Levels of Service

Ten (10) freeway segments were selected for analysis under 2040 conditions. The addition of project traffic causes a traffic impact on a CMP freeway segment when:

- The LOS of the freeway segment is LOS F under existing conditions, and
- The number of new trips added by the project is more than one percent of the freeway capacity.

If there is a percentage increase greater than one (1) percent and the existing LOS is F, then there would be a significant impact. There were eleven (11) freeway segments identified as having LOS F under existing conditions. The same eleven (11) freeway segments are also identified as having an impact under the No Project Alternative, because traffic levels would increase by more than one (1) percent of the mixed-lane capacity between the existing conditions and the 2040 No Project Alternative conditions on all segments.

### **SR 85**

- Northbound between De Anza Boulevard and Stevens Creek Boulevard – AM peak hour
- Northbound between I-280 and Homestead Road – AM peak hour
- Southbound between I-280 and Stevens Creek Boulevard – PM peak hour
- Southbound between Stevens Creek Boulevard and De Anza Boulevard – PM peak hour
- Southbound between De Anza Boulevard and Saratoga Avenue – PM peak hour

**NO PROJECT ALTERNATIVE**

**I-280**

- Eastbound between Lawrence Expressway and Saratoga Avenue – PM peak hour
- Westbound between Saratoga Avenue and Lawrence Expressway – AM peak hour
- Westbound between Lawrence Expressway and Wolfe Road – AM peak hour
- Westbound between Wolfe Road and De Anza Boulevard – AM peak hour
- Westbound between De Anza Boulevard and SR 85 – AM peak hour
- Westbound between SR 85 and Foothill Expressway – AM peak hour

Because these impacted freeway segments are under the jurisdiction of Caltrans, it is not feasible for the City of Cupertino to implement any mitigation measures for any of the freeway segments. Also, because Caltrans has not identified any improvements for the City of Cupertino to contribute to, these impacts would be *significant and unavoidable*.

**Significance Without Mitigation:** Significant and unavoidable.

**Vehicle Miles Traveled**

As described above under Section 4.13.2.1, Regulatory Setting, of Chapter 4.13, Traffic and Transportation, the VTA countywide travel demand model is used to help evaluate cumulative transportation impacts of local land use decisions on the CMP system. Therefore, the daily (24-hour) VMT were tabulated with Land Use Alternative A using the Santa Clara VTA countywide travel demand model with refined land use estimates for the City of Cupertino. The VMT estimates in the VTA model are sensitive to changes in land use. Generally, land uses that reflect a more balanced jobs-housing ratio in the VTA model result in lower per capita VMT.

The total daily VMT and the VMT per capita are presented in Table 5.1-11. As shown in the table, VMT per capita is forecast to remain unchanged from the 10.5 service population per day in 2040 compared to 2013 under existing conditions. As discussed in the Air Quality discussion above, daily VMT in the Project Study Area would increase at a greater rate (11.1 percent) between 2013 and 2040 than would the service population of the Project Study Area (10.5 percent). An increase such as this could be indicative of increased development of both households and jobs, with potentially higher rates of increases in jobs (than households) in a relatively jobs-rich area, providing opportunities for increases in average trip lengths.

**TABLE 5.1-11 VMT PER CAPITA**

	Existing Conditions (2013)	2000-2020 General Plan
Daily VMT	897,419	997,145
Household Units	21,399	23,294
Total Population	58,302	63,873
Total Jobs	27,387	30,848
VMT Per Capita	<b>10.5</b>	<b>10.5</b>

Source: Association of Bay Area Government (ABAG) Projections 2013.  
Hexagon Transportation Consultants. 2014.

## NO PROJECT ALTERNATIVE

The VMT by trip orientation is presented in Table 5.1-12. As shown in the table for the current General Plan, much of the VMT is oriented to internal-external trip making. However, there is not an overwhelming imbalance of internal-external trip making over external-internal trip making, and the pattern compared to existing shows little change.

**TABLE 5.1-12 VMT BY TRIP ORIENTATION**

Trip Orientation	2000-2020 General Plan	2000-2020 General Plan VMT Proportions	Project	Project VMT Proportions
Total Cupertino VMT <sup>a</sup>	897,419	100%	997,145	100%
Internal-External VMT <sup>b</sup>	462,789	51%	540,670	54%
External-Internal VMT <sup>c</sup>	391,367	44%	413,479	42%
Internal-Internal VMT <sup>d</sup>	43,263	5%	42,996	4%

Notes: Estimate of 2030 VMT is based on the current Comprehensive Plan and on preliminary land use projections.

a. Trips with one trip end outside Cupertino were counted as one trip-end, whereas trips with both ends in Cupertino were counted as two trip-ends.

b. "Internal-External" VMT refers to VMT generated by trips associated with a home base in Cupertino and a work or non-work destination outside Cupertino.

c. "External-Internal" VMT refers to VMT generated by trips associated with a home base outside Cupertino and a work or non-work destination in Cupertino.

d. "Internal-Internal" VMT refers to VMT generated by trips associated with a home base in Cupertino and a work or non-work destination in Cupertino.

Source: Hexagon Transportation Consultants. 2014.

As discussed in Section 4.13.2.1, Regulatory Setting, of Chapter 4.13, Transportation and Traffic, SB 743 requires impacts to transportation network performance to be viewed through a filter that promotes the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. Some alternative metrics were identified in SB 743 including VMT, which can help identify how projects (land development and infrastructure) influence accessibility (i.e. access to places and people) and even emissions, but they do not provide information about how the transportation network performs or functions with respect to efficiency or user experience. Accessibility is an important planning objective in many communities, including Cupertino, but so is travel time or delay experienced by users. SB 743 does not prevent a city or county from continuing to analyze delay or LOS as part of other plans (i.e. the general plan), studies, or on-going network monitoring, but once the new CEQA Guidelines are implemented, which is estimated to be following the certification and adoption by the Secretary for Resources of the final draft of changes to CEQA Guidelines by OPR on July 1, 2014, these metrics may no longer constitute the sole basis for CEQA impacts.

While Cupertino does not currently have VMT analysis methodologies, standards, or thresholds of significance, this analysis has been provided for informational purposes only. However, because future growth under the proposed Project would come incrementally over approximately 26 years and would be guided by a policy framework that is generally consistent with many of the principal goals and objectives established in regional planning initiatives for the Bay Area, this additional growth would be consistent with the regional planning objectives established for the Bay Area, which concentrates new development within infill sites and within PDAs.

**NO PROJECT ALTERNATIVE**

---

<b>TRAF-2</b>	<b>Implementation of the No Project Alternative would conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.</b>
---------------	---

---

## CMP Impacts

Of the 41 study intersections included in this EIR document, 21 are included in Santa Clara County's CMP. As shown on Table 5.1-9 and listed above, the results indicate that the following six (6) CMP study intersections would operate at unacceptable levels of service during the AM peak hour, the PM peak hour or both peak hours under the 2040 No Project conditions. The intersection number, as used within the Table 5.1-9, is shown in parentheses.

- Homestead Road and De Anza Boulevard/Saratoga-Sunnyvale Road (#5): LOS E – PM peak hour
- De Anza Boulevard and I-280 Northbound Ramp (#6): LOS E – PM peak hour
- De Anza Boulevard and Stevens Creek Boulevard (#8): LOS F – PM peak hour
- Wolfe Road and I-280 Northbound Ramp (#18): LOS F – AM peak hour
- Wolfe Road/Miller Avenue and Stevens Creek Boulevard (#21): LOS E – PM peak hour
- I-280 Southbound Ramp and Stevens Creek Boulevard (#29): LOS F – PM peak hour

Of the above six intersections, only three of them – those with an LOS F -- would fall below the VTA's CMP standard, which is LOS E. The three CMP intersections that are within Cupertino's jurisdiction and have LOS E (#5, #6, and #21) do not actually fall below the CMP standard, but only below the City of Cupertino's standard of D resulting in a significant impact.

## Mitigation Measures

Mitigation for these impacts is described above in the Impact TRAF-1, and as discussed, even with implementation of Mitigation Measures TRAF-1, which includes preparing and implementing a Traffic Mitigation Fee Program to guarantee funding for roadway and infrastructure improvements that are necessary to mitigate impacts from future projects based on the then current City standards, the impacts to these CMP intersections would be *significant and unavoidable*.

**Significance With Mitigation:** Significant and unavoidable.

---

<b>TRAF-3</b>	<b>Implementation of the No Project Alternative would not substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersection) or incompatible uses (e.g. farm equipment).</b>
---------------	--

---

Because the No Project Alternative is a program-level planning effort, it does not directly address project-level design features or building specifications; however, the General Plan includes policies that, once adopted, would reduce potential hazards due to roadway design or incompatible uses.

## NO PROJECT ALTERNATIVE

Policy 4-8, Roadway Plans that Complement the Needs of Adjacent Land Use, requires that roadway plans complement the needs of adjacent land uses; under this policy, the City would be required to adopt road improvement standards for rural, semi-rural, urban, and suburban roads. Additionally, Policy 4-8 would also require the City to survey intersections to ensure their operation is efficient and promotes the safety of pedestrians and bicyclists. Policy 6-14, Roadway Design, requires the City to involve the Fire department in the design of public roadways. Policy 6-17, Hillside Road Upgrades, would “require new hillside development to upgrade existing access roads to meet Fire Code and City standards.” Policy 4-9, Curb Cuts, would direct developments to minimize the number of resulting driveway openings, thereby reducing potential for vehicle conflicts. Policy 4-10, Street Improvement Planning, would require streetscape planning to be “an integral part of a project to ensure an enhanced streetscape and the safe movement of people and vehicles,” and Policy 4-11, Safe Parking Lots, would “require parking lots that are safe for pedestrians.” Policy 4-12, Good Traffic Service on Major Streets, requires the City to encourage through traffic to use the major arterial and collector streets by maintaining the highest service possible on the arterial street system. Policy 4-13, Traffic Calming on Local Streets, requires the City to install traffic calming measures where appropriate to reduce traffic impacts and enhance walkability. Policy 6-57, Road Improvements to Reduce Truck Impacts, directs the City to consider road improvements, such as medians, landscaping, and the addition of bicycle lanes to reduce quarry truck impacts. Finally, Strategy 3, Community Protection, of Policy 4-16, Transportation Noise, Fumes, and Hazards, calls for protecting the community from the effects of the transportation system, including by enforcing laws related to dangerous and abusive driving.

Future development under the No Project Alternative would increase in both residential and commercial land uses. As these land uses develop, construction and modifications of new and existing roadways would be necessary to support the growth. As with current practice, the improvements would be designed and reviewed in accordance to the City of Cupertino Standard Details, which are promulgated and administered by the City Engineering Department. Additionally, incompatible uses would be discouraged by the General Plan. Future developments and roadway improvements would be designed in accordance to City standards and will be subject to the General Plan policies. Compliance with the City standards and policies would ensure that future projects would not significantly increase hazards due to design features or incompatible uses. Therefore, the impact of the No Project Alternative would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>TRAF-4</b>	<b>Implementation of the No Project Alternative would not result in inadequate emergency access.</b>
---------------	--

---

Because the No Project Alternative is a program-level planning effort, it does not directly address project-level design features or building specifications; however, the General Plan contains policies that would ensure efficient circulation and adequate access are provided in the city, which would help facilitate emergency response. Policy 6-7, Early Project Review, directs the City to “involve the Fire Department in early design stages of projects requiring public review.” Policy 6-8, Commercial and Industrial Fire Protection Guidelines, requires the City to coordinate with the Fire Department to develop new guidelines for fire protection for commercial and industrial land uses. Policy 6-9, Fire Prevention and Emergency



## NO PROJECT ALTERNATIVE

Preparedness, requires the City to promote fire prevention and emergency preparedness through city-initiated public education programs, through the government television channel, the Internet and the Cupertino Scene. Policy 6-14, Roadway Design, requires the City to involve the Fire department in the design of public roadways and directs the City to ensure that frequent median breaks are used to provide “timely access.” Additionally, Policy 6-15, Dead End Street Access, allows the use of private roadways during emergency responses in hillside subdivisions where dead-end streets impair access. Policy 6-16, Hillside Access Routes, directs the city to require new hillside development to have frequent grade breaks in access routes to ensure a timely response from fire personnel. Policy 6-17, Hillside Road Upgrades, directs the city to require new hillside development to upgrade existing access roads to meet Fire Code and City standards. Policy 6-18, Private Residential Electronic Security Gates, discourages the use of private residential electronic security gates to help ensure timely emergency access to these areas. Any new streets or developments that would result from implementation of the No Project Alternative would be subject to City engineering standards and the General Plan policies described above.

Ongoing implementation of the General Plan policies and the City’s engineering standards would ensure that adequate emergency access is provided in Cupertino. Therefore, impacts associated with the implementation of the No Project Alternative would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**TRAF-5                    Implementation of the No Project Alternative would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.**

---

Both the Valley Transportation Plan 2040, enacted by the Valley Transportation Authority, and Plan Bay Area: Strategies for a Sustainable Region, the 2040 Regional Transportation Plan enacted by the MTC in 2013, contain strategies designed to support alternative modes of transportation, including walking, bicycling, and public transit. Additionally, the City of Cupertino’s Pedestrian Transportation Guidelines and Cupertino Bicycle Transportation Plan identify and prioritize improvements to enhance the pedestrian and bicycle environment.

Additionally, the General Plan includes policies and strategies that, once adopted, would ensure adequate public transit, bicycle, and pedestrian facilities are available to the residents of Cupertino. Within the Land Use/Community Design Element, Policy 2-27, Heart of the City Special Area, and supporting strategies, require the City to create a positive and memorable image along Stevens Creek Boulevard of mixed-use development; enhanced activity nodes; and safe and efficient circulation and access for all modes of transportation. Policy 4-2, Reduced Reliance on the Use of Single-Occupant Vehicles, calls for the City to promote the use of alternative forms of transportation instead of single-occupancy vehicles (SOVs) by encouraging attractive alternatives. Supportive strategies under this policy encourage new developments to include facilities supportive of walking, biking, and transit use, as well as providing street space for bus turnouts, bike lanes, or other alternative transportation infrastructure. Policy 4-3, Cupertino Pedestrian Transportation Guidelines and the Cupertino Bicycle Transportation Plan, expressly directs the City to implement the programs and projects recommended in the Cupertino Pedestrian Transportation Guidelines

## NO PROJECT ALTERNATIVE

and in the Cupertino Bicycle Transportation Plan, as well as other programs that promote this goal. Policy 2-57, Pedestrian Access, requires the City to create pedestrian access between new subdivisions and school sites, and to review existing neighborhood circulation plans to improve safety and access for pedestrians and bicyclists to school sites, including completing accessible network of sidewalks and paths.

Policy 4-4, Regional Trail Development, calls for the City to continue to plan and provide for a comprehensive system of trails and pathways consistent with regional systems, including the Bay Trail, Stevens Creek Corridor and Ridge Trail, and with the policies contained in the Land Use and Community Design Element. The General Alignment of the Bay Trail, as shown in the Association of Bay Area Governments' Bay Trail planning document, is incorporated in the General Plan by reference. Policy 4-5, Increased Use of Public Transit, requires the City to support and encourage the increased use of public transit. Policy 4-7, Traffic Service and Pedestrians Needs, requires the City to balance the needs of pedestrians with desired traffic service, and, where necessary and appropriate, allow a lowered LOS standard to better accommodate pedestrians on major streets and at specific intersections. Policy 4-10, Street Improvement Planning, requires the City to plan street improvements such as curb cuts, sidewalks, bus stop turnouts, bus shelters, light poles, benches and trash containers as an integral part of a project to ensure an enhanced streetscape and the safe movement of people and vehicles with the least possible disruption to the streetscape. Policy 4-11, Safe Parking Lots, directs the City to require parking lots that are safe for pedestrians. Policy 4-15, School Traffic Impacts on Neighborhoods, requires the City to minimize the impact of school drop-off, pick-up and parking on neighborhoods.

The current policies and strategies of the General Plan continued under the No Project Alternative are consistent with the VTA Valley Transportation Plan 2040, the MTC's Plan Bay Area, and the City of Cupertino Pedestrian Transportation Guidelines and Cupertino Bicycle Transportation Plan. Policy 4-3 explicitly directs the City to "Implement the programs and projects recommended in the Cupertino Pedestrian Transportation Guidelines and in the Cupertino Bicycle Transportation Plan, as well as other programs that promote this goal."

Policy 4-2 calls for the City to promote the use of alternative forms of transportation instead of Single-Occupancy Vehicles (SOVs). Supportive strategies under this policy include encouraging new developments to include facilities supportive of walking, biking, and transit use, as well as providing street space for bus turnouts, bike lanes, or other alternative transportation infrastructure. Policy 4-4 calls for development of a comprehensive system of trails, consistent with regional trail networks. Policy 4-5 directs the City to support the increased use of public transit, which is consistent with the goals of County and regional transportation plans. Supportive strategies under this policy include ensuring transit amenities in new developments, providing transit stop amenities, working to develop a transit station at Vallco Park, developing rapid transit services, and studying future shuttle services. Policy 4-7 directs the City to balance competing needs of traffic service and pedestrians. Additional measures that would serve to improve conditions for bicyclists and pedestrians include Policy 4-9: Curb Cuts, Policy: 4-10 Street Improvement Planning, Policy 4-11: Safe Parking Lots, and Policy 4-13: Traffic Calming on Local Streets.

Implementation of the No Project Alternative would therefore support and would not conflict with plans, programs and policies regarding bicycle or pedestrian facilities, or decrease the performance and safety of

## NO PROJECT ALTERNATIVE

such facilities. Therefore, related impacts from implementation of the No Project Alternative would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**TRAF-6**            **Implementation of the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would result in a cumulatively considerable impacts.**

---

The analysis of the No Project Alternative, above, addresses cumulative impacts to the transportation network in the city and its surroundings; accordingly, cumulative impacts would be the same as No Project Alternative-specific impacts, which is *significant and unavoidable*.

**Significance With Mitigation:** Significant and unavoidable.

### 5.1.6.14 UTILITIES

#### Water

---

**UTIL-1**            **Implementation of the No Project Alternative would have sufficient water supplies available to serve the No Project Alternative from existing entitlements and resources, and new or expanded entitlements are not needed.**

---

As previously discussed in Chapter 4.14, Utilities and Service Systems, of this Draft EIR, the Project Study Area is within the water utility service area of California Water Service Company (Cal Water) and San Jose Water Company (SJWC). As discussed in Chapter 4.14, Utilities and Service Systems, the City undertook a Water Supply Evaluation (WSE) in May 2014 to assess the adequacy of the water supply for the proposed Project. (The WSE is included as Appendix H, Utilities and Service Systems Data, of this Draft EIR.) The WSE found that both Cal Water and SJWC had adequate water supply plans to match the demand forecasts under the proposed Project. Since the No Project Alternative would include less commercial and residential growth than the proposed Project, and therefore lower water demands, the No Project Alternative would have sufficient water supplies to serve it, and new or expanded entitlements would not be needed. Therefore, the impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

## NO PROJECT ALTERNATIVE

---

**UTIL-2            Implementation of the No Project Alternative would not require or result in the construction of new water facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.**

---

As discussed in Impact UTIL-1 above, the water demand associated with the No Project Alternative would be served with available and planned water supplies provided by Cal Water and SJWC. The General Plan includes policies and strategies that, once adopted, would ensure adequate water supplies are available for the residents of Cupertino. Within the Land Use/Community Design Element, Policy 2-67, Stevens Creek Park, requires the Santa Clara County Parks program to pursue the goal of connecting upper and lower Stevens Creek Parks. The County parks budget should pursue acquisition to the extent possible and emphasize passive park development in keeping with the pristine nature of the hillsides, and work to keep the watershed and storage basin properties of Stevens Creek. Policy 2-68, Continuous Open Space, requires the City to actively pursue inter-agency cooperation in acquiring properties near the western planning area boundary to complete a continuous open space green belt along the lower foothills, and to connect the open space to the trail system and the neighborhoods. Policy 2-79, Park Design, requires the City to design parks to utilize the natural features and topography of the site and to keep long-term maintenance costs low. Strategy 1, Native Plants, requires the City to maximize the use of native plants and minimize water use. Strategy 2, Creek Enhancement, requires the City to, where possible, open and restore covered creeks and riparian habitat. Within the Environmental Resources/Sustainability Element, Policy 5-1, Principles of Sustainability, requires the City to incorporate the principles of sustainability into Cupertino's planning and development system, including preparation of a Sustainable Energy and Water Conservation Plan.

In addition, future development under the No Project Alternative would be located within already developed urban areas and therefore, would connect to an existing water distribution system. Future development would be required to pay fees (construction tax) as outlined in Section 4.14.1.1, Environmental Setting, in Chapter 4.14, Utilities and Service Systems, allocated to service, system maintenance and capital upgrades.

In summary, in accordance with the General Plan policies listed below and applicable regulations below, buildout of the No Project Alternative would not result in water demands that would require the construction of new water treatment facilities or the expansion of existing facilities; thus, impacts would be *less than significant*.

### *Applicable Regulations*

- The Water Conservation Act of 2009 (Senate Bill SB X7 7)
- 2010 California Plumbing Code that requires water conserving fixtures
- Cupertino's Landscaping Ordinance – Municipal Code Chapter 14.15
- Cupertino's Water Conservation Ordinance – Municipal Code Chapter 15.32
- SJWC's, Cal Water's and SCVWD's water supply and demand management strategies and water shortage contingency plan identified in the UWMPs

**Significance Without Mitigation:** Less than significant.

**NO PROJECT ALTERNATIVE**

---

**UTIL-3                    The No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to water supply.**

---

This section analyzes potential impacts to water supply that could occur from the No Project Alternative in combination with other reasonably foreseeable projects in the surrounding area. The geographic scope of this cumulative analysis is taken as the Cal Water and SJWC service areas. While the No Project Alternative would contribute to an increased cumulative demand for water supply, the increased demand would not exceed the long-term supply under normal circumstances, as discussed above. Additionally, Cal Water, SJWC and Santa Clara Valley Water District (SCVWD) Urban Water Management Plans (UWMPs) determine that the water supply will be sufficient to accommodate future demand in the Cal Water and SJWC service areas through 2035, and by extension through 2040, under normal circumstances. As discussed in Chapter 4.14, Utilities and Service Systems, in the multiple dry years, with Cal Water, SJWC and SCVWD drought contingency plans in place, any shortages would be managed through demand reductions and other measures, such as increased groundwater pumping. In addition, with SB X7 7 and the State, county, and local water conservation ordinances in place, each jurisdiction would be required to conserve its water use through establishing water efficiency measures. In addition, pursuant to SB 610 and SB 221, water supply assessments (WSAs) would be prepared for large development projects prior to approval of each project to ensure adequate water supply for new development.

*Applicable Regulations*

- The Water Conservation Act of 2009 (Senate Bill SB X7 7)
- 2010 California Plumbing Code that requires water conserving fixtures
- State Updated Model Water Efficient Landscape Ordinance (Assembly Bill 1881 [2006])
- SCVWD Comprehensive Water Resources Management Plan
- SJWC’s, Cal Water’s and SCVWD’s water supply and demand management strategies and water shortage contingency plan identified in the UWMPs
- City of Cupertino General Plan
- City of Cupertino Municipal Code

Overall, cumulative water demands would neither exceed planned levels of supply nor require building new water treatment facilities or expanding existing facilities beyond what is currently planned. In addition, future development would be required to pay development fees, which would offset the costs of system maintenance and capital upgrades to support the new development in the Cal Water and SJWC service areas. Therefore, the cumulative impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

## NO PROJECT ALTERNATIVE

### Wastewater

---

**UTIL-4      Implementation of the No Project Alternative would or would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.**

---

#### *San Jose/Santa Clara Water Pollution Control Plant*

The Cupertino Sanitary District (CSD) sewer collection system directs wastewater to the San Jose/Santa Clara Water Pollution Control Plant (SJ/SCWPCP), a joint powers authority. The San Francisco Regional Water Quality Control Board (RWQCB) established wastewater treatment requirements for the SJ/SCWPCP in an NPDES Permit (Order No. R2-2009-0038), adopted April 8, 2009 and effective June 1, 2009.<sup>37</sup> The NPDES Order sets out a framework for compliance and enforcement applicable to operation of the SJ/SCWPCP and its effluent, as well as those contributing influent to the SJ/SCWPCP. This NPDES Order currently allows dry weather discharges of up to 167 million gallons per day (mgd) with full tertiary treatment, and wet weather discharges of up to 271 mgd with full tertiary treatment.

As the dischargers named in the NPDES Permit, the City of San Jose and the City of Santa Clara implement and enforce pretreatment programs for effluent discharged into Artesian Slough, tributary to Coyote Creek and South San Francisco Bay. The dischargers conduct programs to educate residents, professionals, and business owners about the proper use of their sewer and drainage systems in order to help preserve their own facilities and to help protect the environment.

The CSD is one of six additional satellite collection systems that discharge into the SJ/SCWPCP. Each satellite collection system is responsible for an ongoing program of maintenance and capital improvements for sewer lines and pump stations within its respective jurisdiction in order to ensure adequate capacity and reliability of the collection system. The responsibilities include managing overflows, controlling Infiltration and Inflow (I&I) and implementing collection system maintenance.

The SJ/SCWPCP, serving as the Discharger, and has an approved pretreatment program, which include approved local limits, as required by prior permits. The previous permit required the Discharger to evaluate its local limits –such as those established by the CSD –to ensure compliance with updated effluent limits. These local limits are approved as part of the pretreatment program required by this permit. The SJ/SCWPCP is required to monitor the permitted discharges in order to evaluate compliance with permit conditions.

With continued compliance with applicable regulations listed below, projected wastewater generated from potential future development under the No Project Alternative would not exceed the wastewater treatment requirements or capacity of the SJ/SCWPCP. Therefore, the wastewater treatment requirements of the San

---

<sup>37</sup> San Francisco RWQCB NPDES Permit (Order No. R2-2009-0038) for SJ/SCWPCP.  
[http://www.waterboards.ca.gov/rwqcb2/board\\_info/agendas/2009/april/SJSC\\_FinalOrder%20-%204-09.pdf](http://www.waterboards.ca.gov/rwqcb2/board_info/agendas/2009/april/SJSC_FinalOrder%20-%204-09.pdf)

**NO PROJECT ALTERNATIVE**

Francisco RWQCB would not be exceeded due to buildout of the No Project Alternative, resulting in a *less-than-significant* impact.

*City of Sunnyvale Water Pollution Control Plant*

The Sunnyvale sewer collection system, which serves a small area of the city along Stevens Creek Boulevard, directs wastewater to the Sunnyvale Water Pollution Control Plant (SWPCP). The San Francisco RWQCB established wastewater treatment requirements for the SWPCP in an NPDES Permit (Order No. R2-2009-0061), adopted August 12, 2009 and effective October 1, 2009. Discharge Prohibition III.C of the permit states the average dry weather effluent flow shall not exceed 29.5 mgd. Exceeding the treatment SWPCP's average dry weather flow design capacity (29.5 mgd) may result in lowering the reliability of achieving compliance with water quality requirements. The prohibition against exceeding design capacity is meant to ensure effective wastewater treatment by limiting flows to the SWPCP's design treatment capability.

Treated wastewater from the SWPCP flows into Moffett Channel, which is a tributary to the Guadalupe Slough and the South San Francisco Bay. The SWPCP has an average dry weather flow design capacity of 29.5 mgd and a 40 mgd peak wet weather flow capacity. The average dry weather flow discharged to Moffett Channel during the months of June, July, August, and September in 2006-2008 was 9.4 mgd. The average flow discharged to Moffett Channel was 11.8 mgd during 2006 - 2008, the average wet weather flow (October-May) discharged to Moffett Channel was 13.1 mgd during 2006 - 2008, and the maximum daily effluent flow rate was 35 mgd during 2006 -2008<sup>38</sup>.

All public entities that own or operate sanitary sewer systems greater than one mile in length—including the CSD and the SJ/SCWPCP—that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California are required to comply with the terms of State Water Resources Control Board (SWRCB) Order No. 2006-0003-DWQ, as amended by Order No. WQ 2008-0002-EXEC. These public entities are considered “enrollees” of the statewide permit, as amended. One purpose of the statewide SWRCB permit is to prevent sewer system overflows (SSOs). Major causes of SSOs include: grease blockages, root blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, excessive storm or ground water inflow/infiltration, debris blockages, sanitary sewer system age and construction material failures, lack of proper operation and maintenance, insufficient capacity and contractor-caused damages. Many SSOs are preventable with adequate and appropriate facilities, source control measures and operation and maintenance of the sanitary sewer system. To facilitate proper management of sanitary sewer systems, each Enrollee must develop and implement a system-specific Sewer System Management Plan (SSMP).

With continued compliance with applicable regulations listed below, projected wastewater generated from potential future development under the No Project Alternative would not exceed the wastewater treatment requirements or capacity of the SWPCP. Therefore, the wastewater treatment requirements of the San Francisco RWQCB would not be exceeded due to buildout of the No Project Alternative, resulting in a *less-than-significant* impact.

---

<sup>38</sup> San Francisco RWQCB NPDES Permit (Order No. R2-2009-0061) for City of Sunnyvale WPCP.  
[http://www.waterboards.ca.gov/rwqcb2/board\\_decisions/adopted\\_orders/2009/R2-2009-0061.pdf](http://www.waterboards.ca.gov/rwqcb2/board_decisions/adopted_orders/2009/R2-2009-0061.pdf)

## NO PROJECT ALTERNATIVE

### *Applicable Regulations*

- San Francisco RWQCB NPDES Permit (Order No. R2-2009-0038) for SJ/SCWPCP
- San Francisco RWQCB NPDES Permit (Order No. R2-2009-0061) for SWPCP
- SWRCB Order No. 2006-0003-DWQ for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems
- SWRCB Order No. WQ 2008-0002-EXEC revising SWRCB Order No. 2006-0003-DWQ
- Chapter 15.20 of the City's Municipal Code establishing standards for individual onsite sewage disposal systems consistent with RWQCB standards.
- Cupertino Sanitary District Operations Code
- Cupertino Sanitary District Sewer System Management Plan

**Significance Without Mitigation:** Less than significant.

---

**UTIL-5      Implementation of the No Project Alternative would or would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.**

---

Buildout of the No Project Alternative would have a significant impact if it would result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would have a significant effect on the environment. As discussed above in Impact UTIL-4 above and Impact UTIL-6 below, future demands from the No Project Alternative would not exceed the design or permitted capacity of the wastewater treatment plants serving the Project Study Area (i.e. SJ/SCWPCP and SWPCP). The potential impacts to the collection system would be addressed through applicable General Plan policies and measures as identified in Impact UTIL-6 below. In addition, the CSD's requirement for new projects to prepare a hydraulic model and, if necessary, improve collection system capacity would ensure that demands from individual projects in the Project Study Area would not significantly impact the wastewater collection service. As a result, the impact would be *less than significant*.

### *Applicable Regulations*

- San Francisco RWQCB NPDES Permit (Order No. R2-2009-0038) for SJ/SCWPCP
- San Francisco RWQCB NPDES Permit (Order No. R2-2009-0061) for SWPCP
- SWRCB Order No. 2006-0003-DWQ for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems
- SWRCB Order No. WQ 2008-0002-EXEC revising SWRCB Order No. 2006-0003-DWQ
- Chapter 15.20 of the City's Municipal Code establishing standards for individual onsite sewage disposal systems consistent with RWQCB standards.
- Cupertino Sanitary District Operations Code
- Cupertino Sanitary District Sewer System Management Plan

**Significance Without Mitigation:** Less than significant.



**NO PROJECT ALTERNATIVE**

---

**UTIL-6      Implementation of the No Project Alternative would or would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments.**

---

Buildout of the No Project Alternative would have a significant impact if future projected demand exceeds the wastewater service capacity of the SJ/SCWPCP or SWPCP, or the CSD or City of Sunnyvale collection systems.

**Collection Systems**

*Cupertino Sanitary District*

Specific capacity deficiencies for specific sewer lines were identified in the current Cupertino General Plan update, including sewer lines serving the Town Center, and lines on Stelling Road and Foothill Boulevard. Trunk lines serving the Town Center identified as flowing either at or above capacity include those in Stevens Creek Boulevard between Randy Lane and Wolfe Road, and those in Wolfe Road south of I-280 and between Pruneridge Avenue and I-280. An additional line was also identified as operating at or above capacity in a 2000 flow study performed as part of the City Center development. This trunk system consists of 10-inch to 18-inch sewer lines located in Randy Lane, Wheaton Drive, Denison Avenue and Norwich Avenue. Flow data indicated that segments of this line flowed at 88-percent of capacity. Capacity improvements have been made to the lines on Wolfe Road. The other lines identified as providing insufficient capacity for existing flows have not been upgraded to date. When development precedes the timely construction of necessary downstream capacity improvements, new development that substantially increase wastewater capacity, including projects potentially associated with No Project Alternative buildout, could, result in wastewater flows that exceed the collection system capacity. To address this possibility, the CSD requires developers of substantial projects to demonstrate that adequate capacity exists, or to identify the necessary mitigations. The CSD defines substantial projects as those projected to generate substantial increases in wastewater. In these situations, the developer is required to prepare a hydraulic model of the pipe system between the project and the downstream limits of CSD facilities. To demonstrate capacity is available, the model must show that existing pipes flow less than two-thirds full when the new development wastewater flow is added to existing flows. In the event that adequate capacity is not available, improvements would need to be identified and constructed to provide a system that flows at less than two-thirds full. The requirement to prepare a hydraulic model and, if necessary, improve capacity is a standard condition of the CSD required for new development. As a result, impacts on the CSD collection system would be *less than significant*.

*City of Sunnyvale*

Portions of the Heart of the City Special Area east of Finch Avenue and south of Stevens Creek Boulevard contribute wastewater flows to the City of Sunnyvale Collection System. Development under the No Project Alternative includes buildout of the remaining 2020 General Plan development allocations. The No Project Alternative could result in wastewater flows to the City of Sunnyvale that exceed the downstream pipe capacity if large office developments are allowed. Development in this area is guided by the Heart of

## NO PROJECT ALTERNATIVE

the City Specific Plan. This Specific Plan does allow office uses in the entire corridor with appropriate mitigation measures. However, development adjacent to the single family residences on the east side along Stevens Creek Boulevard would not be large office campuses due to the small size of the properties and the need to maintain compatibility with adjoining single-family residential uses. Offices allowed in this area would be smaller, like attorney's offices or small office spaces. Modification of the Heart of the City Specific Plan to allow large office space in the area would require further environmental review, which would address sanitary sewer capacity issues, as well as neighborhood compatibility. Without modification of the Heart of the City Specific Plan, and since the remaining development allocations are included in the City of Sunnyvale's growth projections, the City of Sunnyvale could continue to provide system capacity for future growth in its Cupertino service area. As a result, impacts on the City of Sunnyvale collection system would be *less than significant*.

### Treatment Systems

#### *San Jose/Santa Clara Water Pollution Control Plant*

The SJ/SCWPCP has excess capacity, and would be able to treat wastewater produced by development under the proposed Project if the City and SJ/SCWPCP enter into an agreement to provide additional capacity to CSD, which would not require any physical expansion of existing facilities. In addition, as explained above, flows have decreased over time: in 2000 the flows were 131 mgd and flows in 2010 were less than 110 mgd.<sup>39</sup> The SJ/SCWPCP currently treats 105 mgd. The SJ/SCWPCP Master Plan sets a future capacity of 450 mgd. The No Project Alternative would not increase development beyond that envisioned by the current General Plan. As a result, impacts on the contractual treatment capacity at SJ/SCWPCP would be *less than significant*.

#### *City of Sunnyvale*

The SWPCP generation for the entire Heart of the City Special Area is 0.30 mgd. The portion of this Special Area served by the SWPCP is 4-percent of the total area of this Special Area. Assuming a uniform use distribution across the entire Special Area, the wastewater flow to the City of Sunnyvale would be 0.01 mgd. The projected increase amounts to 0.08-percent of the current daily treatment flow of 15 mgd, and 0.04 percent of the SWPCP's dry weather permitted capacity. Thus, the projected increase in wastewater is a relatively insignificant amount with respect system capacity and impacts on the SWPCP would be *less than significant*.

The General Plan includes policies and strategies that, once adopted, would ensure adequate wastewater collection and treatment facilities are available for the residents of Cupertino. Policy 5-45, Coordination with the Cupertino Sanitary District, requires the City to provide input into the District's Master Plan preparation process to ensure that issues relevant to Cupertino's land use policies are addressed, and work closely with the District on the implementation of the General Plan. Policy 5-46, Sunnyvale Treatment Plant, requires the City to consider the impacts on the Sunnyvale sanitary sewer system if significant office

---

<sup>39</sup> San Francisco RWQCB NPDES Permit (Order No. R2-2009-0038) for SJ/SCWPCP.  
[http://www.waterboards.ca.gov/rwqcb2/board\\_info/agendas/2009/april/SJSC\\_FinalOrder%20-%204-09.pdf](http://www.waterboards.ca.gov/rwqcb2/board_info/agendas/2009/april/SJSC_FinalOrder%20-%204-09.pdf)

## NO PROJECT ALTERNATIVE

uses are proposed in the east Stevens Creek Boulevard area. Policy 5-47, Vallco Parkway, requires the City to recognize that new high discharge users in the Vallco area and the Stevens Creek Boulevard and Blaney Avenue area will require private developers to pay for the upgrading of tributary lines.

### *Applicable Regulations*

- SWRCB Order No. 2006-0003-DWQ for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems
- SWRCB Order No. WQ 2008-0002-EXEC revising SWRCB Order No. 2006-0003-DWQ
- Chapter 15.20 of the City's Municipal Code establishing standards for individual onsite sewage disposal systems consistent with RWQCB standards.
- Cupertino Sanitary District Operations Code
- Cupertino Sanitary District Sewer System Management

**Significance Without Mitigation:** Less than significant.

---

**UTIL-7      Implementation of the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would or would not result in less than significant cumulative impacts with respect to wastewater treatment.**

---

This section analyzes potential impacts related to wastewater treatment that could occur from the No Project Alternative in combination with reasonably foreseeable growth within the SJ/SCWPCP and SWPCP service areas.

Buildout of the No Project Alternative would generate a minor increase in the volume of wastewater delivered for treatment at SJ/SCWPCP and SWPCP. This increase represents less than 1 percent of the available treatment capacity at the SJ/SCWPCP and SWPCP, and it would occur incrementally over a period of 26 years. Both the SJ/SCWPCP and SWPCP serving the Project Study Area currently use less than their design and permitted wastewater treatment capacity. Cumulative wastewater treatment demand over the proposed No Project Alternative buildout period – based on the recent trends of diminishing wastewater treatment demand and the projected population growth in the service areas – is far below the excess capacity of the SJ/SCWPCP and SWPCP. Because the cumulative demand would not substantially impact the existing or planned capacity of the wastewater treatment systems, which have sufficient capacity for wastewater that would be produced by the No Project Alternative, the construction of new wastewater treatment facilities would not be necessary.

Additionally, future development under the No Project Alternative would be subject to the development review process and would be required to mitigate any effects to wastewater treatment services on a project-by-project basis. Future development would also be required to comply with all applicable regulations and ordinances protecting wastewater treatment services as described in Section 4.14.2.1, Environmental Setting, in Chapter 4.14, Utilities and Service Systems.

## NO PROJECT ALTERNATIVE

Wastewater from cumulative development combined with the No Project Alternative would not exceed wastewater treatment requirements, and cumulative impacts to sanitary wastewater service would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

### Solid Waste

**UTIL-8 Implementation of the No Project Alternative would not be served by a landfill(s) with sufficient permitted capacity to accommodate the No Project Alternative’s solid waste disposal needs.**

Existing and potential development under the No Project Alternative would not be served by landfill sites with sufficient permitted capacity to accommodate the city’s solid waste disposal needs, under existing contractual agreements. As described in Section 4.14.3.1, Environmental Setting, in Chapter 4.14, Utilities and Service Systems, of this Draft EIR, 99% of all solid waste generated in Cupertino – which includes City [Recology] hauled waste, as well as self-hauled waste from private projects within the City – is disposed at four different landfill facilities. One hundred (100) percent of City [Recology] hauled waste – which accounts for 92 percent of the total waste volume – goes to one landfill (Newby Island). Table 5.1-13 compares the remaining capacity, maximum daily and annual capacity, and estimated closure date for each of the four landfill facilities.

**TABLE 5.1-13 LANDFILLS EXISTING CAPACITY AND ESTIMATED CLOSURE DATE**

Landfill Facility	Remaining Capacity (cubic yard)	Daily Capacity (tons/day)	Estimated Closure Date
Newby Island Landfill	18,274,953 (as of 10/16/2006)	4,000	6/1/2025 <sup>a</sup>
Guadalupe Sanitary Landfill	11,055,758 (as of 1/1/2011)	1,300	1/1/2048
Monterey Peninsula Landfill	48,560,000 (as of 12/31/2004)	3,500	2/28/2107
Altamont Landfill	45,720,000 (as of 8/22/2005)	11,500	1/1/2025

a. The agreement between the Newby Island Landfill and the City of Cupertino ends in 2023.  
Source: CalRecycle, 2014.

In 2012, the City of Cupertino’s actual disposal rate for residents was 2.6 pounds per person per day (PPD) with the target of 4.3 PPD. For employees, the disposal rate was 4.3 PPD with the target rate of 8.1 PPD.<sup>40</sup> The city of Cupertino’s disposal rates for both residents and employees have been below target rates and steadily decreasing since 2007.<sup>41</sup>

<sup>40</sup> CalRecycle, “Jurisdiction per Capita Disposal Trends: Cupertino,” <http://www.calrecycle.ca.gov/>, accessed May 15, 2014.

<sup>41</sup> CalRecycle, “Jurisdiction per Capita Disposal Trends: Cupertino,” <http://www.calrecycle.ca.gov/>, accessed May 15, 2014.

**NO PROJECT ALTERNATIVE**

The per capita disposal rate target is also known as “the 50% equivalent per capita disposal target.” It is the amount of disposal Cupertino would have had during the CalRecycle-designated base period (2003 – 2006) if it had been exactly at a 50% diversion rate. It is calculated by CalRecycle using the average base period per capita generation for Cupertino (in pounds), then dividing this generation average in half to determine the 50% equivalent per capita disposal target. The target is an indicator for comparison with that jurisdiction’s annual per capita per day disposal rate beginning with the 2007 program year.

As shown on Table 5.2-21, at 2040 buildout of the No Project Alternative, it is anticipated that the city will generate solid waste at a rate of 95,725 tons/year, which equates to approximately 262 tons/day. Although the anticipated amount of solid waste is below daily per capita disposal targets, two of four landfill facilities that receive the majority of the city’s solid waste are likely to reach their permitted maximum capacities by 2040. The Newby Island Landfill facility will reach its capacity in 2025 (the City’s agreement with the facility ends earlier, in 2023), and Altamont Landfill also is anticipated to reach its capacity in 2025, as shown in the Table 5.1-13. Since the Newby Island Landfill facility currently accepts 92 percent of the solid waste generated by Cupertino, the City must find an alternative to this landfill when it closes in approximately ten years.

Anticipated rates of solid waste disposal would have a less-than-significant impact in regard to target disposal rates, and the City would continue its current recycling ordinances and zero-waste policies. Nevertheless, the 2023 termination of the agreement between the Newby Island Landfill facility, as well as the facility’s estimated closure date in 2025 would result in insufficient solid waste disposal capacity at buildout of the No Project Alternative, resulting in a *significant* impact.

## Mitigation Measure

The following mitigation measure is recommended to minimize the potential for the No Project Alternative to not be served by a landfill(s) with sufficient permitted capacity to accommodate the No Project Alternative’s solid waste disposal needs:

**Mitigation Measure UTIL-8:** The City shall continue its current recycling ordinances and zero-waste policies in an effort to further increase its diversion rate and lower its per capita disposal rate. In addition, the City shall monitor solid waste generation volumes in relation to capacities at receiving landfill sites to ensure that sufficient capacity exists to accommodate future growth. The City shall seek new landfill sites to replace the Altamont and Newby Island landfills, at such time that these landfills are closed.

Implementation of Mitigation Measure UTIL-8 would serve to ensure sufficient capacity of landfill is available for future development under the No Project Alternative. In addition, the trend of lower per capita solid waste volumes would continue to reduce the amount of waste disposed at landfills overall, which may delay the estimated closure date of landfill sites, including the Newby Island Landfill facility. With incorporation of the above Mitigation Measure UTIL-8, related to the potential for the No Project Alternative to not be served by a landfill(s) with sufficient permitted capacity to accommodate No Project Alternative’s solid waste disposal needs, impacts would be *less than significant*.

**Significance With Mitigation:** Less than significant.

**NO PROJECT ALTERNATIVE**

**UTIL-9                    The No Project Alternative would not be out of compliance with federal, State, and local statues and regulations related to solid waste.**

As discussed in Section 4.14.3 of this Draft EIR, the City has complied with State requirements to reduce the volume of solid waste through recycling and reuse of solid waste. The City’s per capita disposal rate is below the target rate established by CalRecycle. Cupertino adopted a Source Reduction and Recycling Element (SRRE) and a Household Hazardous Waste Element (HHWE) in compliance with the California Integrated Waste Management Act. The City has gone beyond the SRRE by implementing several programs, including the City’s and Recology’s organics or food waste collection program and Environmental Recycling Day events offered to residents three times per year by Recology. Implementation of the referenced strategies, plans, and programs, as well as the Climate Action Plan that launched in May 2014, will enable the city to meet the 75 percent of solid waste by the year 2020. These programs will be sufficient to ensure that future development in Cupertino would not compromise the ability to meet or perform better than the State mandated target.

**TABLE 5.1-14      PROJECTED RESIDENTS, EMPLOYMENT, AND WASTE GENERATION AT 2040 BUILDOUT – NO PROJECT ALTERNATIVE**

	2012 <sup>a</sup>	Existing	2040 Buildout
Residents	59,022	58,302	63,873
Employment	35,438	27,387	30,848
Residential Disposal Rate Target (pounds/person/day)	4.3	4.3	4.3
Employee Disposal Rate Target (pounds/person/day)	8.1	8.1	8.1
Maximum Disposal (tons/year)	98,704	86,237	95,725
Actual Disposal (tons/year)	27,652	–	–

a. The latest data on the actual disposal information was from 2012.  
Source: CalRecycle, 2014.

Construction and demolition associated with future development under the No Project Alternative would generate significant solid waste. At least 60 percent of this waste, however, would be expected to be diverted from landfill disposal by recycling in accordance with the City’s construction debris ordinance. Therefore, future development would comply with applicable statutes and regulations and the impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

**NO PROJECT ALTERNATIVE**

**UTIL-10 The No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would result in significant cumulative impacts with respect to solid waste.**

The buildout of the No Project Alternative will increase the quantity of solid waste for disposal. Although AB 939 established a goal for all California cities to provide at least 15 years of ongoing landfill capacity, growth from other cities in the region may exceed that which was taken into account when calculating landfill capacity. Also, because the Newby Island Landfill facility, which takes approximately 92 percent of the City's solid waste, is expected to close in 2025, Cupertino may eventually experience insufficient landfill capacity to accommodate existing or increased population and employment levels.

As discussed in Section 4. 11, Population and Housing, of this Draft EIR, projected growth in Cupertino with the No Project Alternative is lower than that anticipated by regional projections. The 2040 buildout under the No Project Alternative would add 7,827 fewer residents than ABAG's 2040 projection for Cupertino, and the 2040 buildout employment levels and housing units are well below regional projections. Table 5.1-15 compares the 2040 buildout of the No Project Alternative and the regional growth scenario.

**TABLE 5.1-15 BUILDOUT AND REGIONAL GROWTH COMPARISON – NO PROJECT ALTERNATIVE**

	ABAG Projection	2040 Buildout	Difference
Residents	71,700	63,873	-7,827
Housing Units	24,180	23,294	-886
Employment	33,260	30,848	-2,412

Source: Association of Bay Area Governments, Plan Bay Area, Projections 2013, Subregional Study Area Table, Santa Clara County; PlaceWorks, 2014.

Although implementation of existing waste reduction programs and diversion requirements discussed above would reduce the potential for exceeding existing capacities of landfills, the potential lack of landfill capacity for disposal of solid waste would have a significant impact. However, with incorporation of the Mitigation Measure UTIL-8, this impact related to the potential for the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, to result in significant cumulative impacts with respect to solid waste, would be *less than significant*.

**Significance Without Mitigation:** Significant.

## NO PROJECT ALTERNATIVE

### Energy Conservation

---

**UTIL-11      Implementation of the No Project Alternative, in combination with past, present, and reasonably foreseeable projects, would or would not result in a substantial increase in natural gas and electrical service demands, and would not require new energy supply facilities and distribution infrastructure or capacity enhancing alterations to existing facilities.**

---

The No Project Alternative, upon buildout, would result in increases to residential and commercial development consistent with those envisioned by the current General Plan. The proposed increase in development would result in a long-term increase in energy demand, associated primarily with the operation of lighting and space heating/cooling in the added building space. In addition, construction activities associated with development require the use of energy (e.g. electricity and fuel) for various purposes such as the operation of construction equipment and tools, as well as excavation, grading, demolition, and vehicle travel.

The General Plan includes policies and strategies that, once adopted, would ensure energy conservation is practiced in Cupertino. Policy 5-1, Principles of Sustainability, requires the City to incorporate the principles of sustainability into Cupertino's planning and development system. Policy 5-2, Conservation and Efficient Use of Energy Resources, requires the City to encourage the maximum feasible conservation and efficient use of electrical power and natural gas resources for new and existing residences, businesses, industrial and public uses. Strategy 1, Alternate Energy sources, requires the City to encourage the use of solar energy and other alternate, renewable energy resources for all new and significantly renovated private and public buildings, to ensure that all homes have an acceptable balance of access to the sun and protection from it, and to promote new technologies, such as waterless water heaters to effect this change. Strategy 2, Comprehensive Energy Management Plan, requires the City to prepare and implement a comprehensive energy management plan for all applicable public facilities, equipment, procurement, and construction practices. Strategy 4, Energy Efficient Replacements, requires the City to use life cycle cost analysis to identify City assets for replacement with more energy efficient replacements. Strategy 5, Incentive Program, requires the City to implement an incentive program to include such items as reduced permit fees for building projects that exceed Title 24 requirements, and to promote other incentives from the State, County and Federal Governments for improving energy efficiency by posting information regarding incentive, rebate and tax credit programs on the City's web site. Strategy 6, Solar Access Standards, requires the City to ensure compliance with the State of California Subdivision Map Act solar access standards in order to maximize natural heating and cooling opportunities for future residences and to encourage the inclusion of additional shade trees and landscaping for energy efficiency. Strategy 8, Energy Cogeneration Systems, requires the City to encourage the use of energy cogeneration systems through the provision of an awareness program targeting the larger commercial and industrial users and public facilities. Strategy 9, Regulation of Building Design, requires the City to ensure designers, developers, applicants and builders meet California Title 24 Energy Efficient Building Standards and encourage architects, building designers and contractors to exceed "Title 24" requirements for new projects through the provision of incentives, to encourage either passive solar heating and/or dark plaster interior with a cover for swimming pools, cabanas and other related accessory uses where solar access is available, and to encourage the use of alternative



## NO PROJECT ALTERNATIVE

renewable sources where feasible, and develop energy audits or subvention programs. Strategy 10, Use of Discretionary Development Permits (Use Permits), requires the City to require, as conditions of approval for new and renovated projects, the provision of energy conservation/efficiency applications. Strategy 11, Energy Efficient Transportation Modes, requires the City to encourage alternative, energy efficient transportation modes such as “clean” multi-modal public transit, car and vanpooling, flexible work hours, and pedestrian and bicycle paths.

Policy 5-3, Green Building Design, requires the City to set standards for the design and construction of energy and resource conserving/efficient buildings (Green Building Design). Strategy 1, “Green Building” Program, requires the City to prepare and implement “Green Building” standards for all major private and public projects that ensure reduction in energy consumption for new development through site and building design. Strategy 2, Building Energy Audits, requires the City to participate in and encourage building energy audits, where feasible, for commercial, industrial and city facilities and convey to the business and industrial communities that energy conservation/efficiency is, in the long term, economically beneficial. PG&E also offers energy evaluation tools and services free of charge.

Future new development would be constructed using energy efficient modern building materials and construction practices. The new buildings also would use new modern appliances and equipment, and would comply with the current CALGreen Building Code, which requires the use of recycled construction materials, environmentally sustainable building materials, building designs that reduce the amount of energy used in building heating and cooling systems as compared to conventionally built structures, and landscaping that incorporates water efficient irrigation systems. With the implementation of these General Plan policies and the CALGreen Building Code, significant energy conservation and savings would be realized in future new development. Even with the energy saving practices in place, it is possible that new electrical switches and/or transformers might be required to handle additional loads. However, potential environmental impacts from possible new electrical switches/transformers are not anticipated to be significant and, if necessary, would be addressed in project-specific reviews. In addition, buildout of the No Project Alternative would not significantly increase energy demands in the context of the 70,000 square mile PG&E service territory for electricity and natural gas generation, transmission and distribution. As a result, new energy supply facilities and distribution infrastructure or capacity enhancing alterations to existing facilities would not be required. Therefore, with consideration of the applicable regulations listed below, impacts related to energy conservation would be *less than significant*.

### *Applicable Regulations*

- Federal Energy Independence and Security Act of 2007
- Federal Energy Policy Act of 2005
- California Building Code (Title 24, CCR)
- California 2006 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608)
- Governor’s Green Building Executive Order (S-20-04)
- City of Cupertino General Plan, Environmental Resources/Sustainability Element
- City of Cupertino Municipal Code, Chapter 16.58, Green Building Standards

**Significance Without Mitigation:** Less than significant.

## NO PROJECT ALTERNATIVE

### 5.1.7 RELATIONSHIP OF THE ALTERNATIVE TO THE OBJECTIVES

As discussed in Section 3.5, Project Objectives, of Chapter 3, Project Description, of this Draft EIR, the primary purpose of the proposed Project is to: 1) replenish, re-allocate, and increase citywide office, commercial, hotel, and residential development allocations in order to plan for anticipated future growth while, sustaining the community's character, goals, and objectives; 2) consolidate development requests by several property owners for amendments to the General Plan, by reviewing seven Study Areas; and 3) provide a full range of housing to meet the needs of all segments of the city's population.

The City has also drafted a 2040 Community Vision and Guiding Principles as part of the overall Project, which builds upon the framework of the current General Plan's vision, goals, and guiding principles, and reflects the community's desires for Cupertino's future. The proposed Project is based on the vision for the city 1) to be a balanced community with: quiet and attractive residential neighborhoods; exemplary parks and schools; accessible open space areas, hillsides, and creeks; and a vibrant, mixed-use "Heart of the City;" and 2) to be safe, friendly, healthy, connected, walkable, bikeable, and inclusive for all residents and workers, with ample places and opportunities for people to interact, recreate, innovate and collaborate. This vision statement is included in the proposed General Plan and outlines the objectives of the proposed Project.

Under No Project Alternative, the development allocation would not be increased, and the allocations listed in Table 5.1-1 would remain in place until 2040. Therefore, the No Project Alternative would not replenish, re-allocate, or increase citywide office and commercial uses and hotel rooms and consolidate development requests by several property owners on the seven Study Areas. Conversely, the No Project Alternative would accommodate the RHNA for the 2014-2022 planning period to allow the city to meet its fair share housing obligation of 1,064 units; however, given the broad spectrum of housing opportunities outlined under the proposed Project, this Alternative would not provide the same range of housing to meet the needs of all segments of the city's population and allow flexibility for the city when future state-mandated updates are required to the Housing Element. Thus, the proposed Project would not result in an updated Housing Element, as required by State law. Accordingly, as shown in Table 5-2, in Chapter 5.0, Alternatives, of this Draft EIR, while the No Project Alternative would meet some of the objectives, this Alternative would not meet the overall intent of the proposed Project.

**LAND USE ALTERNATIVE A**

**5.2 LAND USE ALTERNATIVE A**

Alternative A would largely continue the policies of the current General Plan, while making minor development allocation and boundary changes throughout the buildout horizon year of 2040. The amended General Plan policies for Alternative A are shown in Appendix I, Proposed General Plan Policy Amendments, of this Draft EIR.

Under this Alternative, height limits will not be increased and no other changes to the development standards in the current General Plan or Zoning Ordinance would occur. However, development allocations will be redistributed and increased. Table 5.2-1 shows the total built and/or approved development for 2013 (“Existing”) conditions, the current General Plan development allocations (“Remaining”), and the 2040 buildout projections for this Alternative. As shown in Table 5.2-1, this Alternative would result in an increase of 500,000 square feet of office space allocation, and 261 hotel rooms above the remaining development allocation in the 2000-2020 General Plan, which is estimated to result in up to 1,745 additional jobs. There would be no increase in development allocation for commercial space or residential units; however, commercial and residential units would be redistributed throughout the city under this Alternative, as described below.

**TABLE 5.2-1 LAND USE ALTERNATIVE A DEVELOPMENT ALLOCATION & PROJECTIONS SUMMARY**

Category	Existing <sup>a</sup> (2013)	Remaining (No Project)	Net New Proposed	Total in Land Use Alternative A <sup>b</sup>	Buildout (2040) <sup>b</sup>
Office	8,929,774 sf	540,231 sf	+ 500,000 sf	1,040,231 sf	9,970,005 sf
Commercial	3,729,569 sf	701,413 sf	0 sf	701,431 sf	4,430,982 sf
Hotel	1,090 rooms	339 rooms	+ 261 rooms	600 rooms	1,690 rooms
Residential	21,399 units	1,895 units	0 units	1,895 units	23,294 units
Population	58,302	5,571	0	5,571 <sup>d</sup>	63,873
Jobs	27,837	3,461	+1,745	5,206 <sup>e</sup>	32,593

Note: sf = square feet

a. The amount of development that is built and approved in the city and the population and jobs accounted for in 2013.

b. The “remaining” (i.e. what is expected under No Project “Current General Plan” conditions) plus the “net new proposed” equals the total new buildout potential under the Land Use Alternative A.

c. The “existing” (i.e. built/approved 2013 baseline) plus the “Land Use Alternative A” equals the total 2040 buildout projections.

d. Population is calculated by 1,895 units times 2.94 persons per household, which is the ABAG 2040 estimated generation rate.

e. Jobs are calculated applying the City’s generation rates as follows; 1,040,231 square feet of office allocation divided by 300 square feet equals 3,467 jobs; 701,431 square feet of commercial allocation divided by 450 square feet equals 1,559 jobs; and 600 hotel rooms at .3 jobs per room equals 180 jobs for a total of 5,206 jobs.

Source: City of Cupertino.

Alternative A would focus on how office and hotel growth in Cupertino could occur if Cupertino largely continues the policies of the current General Plan, while making minor development allocation changes in these two categories. Under this Alternative, office allocation would be increased primarily in the Heart of the City Specific Plan area and the Major Employers development allocation category, which represent areas that can absorb new office development under the framework of the current General Plan.

## LAND USE ALTERNATIVE A

As shown in Table 5-2, in Chapter 5, Alternatives to the Proposed Project, of this Draft EIR, the No Project Alternative would allocate, Land Use Alternative A would allocate 74 percent less office space, 48 percent less commercial space, 55 percent fewer hotel rooms, and 57 percent fewer residential units and new residents. In addition, as shown in Table 5-4, when compared to the proposed Project at 2040 buildout out, Land Use Alternative A is projected to result in 23 percent less office space, 13 percent less commercial space, 30 percent fewer hotel rooms, 10 percent fewer residential units and new population, and 26 percent fewer jobs.

The differences between the proposed Project and the Land Use Alternative A would be incremental and even if no action was taken, regional growth, and the associated environmental effects linked to this growth, would continue to occur under the provisions of the current 2000-2020 General Plan.

### 5.2.1 OFFICE DEVELOPMENT ALLOCATION

The office allocation in the Heart of the City would be increased to 315,000 square feet, which represents an increase of 297,887 square feet over the remaining 17,113 square feet. The Major Employers category would increase to 625,000 square feet, which represents an increase of 101,882 square feet. Under this Alternative, the Special Areas and development allocation categories would increase office space development allocations as follows:

- Homestead: 10,000 square feet
- North Vallco Park: 30,000 square feet
- Heart of the City: 315,000 square feet
- North De Anza: 25,000 square feet
- South De Anza: 10,000 square feet
- Other Non-Residential: 5,000 square feet
- Bubb Road: 15,000 square feet
- Monta Vista Village: 5,231 square feet
- Major Employers: 625,000 square feet

### 5.2.2 COMMERCIAL DEVELOPMENT ALLOCATION

Under this Alternative, the Heart of the City Special Area remaining commercial development allocation of 695,629 square feet would be reduced by 195,629 square feet and redistributed in the other Special Areas, which, with the exception of the Monta Vista Special Area, currently have no commercial space development allocation remaining under the current General Plan. The Monta Vista Village Special Area currently has 5,784 square feet of undeveloped commercial space remaining. The commercial development allocation would be increased and distributed as follows under this Alternative:

- Homestead: 70,000 square feet
- North Vallco Park: 50,000 square feet
- Heart of the City: 500,000 square feet
- North De Anza: 10,000 square feet
- South De Anza: 50,000 square feet

**LAND USE ALTERNATIVE A**

- Other Non-Residential: 12,000 square feet
- Monta Vista Village: 9,431 square feet

**5.2.3 HOTEL DEVELOPMENT ALLOCATION**

Under existing conditions, the Heart of the City Specific Area has a remaining development allocation of 339 hotel rooms. Under this Alternative, 261 new hotel rooms would be added for a total of 600 hotel rooms and would be distributed as follows:

- Homestead: 125 rooms
- North Vallco Park: 100 rooms
- Heart of the City: 375 rooms

**5.2.4 HOUSING DEVELOPMENT ALLOCATION**

Although the existing development allocations would limit overall development, the residential unit development allocation under this Alternative would accommodate the Regional Housing Needs Allocation (RHNA) for the 2014-2022 planning period and allow the city to meet its fair-share housing obligation of 1,064 housing units. As shown in Table 5.2-1 above, the residential allocation under this Alternative would allow for construction of up to 1,895 housing units, which represents 831 units above the Cupertino’s fair-share housing obligation. The remaining housing development allocation would be allocated throughout the city by reducing the total number of new housing in the Vallco North and Bubb Road Employments Center by 197 units and 94 units, respectively; the South De Anza Commercial Center by 80 units; the Monta Vista Village Neighborhood by 4 units; and the Other Neighborhoods by 106 units. Under this Alternative, new residential units would be distributed in the Special Areas as follows:

- Homestead: 200 units
- North Vallco Park: 100 units
- Heart of the City: 1,000 units
- North De Anza: 170 units
- South De Anza: 150 units
- Other Non-Residential: 70 units
- Monta Vista Village: 70 units
- Other Neighborhoods: 135 units

**5.2.5 DEVELOPMENT STANDARDS**

The following section describes development standards that would be applicable to future development under implementation of Land Use Alternative A.

Under Land Use Alternative A, the maximum allowable height would remain unchanged in all Special Areas; heights applicable to Gateways would remain unchanged from existing conditions. Existing heights are described in Section 3.7.1, Corridors with Gateways/ Nodes, in Chapter 3, Project Description, of this Draft EIR.

## LAND USE ALTERNATIVE A

Under this Alternative, density would remain unchanged over existing conditions throughout the Special Areas, including Gateways and Nodes, with the exception of the South De Anza Corridor, where density would be increased from 15 dwelling units per acre (du/ac) to 25 du/ac. Existing densities are described in Section 3.7.1, in Chapter 3 of this Draft EIR.

### 5.2.5.1 STUDY AREAS

Under this Alternative, the height and density would remain unchanged. For a detailed discussion of the seven Study Areas, including height and density, please refer to Section 3.7.2, Study Areas, in Chapter 3, Project Description, of this Draft EIR.

### 5.2.5.2 HOUSING ELEMENT SITES

Under this Alternative, the Housing Element Sites, as described in detail in Section 3.6.4, Housing Element Sites, in Chapter 3, Project Description, of the Draft EIR, are proposed as follows:

- Housing Element Site 1 (Shan Restaurant)
- Housing Element Site 2 (Arya/Scandinavian Design)
- Housing Element Site 3 (United Furniture/East of East Estates Drive)
- Housing Element Site 4 (Barry Swenson)
- Housing Element Site 5 (Glenbrook Apartments)
- Housing Element Site 6 (The Villages Apartments)
- Housing Element Site 7 (Carl Berg Property)
- Housing Element Site 13 (Loree Shopping Center)
- Housing Element Site 14 (Marina Plaza)
- Housing Element Site 16 (Summerwinds & Granite Rock)
- Housing Element Site 18 (The Oaks Shopping Center)
- Housing Element Site 19 (Cypress Building Association & Hall Property)

The height and density for each Housing Element Site would remain unchanged from existing conditions except for Housing Element Site 16 (Summerwinds and Granite Rock), which would increase the permitted density from 15 dwelling units per acre (du/ac) to 25 du/ac and a change to the Zoning designation from Planned Development with General Commercial and Residential (P(CG, Res 5-15)) to (P(CG, Res)). In addition, Housing Element Site 18 (The Oaks Shopping Center) would require a change to the Zoning designation from P(CG) to Planned Development with General Commercial, and Residential(P(CG, Res,)) to allow for future mixed-use development including residential uses. For a detailed discussion of the Housing Element Sites, including height and density, please refer to Section 3.7.4, Housing Element Sites, in Chapter 3 of this Draft EIR.

## 5.2.6 GENERAL PLAN LAND USE MAP AND ZONING ORDINANCE AND MAP AMENDMENTS

Land Use Alternative A will also include revisions to the City's Land Use Map and Zoning Ordinance and Map for consistency with the current General Plan, as a result of changes to Housing Element policies that

## LAND USE ALTERNATIVE A

are required by State Law,<sup>1</sup> or as adopted by the City Council, and by correcting inconsistencies of existing land uses identified by the City. The Special Areas and Housing Element Sites described in this chapter have been identified for their appropriateness for additional commercial, office, hotel, and for housing. The City would rezone and change the land use designations, densities, and height standards for these Sites to accommodate the additional land uses as described in this chapter. Under Land Use Alternative A, the same Land Use and Zoning Ordinance and Map amendments would occur as with the proposed Project as detailed in Section 3.7.4, Housing Element Sites, in Chapter 3, Project Description, of this Draft EIR.

### 5.2.6.1 OTHER GENERAL PLAN AND ZONING CHANGES

Other changes to the General Plan text and figures, and Zoning Ordinance are proposed to include bringing sites with inconsistent land use and zoning designations into consistency, the identification of new neighborhood areas, a new Public Utilities, Infrastructure and Services Element, the minor reformatting, reorganization and addition of clarifying or descriptive language to the General Plan and the method in which residential density is calculated.

### General Plan Land Use Map and Zoning Map Conformance

The City has identified specific sites, shown on Figure 3-40, in Chapter 3, Project Description, of the Draft EIR, that represent locations where there are inconsistencies between existing land use and the current General Plan land use designation and/or Zoning designation for the location. Under the proposed Project, the General Plan or the Zoning Ordinance and/or Maps will be amended to bring consistency between the existing use and the General Plan land use and/or Zoning for the location. Table 3-22 in Chapter 3, Project Description, lists the parcels with known inconsistencies and shows how the General Plan and Zoning amendments under Land Use Alternative A will bring these locations into conformance with the current General Plan. Because these locations are currently developed and the amendments are being made to reflect the current use on the property, these amendments will not result in new development potential at these locations.

### New Neighborhoods

New neighborhood names and boundaries would be established under Land Use Alternative A. The new neighborhood names are commonly used by the residents of Cupertino, and this process will formalize the neighborhood names and define their boundaries on a map. No new development potential would occur as result of the new names or boundary identification. The new neighborhood names and boundaries are shown on Figure 3-19, Other Special Areas including Neighborhoods and Non-Residential/Mixed-Use Special Areas and are listed in Section 3.6.3.3, Other Neighborhoods, in Chapter 3, Project Description.

---

<sup>1</sup> Specific State Law includes, but is not limited to, the Federal Fair Housing Amendments Act of 1988, California's Fair Employment and Housing Act, and the State's Housing Element law.

## LAND USE ALTERNATIVE A

### Public Utilities, Infrastructure, and Services Element

In order to better organize the General Plan, the City has reorganized the of policies within existing Chapters (Elements) of the General Plan and relocated these policies in a newly created Chapter for the purposes of consolidating policies related to Public Utilities, Infrastructure and Services. The policies that will be part of the new Public Utilities, Infrastructure and Services Element are listed in Appendix I, Proposed General Plan Policy Amendments, of this Draft EIR.

### City of Cupertino Historical Register

The Seven Springs Ranch, built in 1866 and located at 11801 Dorothy Anne Way in Cupertino, is listed on the Office of Historic Preservation Directory Listings. This site has been nominated for inclusion in the National Register; however, it is not currently listed in either the National Register of Historic Places or the California Register of Historical Resources. As part of the proposed Project, this site would be added to the City's list of Historically Significant Resources. This This Cultural Resources Site is discussed in detail in Chapter 4.5, Cultural Resources, of this Draft EIR and is shown on Figure 4.4-1, Cultural Resources, as Site 23.

### Residential Density

In the context of planning, residential density is the amount of residential units within a given area. Insufficient density can lead to problems in supporting neighborhood-serving retail and services, difficulties in offering a wider range of housing options, and an inability to provide the critical mass necessary to support public transportation. The City currently calculates residential density as “gross” density, which is the number of units divided by the acreage of the entire area. Under the proposed Project, the City would calculate residential density as “net” density, which is the number of units divided by the acreage of residential land. The residential density under Land Use Alternative A as described in this chapter has been calculated by net density.

## 5.2.7 LAND USE ALTERNATIVE A ANALYSIS

### 5.2.7.1 AESTHETICS

---

AES-1	<b>Implementation of Land Use Alternative A would not have a substantial adverse effect on a scenic vista.</b>
-------	--

---

Future development under Land Use Alternative A would have the potential to affect scenic vistas and/or scenic corridors if new or intensified development blocked views of areas that provide or contribute to such vistas. Potential effects could include blocking views of a scenic vista/corridor from specific publically accessible vantage points or the alteration of the overall scenic vista/corridor itself. Such alterations could be positive or negative, depending on the characteristics of individual future developments and the subjective perception of observers.



## LAND USE ALTERNATIVE A

Public views of scenic corridors are considered those views as seen along a linear transportation route and public views of scenic vistas are those views with of specific scenic features. Scenic vistas are generally interpreted as long-range views, while scenic corridors are comprised of short-, middle-, and long-range views. As stated in Section 4.1.1, Environmental Setting, of Chapter 4.1, Aesthetics, of the Draft EIR, the current General Plan does not have designated scenic corridors or vistas. However, for this analysis, the westward views of the foothills and ridgelines of the Santa Cruz Mountains are considered scenic vistas; and the State-designated, an eligible State Scenic Highway segment of Interstate 280 (I-280), from Santa Clara County line on the west and Interstate 880 (I-880) on the east, is considered a scenic corridor. The impacts to the State-designated view corridor are discussed below under Impact AES-2.

In addition to the potential for new development under implementation of Land Use Alternative A, there would be a number General Plan policies that could affect scenic vistas. Even so, other policies within the General Plan, as well as provisions of the Municipal Code would continue to regulate development, thereby preventing significant impacts to scenic vistas.

Policies 2-23 through 2-33 collectively reflect the changes to land use, development intensity, development allocations, and Special Areas that constitute the Project Components—as described in detail in Chapter 3, Project Description. Since the content of these particular policies is directly integrated with and reflective of Land Use Alternative A as a whole, impact discussions for the effects of Land Use Alternative A necessarily encompass analysis of these particular policies.

General Plan Policy 2-15, Urban Building Forms, includes minor changes, including the combination of two previous strategies regarding building massing and height, and amended Policy 2-16, Attractive Building and Site Design, includes a new strategy requiring the screening of utilities areas in new developments. Changes to acceptable heights and densities, are an integral part of the City’s amended land use policies, and these changes are included as part of the project description. Therefore, the potential for physical impacts from amended policies 2-15 and 2-16 are addressed in the analysis of overall implementation of this Alternative, which would continue to be governed by General Plan and Municipal Code policies related to aesthetic impacts. Additionally, the amendments to Policy 2-16 would serve to reduce aesthetic impacts from new developments. Finally, as individual projects are proposed, each would continue to be required to undergo development review that would ensure conformance with other General Plan and Municipal Code policies regarding aesthetics, including any applicable requirements for approval by the Design Review Committee.

Policy 2-20, Streetscape Design, would require that development or redevelopment projects consider unique streetscape choices for different parts of Cupertino, including conforming to the Crossroad Area Streetscape Plan.

Policies 2-88 and 5-48 would respectively serve to enhance the aesthetic quality of Cupertino by encouraging new “demonstration gardens” and promoting the undergrounding of utility lines. Especially with regard to Policy 5-48, these amended policies would serve to mitigate potential aesthetic impacts of future developments under the proposed Project.

As described in detail in Section 4.1.1.2, Existing Conditions, in Chapter 4.1, Aesthetics, of this Draft EIR, the Project Component locations, where potential future development is expected to occur, would be concentrated on a limited number of vacant parcels and in the form of infill/intensification on sites either

## LAND USE ALTERNATIVE A

already developed and/or underutilized, and/or in close proximity to existing residential and residential-serving development, where future development would have a lesser impact on scenic vistas. Proposed changes under Land Use Alternative A consist primarily of increased development intensities.

Given no increases in proposed building heights, potential new development under Land Use Alternative A is not anticipated to block the far-field views of the Santa Cruz Mountain Range and foothills from various vantage points throughout the city. Furthermore, provided that the topography in the Project Component locations is essentially flat, the views from street-level public viewing to the scenic resources are currently inhibited by existing conditions such as buildings, structures, and mature trees/vegetation, the maximum heights currently permitted limit the opportunity for these views from street-level public viewing, and the distributed nature of the Project Component locations with maximum height increases, future development under Land Use Alternative A is not anticipated to further obstruct public views of scenic resources from within the city. Similar views would continue to be available between projects and over lower density areas. Considering this and the fact that the Project Component locations are not considered destination public viewing points nor are they visible from scenic vistas, overall impacts to scenic vistas would be *less than significant*.

Furthermore, potential future development would, if necessary, be subject to the Architectural and Site Review process, in accordance with Section 19.168, Architectural and Site Review, of the Zoning Ordinance or would be required to comply with Design Standards outlined in the Heart of the City Specific Plan, the Monta Vista Design Guidelines, or the Vallco Master Plan and Conceptual Plans discussed in Section 4.1.1.1, Regulatory Framework, in Chapter 4.1, Aesthetics, of this Draft EIR. In addition, the General Plan includes policies and strategies that, once adopted, would ensure future development in Cupertino that would conceivably reduce potential aesthetic impacts of future development under this Alternative. Within the Land Use/Community Design Element, Policy 2-1, Focus Development in Mixed-Use Special Areas, requires the City to, in the mixed-use Special Areas where office, commercial and residential uses are allowed, focus higher intensity development and increased building heights where appropriate in designated corridors, gateways and nodes. Policy 2-15, Urban Building Forms, requires the City to concentrate urban building forms in the mixed-use Special Areas which would ensure that higher intensity development is limited to the major Special Areas. Policy 2-16, Attractive Building and Site Design, requires the City to emphasize attractive building and site design during the development review process by giving careful attention to building scale, mass and placement, architecture, materials, landscaping, and related design considerations, including screening of equipment and loading areas. Policy 2-18, Single-Family Residential Design, requires the City to preserve the character of residential neighborhoods by requiring new development to be compatible with the existing neighborhood. Policy 2-21, Context of Streetscape Landscaping, requires the City to, in public and private landscaping projects subject to City review, select landscaping designs that reflect the development context. Policy 2-47, Hillside Development Standards, requires the City to establish building and development standards for the hillsides that ensure hillside protection. Policy 2-48, Previously Designated Very Low Density Semi-Rural 5-Acre, calls for the City to allow certain hillside properties to develop using a previous General Plan Designation. Policy 2-51, Rural Improvement Standards in Hillside Areas, calls for the City to require rural improvement standards in hillside areas to preserve the rural character of the hillsides. Policy 2-52, Views for Public Facilities, requires the City to design and layout public facilities, particularly public open spaces, so they include views of the foothills or other nearby natural features, and plan hillside developments to minimize visual and other

**LAND USE ALTERNATIVE A**

impacts on adjacent public open space. Policy 2-66, Historic Sites, requires the City to have projects on Historic Sites meet the Secretary of the Interior's Standard for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, and Restoring Historic Buildings and provide a plaque, reader board and/or other educational tools on the site to explain the historic significance of the resource(s). Under this policy the plaque must include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. Additionally, this policy requires that for public and quasi-public sites, the City will coordinate with the property owner to allow public access of the historical site to foster public awareness and provide educational opportunities. For privately-owned sites, property owners should be encouraged, but not required, to provide access to the public. Policy 2-67, Commemorative Sites, calls for the City to require projects on Commemorative Sites to provide a plaque, reader board and/or other educational tool on the site to explain the historic significance of the resource. The plaque shall include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. Additionally, for public and quasi-public sites, this policy calls for the City to coordinate with property owners to allow public access to the historical site to foster public awareness and provide educational opportunities. For privately-owned sites, property owners should be encouraged, but not required, to provide access to the public. Policy 2-68, Community Landmarks, calls for the City to require Projects on Landmark Sites to provide a plaque, reader board and/or other educational tools on the site to explain the historic significance of the resource. Under this policy the plaque must include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. Policy 2-69, Historic Mention/Interest Sites, requires the City to encourage agencies that have jurisdiction over the historical resource to encourage rehabilitation of the resource and provide public access to foster public awareness and provide educational opportunities. These are sites outside the City's jurisdictions, but have contributed to the City's historic past. Policy 2-70, Incentives for Preservation of Historic Resources, says that the City should utilize a variety of techniques to serve as incentives toward fostering the preservation and rehabilitation of Historic Sites including: allowing flexible interpretation of zoning ordinance not essential to public health and safety (this could include flexibility as to use, parking requirements and/or setback requirements); using the California Building Code for rehabilitation of historic structures; tax rebates (Mills Act or Local tax rebates); financial incentives such as grants/loans to assist rehabilitation efforts. Policy 2-71, Recognizing Historical Resources, requires the City to maintain an inventory of historically significant structures and periodically updated it in order to promote awareness of these community resources. Policy 2-74, Heritage Trees, requires the City to protect and maintain heritage trees in a healthy state. Policy 2-88, Park Design, requires the City to design parks to utilize the natural features and topography of the site and to keep long-term maintenance costs low.

Within the Environmental Resources/Sustainability Element, Policy 5-9, Development near Sensitive Areas, requires the City to encourage the clustering of new development away from sensitive areas such as riparian corridors, wildlife habitat and corridors, public open space preserves and ridgelines. New developments in these areas must have a harmonious landscaping plans approved prior to development.

**Significance Without Mitigation:** Less than significant.

## LAND USE ALTERNATIVE A

---

**AES-2                    Implementation of Land Use Alternative A would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway.**

---

The segment of I-280 is not an officially designated State Scenic Highway, but is considered to be an eligible State Scenic Highway. Future development in the Homestead, North Vallco Park, North De Anza, and Heart of the City Special Areas and Housing Element Site 6 (The Villages Apartments) would be within the viewshed of I-280. Future development in these areas would be similar to the existing conditions at these locations, including existing building height limits. These are shown on Figure 4.1-1 in Chapter 4.1, Aesthetics, of this Draft EIR. As described below, these major mixed-use Special Areas are currently developed and the proposed land use, zoning and development standards changes would not represent a substantial reimagining of the character in these areas.

### Homestead Special Area

#### *North De Anza Gateway /Study Area 1 (Cupertino Inn and Goodyear Tire)*

Study Area 1 (Cupertino Inn and Goodyear Tire) is coterminous with the North De Anza Gateway and is located at the northwest corner of the North De Anza Boulevard and I-280 intersection. Under this Alternative, future development would retain a hotel and would include a new 250-room hotel and conference facility at the Goodyear Tire property. The General Plan designation and Zoning designation would remain unchanged, with the exception of the Goodyear Tire property, which would change to P(CG) to be consistent with the Cupertino Inn property. The maximum height would remain 45 feet at this location.

As described above in Section 4.1.1.2, Existing Conditions, in Chapter 4.1, Aesthetics, of this Draft EIR, this Study Area is proximate to existing large-scale residential developments and large format retail buildings and parking lots. Therefore, redevelopment or expansion of existing commercial and hotel uses would not represent a substantial change in visual character. Therefore, while future development in this Study Area could result in greater intensity, with respect to damaging or obstructing a view of a scenic resource from the I-280 viewshed, the foreground views would continue to be of the built urban environment and the far-distant views to the Santa Cruz Mountains would remain; thus, impacts would be *less than significant*.

#### *Study Area 3 (PG&E) and Study Area 4 (Mirapath)*

Given the Study Area 3 (PG&E) and Study Area 4 (Mirapath) are adjacent properties, in the case of complete redevelopment, it is intended that both properties would be master planned in order to ensure cohesive development. Under Land Use Alternative A, the Study Areas land use designation and zoning would be amended to support a retail store/center in the future use. The maximum height would remain 45 feet which would not result in substantially taller development as the existing building heights are 1 to 2 stories. Given these Study Areas are generally surrounded by single-family residential, a commercial strip mall, and townhomes, as described above in Section 4.1.1.2, Existing Conditions, of Chapter 4.1, Aesthetics, of this Draft EIR, with respect to damaging or obstructing a view of a scenic resource from a

## LAND USE ALTERNATIVE A

scenic highway, the foreground views would continue to be of the built urban environment and the far-distant views to the Santa Cruz Mountains would not be obstructed; thus, impacts would be *less than significant*.

### *Stelling Gateway*

The Stelling Gateway is located in the western end of the Homestead Special Area. Under Land Use Alternative A building heights would remain 30 feet west of Stelling Road and 45 feet east of Stelling Road.

Under Land Use Alternative A, the permitted density would remain at 35 dwelling units per acre for the east side of Stelling Road and 15 dwelling units per acre on the west of Stelling Road. These amendments would not result in substantially taller development given the location is surrounded by 1- to 2-story developments as described in Section 4.1.1.2, Existing Conditions, of Chapter 4.1, Aesthetics. No residential uses would be allowed on the west of the Stelling Road neighborhood. Therefore, while residential uses on the east side in this area would represent a new use, with respect to damaging or obstructing a view of a scenic resource from the I-280 viewshed, the foreground views would continue to be of the built urban environment and the far-distant views to the Santa Cruz Mountains would remain; thus, impacts would be *less than significant*.

## North Vallco Special Area

### *North Vallco Gateway/Study Area 5 (Cupertino Village)*

The North Vallco Special Area includes the North Vallco Gateway, and Study Area 5 (Cupertino Village). Only a portion of Study Area 5 is within this Gateway's boundary. Under Land Use Alternative A, the North Vallco Park Special Area would continue to be a predominantly office, hotel, and residential area, with a series of low- to mid-rise neighborhood mixed-use centers.

There are no proposed changes to the current General Plan land use designation for this Study Area and Gateway. The proposed density in this Gateway and Study Area would be 25 dwelling units per acre. Maximum building heights would remain 60 feet.

Currently, the Study Area and Gateway include a prevalent surface parking lot, specialty retail stores, restaurants, professional offices, and financial services, and The Hamptons apartment complex is currently occupied with a 342-unit multi-family housing development and surface parking lots. The location is also surrounded by a 4-story hotel and residential development, including both 3-story, multi-family residential and single-family houses as described in Section 4.1.1.2, Existing Conditions, in Chapter 4.1, Aesthetics, of this Draft EIR.

While these represent greater intensity, given the surrounding land uses, and the nearby projects under construction, including the Apple Campus 2 project site, two retail pads, and a 2-story parking structure, new development at this Study Area and Gateway, would not damage or obstruct a view of a scenic resource from the I-280 viewshed. Therefore, impacts to views of scenic resource from the I-280 viewing corridor would be *less than significant*.

## LAND USE ALTERNATIVE A

### Heart of the City Special Area

#### *South Vallco Park East and West Gateways/Study Area 6 (Vallco Shopping District)*

The South Vallco Park Gateway West and South Vallco Gateway East include Study Area 6 (Vallco Shopping District). These Project Component locations are bounded by I-280 to the north.

This Study Area is considered the city's regional shopping district and consist of many retail stores and restaurants. As described in Section 4.1.1.2, Existing Conditions, of Chapter 4.1, Aesthetics, of this Draft EIR, the Vallco Shopping District is surrounded with commercial and industrial uses, as well as some residential neighborhoods further away from Stevens Creek Boulevard. Future development would represent similar buildings heights, ranging from 45 to 60 feet with a retail component. Given the existing site conditions and the surrounding area has large scale retail and industrial uses, future development on this site would not damage or obstruct a view of a scenic resource from the I-280 viewshed. Therefore, impacts to views of scenic resources from the I-280 viewing corridor would be *less than significant*.

### North De Anza Special Area

Under Land Use Alternative A, the North De Anza Corridor would remain an office area consisting of mid-rise buildings. This Special Area is a major north/south connector that includes many office and commercial uses. Future development permitted in this Special Area would result in increased office, commercial, and increased residential units, with no changes to the current permitted density and height limits. Because this Special Area is currently comprised of mid-rise office buildings, Land Use Alternative A would not represent a substantial change in the visual character. Accordingly, potential future development would not damage a scenic resource or obstruct a view of a scenic resource from the I-280 viewshed; thus, and impacts would be *less than significant*.

#### *Housing Element Site 7 (Carl Berg Property)*

Housing Element Site 7 (Carl Berg Property), which was built on in 1975, currently has light industrial (research and office) uses with a large amount of surface parking. Under Land Use Alternative A, there would be no changes to the designation, zoning, density, or building height on this housing Site. Therefore, future development would not damage or obstruct a view of a scenic resource from the I-280 viewshed. The foreground views would continue to be of the built urban environment and the far-distant views to the Santa Cruz Mountains would remain; thus, impacts would be *less than significant*.

### Housing Element Site 6 (The Villages Apartments)

Housing Element Site 6 (The Villages Apartments) is not located within a Major Mixed-Use Special Area; however, it is situated on the south side of I-280 south of the Homestead Special Area and west of the North De Anza Special Area and Housing Element Site 7 (Carl Berg Property). Under Land Use Alternative A, there would be no changes to the current General Plan land use designation, zoning, density, or building height and impacts to the I-280 viewshed would be *less than significant*.

**LAND USE ALTERNATIVE A**

**Summary**

As described above, the land use or intensity changes do not represent a substantial reimagining of the character of the Project Component locations in the I-280 viewshed given the existing viewshed within this area is largely urbanized and built out. New uses in the I-280 viewshed, as result of this Alternative, would be dispersed within the designated Major Mixed-Use Special Areas and would not fully obstruct views of far-field scenic resources (e.g. Santa Cruz Mountains) from I-280.

As discussed under impact AES 1, above, Policies 2-23 through 2-33 are analyzed as an integral, inseparable component of Land Use Alternative A, and Policies 2-15, 2-16, 2-18, 2-20, 2-82, 2-88, and 7-4 under Land Use Alternative A would not cause adverse physical changes that could create aesthetic impacts in Cupertino. Individual developments would continue to be subject to General Plan policies and Municipal Code provisions related to aesthetics, including potential project-level design review requirements. Moreover, certain policy changes would serve to reduce aesthetic impacts from new and existing developments. Therefore, the policy amendments under Land Use Alternative A would not result in impacts under this threshold of significance.

Furthermore, potential future development would, if necessary, be subject to the Architectural and Site Review process, in accordance with Section 19.168 of the Zoning Ordinance. Future development would also would be required to comply with Design Standards outlined in the Heart of the City Specific Plan and the Vallco Master Plan or Conceptual Plans as described in Section 4.1.1.1, Regulatory Framework, in Chapter 4.1, Aesthetics, of this Draft EIR and the General Plan policies outlined in impact discussion AES-1, that limit the height and bulk of buildings. Accordingly, impacts related to scenic resources in the I-280 viewshed would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**AES-3                      Implementation of Land Use Alternative A would not substantially degrade the existing visual character or quality of the Site and its surroundings.**

---

The Project Component locations are concentrated on areas either already developed and/or underutilized, and/or in close proximity to existing residential and residential-serving development. Future building form and massing may be greater than existing conditions, but would not necessarily degrade the existing surrounding character.

Project implementation would allow continued development and redevelopment throughout the city. As discussed above, future development in the Homestead Special Area, North Vallco Special Area, the North De Anza Special Area and the South Vallco West Gateway and South Vallco West Gateway in the Heart of the City Special Area, and Housing Element Site 6 (The Villages Apartments) would not result in a substantial change to the existing visual character of the Site or its surroundings. Potential impacts to visual character from future development on the remaining Project Component locations are discussed below.

## LAND USE ALTERNATIVE A

### Heart of the City Special Area

#### *Stevens Creek and 85 Gateway/Housing Element Site 18 (The Oaks Shopping Center)*

The Stevens Creek and 85 Gateway is coterminous Housing Element Site 18 (The Oaks Shopping Center) located on the north side of Stevens Creek Boulevard between State Route 85 (SR 85) and Mary Avenue. Under this Alternative, there would be no changes to the General Plan land use designation; however, the Zoning designation would be amended to Planned Development with General Commercial, and Residential (P(CG, Res)) to allow for future mixed-use development including residential uses. Under this Alternative, the permitted density would remain at 25 dwelling units per acre and building heights would remain at 45 feet. Given this Project Component location is within the existing 1-story Oaks Shopping Center, currently has entitlements for a mixed-use office/commercial building and a hotel which expire in September 2014, and is surrounded by urban land uses and SR 85 to the west, future development permitted under this Alternative would not adversely impact the visual character of the Site or its surroundings; thus impacts would be *less than significant*.

#### *North Crossroads Node/Study Area 7 (Stevens Creek Office Center)/Housing Element Site 14 (Marina Plaza)*

The North Crossroads Node includes Study Area 7 (Stevens Creek Office Center) and Housing Element Site 14 (Marina Plaza), located along Stevens Creek Boulevard; a major commercial corridor that currently houses major retailers in big-box buildings. A new 16,000 square-foot retail project (Saich Way Station) is also scheduled for construction in Spring/Summer 2014. Other properties near these Project Component locations include large, 1- to 2-story buildings. There is no proposed change to density and building heights at this location.

Under this Alternative, there would be no changes to the General Plan land use designation, zoning, density, or building height at Housing Element Site 14 (Marina Plaza).

Because the area is largely built out and within one of the major commercial areas in the city, and is surrounded by big-box development with a dense urban character, new development on these Sites would not degrade the visual character of the Site or the area; thus, impacts would be *less than significant*.

#### *City Center Node/Study Area 2 (City Center)*

The City Center Node includes Study Area 2 (City Center). The proposed density at this Node would remain 25 dwelling units per acre and the maximum height would remain 45 feet.

Given this Project Component location is currently developed with mixed-use development offering residential, office, and commercial space, and is surrounded by higher density uses ranging from 1- to 8-story buildings, future development permitted under this Alternative would not adversely impact the visual character of the Site or its surroundings; thus impacts would be *less than significant*.



## LAND USE ALTERNATIVE A

### *Other Housing Element Sites*

Under this Alternative there would be no changes to the General Plan land use designation, zoning, density, or height limit at Housing Element Sites 1 (Shan Restaurant), 2 (Arya/Scandinavian Design), 3 (United Furniture/East of East Estates Drive), 4 (Barry Swenson), 5 (Glenbrook Apartments), 13 (Loree Shopping Center) and 19 (Cypress Building Association & Hall Property); thus impacts from future development permitted under this Alternative would not adversely impact the visual character of the Site or its surroundings; thus impacts would be *less than significant*.

### **South De Anza Special Area**

Under this Alternative, the South De Anza Special Area would remain a general commercial area south of Stevens Creek Boulevard. This Special Area would result in increased office and commercial allocations, as well as an increase in the density from 5 to 15 dwelling units per acre to 25 dwelling units per acre, but no height increases would occur and the land uses would remain the same. Thus, future development permitted under this Alternative would not adversely impact the visual character of the Site or its surroundings; thus impacts would be *less than significant*.

### *Housing Element Site 16 (Summerwinds & Granite Rock)*

Under this Alternative, there would be no changes to the General Plan land use designation. The permitted density would remain at 25 dwelling units per acre, no height increases would occur, and the land uses would generally remain the same; thus, future development permitted under this Alternative would not adversely impact the visual character of the Site or its surroundings; thus impacts would be *less than significant*.

### **Housing Element Site 8 (Bateh Bros.)**

Under this Alternative, there would be no changes to the General Plan land use designation to allow for residential uses, and density would be increased to 35 dwelling units per acre, but no height increases would occur and the land uses would remain the same; thus, future development permitted under this Alternative would not adversely impact the visual character of the Site or its surroundings; thus impacts would be *less than significant*.

### **Special Centers/Other Areas**

#### *Monta Vista Village Neighborhood*

Under this Alternative, the Monta Vista Village Neighborhood would remain at 12 dwelling units per acre, and decrease the amount of residential units permitted in this neighborhood by four (4). Additional development allocation in this Neighborhood includes an increase of 5,231 square feet for office, and 9,413 square feet (3,629 square feet net increase) for commercial uses. The lots in Monta Vista Village that are identified as part of the General Plan Conformance sites will go up from P(Res 4.4 - 7.7) to P(Res 10-15); however, this is because they are currently developed at this density and no new development potential will occur on these lots as a result of this change. These lots are in the Monta Vista Village. There are no

## LAND USE ALTERNATIVE A

proposed General Plan land use designations or Zoning designation changes for this area under this Alternative. Because the land uses would remain the same and there would be no increase in building height, future development permitted under this Alternative would not adversely impact the visual character of the Site or its surroundings; thus impacts would be *less than significant*.

### *Bubb Road Special Area*

Under this Alternative, the Bubb Road Special Area would remain at 20 dwelling units per acre, but no new residential units would be permitted in this area because the existing 94-unit residential allocation would be allocated to other areas of the city more appropriate for residential development.<sup>2</sup> Additional development allocation in this Special Area includes 15,000 square feet for office uses. There are no proposed General Plan land use designations or Zoning designation changes for this Employment Center under this Alternative. Because the land uses would remain the same and there would be no increase in building height, future development permitted under this Alternative would not adversely impact the visual character of the Site or its surroundings; thus impacts would be *less than significant*.

### *Other Non-Residential/ Mixed-Use Special Areas*

Under this Alternative, a maximum of 5,000 square feet of office uses and 12,000 square feet of commercial uses would be permitted throughout the seven locations that are comprised of existing mixed-use office and commercial properties distributed throughout the city as discussed under Section 4.1.1.2, Existing Conditions, in Chapter 4.1, Aesthetics, of this Draft EIR. Furthermore, a total of 70 residential units would be permitted. Because the land uses would remain the same and there would be no increase in building height, future development permitted under this Alternative would not adversely impact the visual character of the site or its surroundings; thus impacts would be *less than significant*.

### *Other Neighborhoods*

There are no proposed General Plan land use designations or Zoning designation changes for the Other Neighborhoods under this Alternative. Because the land uses would remain the same and there would be no increase in building height, future development permitted under this Alternative would not adversely impact the visual character of the Site or its surroundings; thus impacts would be *less than significant*.

## General Plan and Zoning Ordinance Conformance Sites

Under this Alternative, the City-identified Sites, shown on Figure 3-40, in Chapter 3, Project Description, of this Draft EIR, that represent locations where there are inconsistencies between existing land use and the General Plan land use designation and/or Zoning designation for the location, would not result in changes

---

<sup>2</sup> As shown in Table 3-2, the remaining total residential allocation is 479 units throughout the Special Centers and the project proposes 521 units for a difference of 42 additional residential units in the Special Centers under the proposed Project. This results from 50 proposed unit in the Other Commercial area plus 27 proposed units in the Monta Vista Village Neighborhood area plus 59 proposed units in the Other Neighborhood area for a total of 136 proposed units; 136 proposed units minus the 94 currently permitted in the Bubb Road area equals 42 new units in the Special Centers.

## LAND USE ALTERNATIVE A

to the character of the existing Site or its surroundings. Under this Alternative, the General Plan or the Zoning Ordinance and/or Maps will be amended to bring consistency between the existing use and the General Plan land use and/or Zoning for the location. Thus, *no impact* would occur.

### Summary

Given the existing commercial, industrial, and residential uses surrounding Project Component locations, future developments would not substantially degrade the existing visual character or quality of the Site and their surroundings.

As discussed under Impact AES-1, above, Policies 2-23 through 2-33 are analyzed as an integral, inseparable component of the proposed Project, and amended policies 2-15, 2-16, 2-18, 2-20, 2-82, 2-88, and 5-48 under the proposed Project would not cause adverse physical changes that could create aesthetic impacts in Cupertino. Individual developments would continue to be subject to General Plan policies and Municipal Code provisions related to aesthetics, including potential project-level design review requirements. Moreover, certain policy changes would serve to reduce aesthetic impacts from new and existing developments. Therefore the policy amendments under the proposed Project would not result in impacts under this threshold of significance.

Furthermore, potential future development would, if necessary, be subject to the Architectural and Site Review process, in accordance with Section 19.168 of the Zoning Ordinance. Future development would also be required to comply with Design Standards outlined in the Heart of the City Specific Plan, the Vallco Master Plan, and the Monta Vista Design Guidelines and Conceptual Plans as described in Section 4.1.1.1, Regulatory Framework, in Chapter 4.1, Aesthetics, of this Draft EIR, and the General Plan policies outlined in impact discussion AES-1, would ensure that the bulk, mass, height, and architectural character of new development are compatible with surrounding uses.

**Significance Without Mitigation:** Less than significant.

---

<b>AES-4</b>	<b>Implementation of Land Use Alternative A would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.</b>
--------------	--

---

Nighttime illumination and glare impacts are the effects of a project's exterior lighting upon adjoining uses and areas. Light and glare impacts are determined through a comparison of the existing light sources with the proposed lighting plan or policies.

Currently, the Project Study Area contains many existing sources of nighttime illumination. These include street and parking area lights, security lighting, and exterior lighting on existing residential, commercial, and institutional buildings. Additional onsite light and glare is caused by surrounding land uses and traffic on SR 85 and I-280.

As discussed under impact AES 1, above, Policies 2-23 through 2-33 are analyzed as an integral, inseparable component of Land Use Alternative A, and amended policies 2-15, 2-16, 2-18, 2-20, 2-82, 2-88, and 7-4

## LAND USE ALTERNATIVE A

under Land Use Alternative A would not cause adverse physical changes that could create aesthetic impacts in Cupertino. Individual developments would continue to be subject to General Plan policies and Municipal Code provisions related to aesthetics, including potential project-level design review requirements. Moreover, certain policy changes would serve to reduce aesthetic impacts from new and existing developments. Therefore, the policy amendments under Land Use Alternative A would not result in impacts under this threshold of significance.

The Land Use Alternative A would modify land uses, zoning, and density, which in turn would intensify related lighting sources. In addition to new building, security, and lighting for parking areas, buildout of the Project Study Area would also include lighting aimed at properly illuminating the Project Component locations. Because the Land Use Alternative A allows additional development throughout the Project Study Area, its implementation would likely result in some larger buildings with more exterior glazing (i.e. windows and doors) that could result in new sources of glare. Despite the new and expanded sources of nighttime illumination and glare, the Land Use Alternative A is not expected to generate a substantial increase in light and glare.

The General Plan policies and Municipal Code provisions that ensure new land uses do not generate excessive light levels. The City's General Plan policies require reduce light and glare spillover from future development to surrounding land uses by buffering new development with landscaping and trees. The preservation of mature trees with substantial tree canopies would diffuse the overall amount of light generated by new development and glare generated by windows of multistory buildings. Furthermore, because the Project Component locations and surrounding area are largely developed, the lighting associated with the Land Use Alternative A would not substantially increase nighttime light and glare within the Project Study Area or its surroundings. Therefore, impacts relating to light and glare would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>AES-5</b>	<b>Implementation of Land Use Alternative A, in combination with past, present and reasonably foreseeable projects, would not result in less than significant cumulative impacts with respect to aesthetics.</b>
--------------	--

---

As discussed in Chapter 4, Environmental Evaluation, of this Draft EIR, this EIR takes into account growth projected by this Alternative within the Cupertino city boundary and Sphere of Influence (SOI), in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). The cumulative setting for visual impacts includes potential future development under the proposed General Plan combined with effects of development on lands adjacent to the city within Los Altos and Sunnyvale to the north, Santa Clara and San Jose to the east, and Saratoga to the south, and the unincorporated areas of Santa Clara County to the west and south.

Significant impacts, including those associated with scenic resources, visual character, and increased light and glare would generally be site-specific and would not contribute to cumulative impacts after implementation of the General Plan policies and the provisions stated in the Municipal Code.

## LAND USE ALTERNATIVE A

Because of the developed nature of the Project Study Area, future development under the General Plan Amendment, Housing Element Update, and associated Rezoning, in combination with other new development, would not negatively impact the visual character of the City. Furthermore, Land Use Alternative A would not constitute a significant adverse impact because redevelopment of the area is also anticipated in the current specific plans and the City's General Plan policies.

As discussed under Impact AES-1, above, Policies 2-23 through 2-33 are analyzed as an integral, inseparable component of Land Use Alternative A, and Policies 2-15, 2-16, 2-18, 2-20, 2-82, 2-88, and 7-4 under the Land Use Alternative A would not cause adverse physical changes that could create aesthetic impacts in Cupertino. Individual developments would continue to be subject to General Plan policies and Municipal Code provisions related to aesthetics, including potential project-level design review requirements. Moreover, certain policy changes would serve to reduce aesthetic impacts from new and existing developments. Therefore, the policy amendments under the Land Use Alternative A would not result in cumulative impacts to aesthetics.

Moreover, as part of the approval process, potential new development under the Land Use Alternative A would be subject to environmental review and architectural and site design review, to ensure that the development is aesthetically pleasing and compatible with adjoining land uses. With the development review mechanisms in place, approved future development under the Land Use Alternative A is not anticipated to create substantial impacts to visual resources. Therefore, this Alternative would result in a cumulatively *less-than-significant* contribution to aesthetic impacts.

**Significance Without Mitigation:** Less than significant.

### 5.2.7.2 AIR QUALITY

---

**AQ-1                      Implementation of Land Use Alternative A would conflict with or obstruct implementation of the applicable air quality plan.**

---

#### 2010 Bay Area Clean Air Plan

The current AQMP is the 2010 Bay Area Clean Air Plan. The primary goals of the 2010 Bay Area Clean Air Plan are to attain the State and Federal AAQS, reduce population exposure and protect public health in the Bay Area, and reduce GHG emissions and protect the climate. BAAQMD considers the Plan consistent with the AQMP in accordance with the following:

##### *Attain Air Quality Standards*

BAAQMD's 2010 Bay Area Clean Air Plan strategy is based on regional population and employment projections within the Bay Area compiled by ABAG. Demographic trends incorporated into the Plan Bay Area determine vehicle miles traveled (VMT) within the Bay Area, which BAAQMD utilizes to forecast future air quality trends. The San Francisco Bay Area Air Basin (SFBAAB) is designated as a nonattainment area for Ozone (O<sub>3</sub>), fine inhalable particulate matter (PM<sub>2.5</sub>), and coarse inhalable particulate matter (PM<sub>10</sub>) (State ambient air quality standards (AAQS) only).

## LAND USE ALTERNATIVE A

As discussed in Chapter 4.11, Population and Housing, of this Draft EIR, the growth projections for the City of Cupertino would exceed the employment projections identified by ABAG. ABAG forecasts the population in Cupertino could grow to 71,700 by 2040.<sup>3</sup> The buildout projections resulting from future development under Land Use Alternative A estimates that the residential population could grow to 63,873 by 2040. Therefore, additional residential population resulting from implementation of Land Use Alternative A would not exceed regional projections (7,827 fewer residents). With respect to employment, ABAG forecasts 33,260 employees in the City of Cupertino in 2040.<sup>4</sup> Buildout of Land Use Alternative A would not exceed the regional projections (667 fewer employees). Growth under Land Use Alternative A would come incrementally over approximately 26 years and would be guided by a policy framework that is generally consistent with many of the principal goals and objectives established in regional planning initiatives for the Bay Area.

The General Plan includes policies and strategies that, once adopted, would ensure coordination with regional agencies on regional planning initiatives. Within the Environmental Resources Element, Policy 5-5, Air Pollution Effects of New Development, would require the City to minimize the air quality impacts of new development projects and the impacts affecting new development. Supporting Strategy 3 would require the City to assess the potential for air pollution effects of future land use and transportation planning, to ensure that planning decisions support regional goals of improving air quality.

The Circulation Element also includes policies regarding coordination with regional transportation planning agencies. Policy 4-1, City Participation in Regional Transportation Planning, would ensure that the City actively participate in developing regional approaches to meeting the transportation needs of the residents of the Santa Clara Valley. Subsequently, growth under Land Use Alternative A would be consistent with the regional planning objectives established for the Bay Area.

Therefore, emissions within the City of Cupertino are included in Bay Area Air Quality Management District (BAAQMD)'s projections, and future development under Land Use Alternative A through horizon year 2040 would not hinder BAAQMD's ability to attain the California or National AAQS. Accordingly, impacts would be *less than significant*.

### *Reduce Population Exposure and Protect Public Health*

The City of Cupertino is already largely developed. Future growth under Land Use Alternative A would be accommodated through redevelopment of infill sites. As identified in the discussion of community risk and hazards (see Impact AQ-4 below), new sensitive land uses could be proximate to major sources of Toxic Air Contaminants (TACs), and new industrial/commercial land uses could generate an increase in TACs. Adherence to BAAQMD regulations would ensure new sources of TACs do not expose populations to significant health risk; however, siting of land uses proximate to major sources of air pollution is outside the control of BAAQMD. These impacts are addressed under Impact AQ-4, below. Implementation of current

---

<sup>3</sup> Association of Bay Area Governments (ABAG), 2014, Plan Bay Area Projections 2013.

<sup>4</sup> Association of Bay Area Governments (ABAG), 2014, Plan Bay Area Projections 2013.

## LAND USE ALTERNATIVE A

and amended General Plan policies, and strategies, and mitigation to reduce community risk and hazards listed in AQ-4 below would ensure these impacts are *less than significant*.

### *Reduce GHG Emissions and Protect the Climate*

The Greenhouse Gas (GHG) emissions impacts of Land Use Alternative A are discussed in Chapter 4.6, Greenhouse Gas Emissions, of this Draft EIR. Goals and policies have been incorporated within Land Use Alternative A, as identified in Chapter 4.6, Greenhouse Gas Emissions, of this Draft EIR, to reduce Vehicle Miles Traveled (VMT) and associated GHG emissions. In addition, the City of Cupertino is also preparing a Climate Action Plan (CAP) to reduce community-wide GHG emissions. The City's CAP would identify GHG reduction measures for community-wide operations.

The current and amended General Plan policies and strategies would also reduce GHG emissions, as described in more detail in Chapter 4.6, Greenhouse Gas Emissions, of this Draft EIR. Future development under this Alternative would be required to adhere to statewide measures that have been adopted to achieve the GHG reduction targets of Assembly Bill 32. In addition, this Alternative is consistent with regional strategies for infill development identified by the Metropolitan Transportation Commission (MTC)/ABAG in the Plan Bay Area. Consequently, Land Use Alternative A is consistent with the goals of the 2010 Bay Area Clean Air Plan to reduce GHG emissions and protect the climate. As identified above, Land Use Alternative A would support the goals of the 2010 Bay Area Clean Air Plan. New policies would be introduced as part of Land Use Alternative A to minimize impacts. Impacts would be *less than significant*.

### Include Applicable Control Measures from the AQMP

Table 4.2-6, in Chapter 4.2, Air Quality, of this Draft EIR, identifies the control measures included in the 2010 Bay Area Clean Air Plan, and, as shown, implementation of Land Use Alternative A goals, policies, and actions in Table 4.2-6 would ensure that Land Use Alternative A would be consistent with the 2010 Bay Area Clean Air Plan and that the impacts due to inconsistency would be *less than significant*.

### Disrupt or Hinder Implementation of Any AQMP Control Measures

Table 5.2-2 identifies the control measures included in the 2010 Bay Area Clean Air Plan. As identified in the table, Land Use Alternative A would not hinder BAAQMD from implementing the control measures in the 2010 Bay Area Clean Air Plan. Impacts are *less than significant*.

## LAND USE ALTERNATIVE A

**TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
Stationary and Area Sources Control Measures	<ul style="list-style-type: none"> <li>▪ SSM 1 – Metal Melting Facilities</li> <li>▪ SSM 2 – Digital Printing</li> <li>▪ SSM 3 – Livestock Waste</li> <li>▪ SSM 4 – Natural Gas Processing and Distribution</li> <li>▪ SSM 5 – Vacuum Trucks</li> <li>▪ SSM 6 – General Particulate Matter Weight Rate Limitations</li> <li>▪ SSM 7 – Open Burning</li> <li>▪ SSM 8 – Cole Calcining</li> <li>▪ SSM 9 – Cement Kilns</li> <li>▪ SSM 10 – Refinery Boilers and Heaters</li> <li>▪ SSM 11 – Residential Fan Type Furnaces</li> <li>▪ SSM 12 – Space Heating</li> <li>▪ SSM 13 – Dryers, Ovens, Kilns</li> <li>▪ SSM 14 – Glass Furnaces</li> <li>▪ SSM 15 – Greenhouse Gases in Permitting Energy Efficiency</li> <li>▪ SSM 16 – Revise Regulation 2, Rule 2: New Source Review</li> <li>▪ SSM 17 – Revise Regulation 2, Rule 5 New Source Review for Air Toxics</li> <li>▪ SSM 18 – Revise Air Toxics “Hot Spot” Program</li> </ul>	<p>Stationary and area source control measures are sources regulated directly by BAAQMD. To implement the stationary and area source control measures, BAAQMD adopts/revises rules or regulations to implement the control measures and reduce emissions from stationary and area sources. Because BAAQMD is the implementing agency, new and existing sources of stationary and area sources in the City would be required to comply with these control measures in the 2010 Bay Area Clean Air Plan.</p>
Mobile Source Control Measures	<ul style="list-style-type: none"> <li>▪ MSM A-1 – Promote Clean, fuel Efficient Light and Medium-Duty Vehicles</li> <li>▪ MSM A-2 – Zero Emission Vehicle and Plug-in Hybrids</li> <li>▪ MSM A-3 – Green Fleets (Light Medium and Heavy-Duty Vehicles)</li> <li>▪ MSM A-4 – Replacement or Repair of High Emitting Vehicles</li> <li>▪ MSM B-1 – HDV Fleet Modernization</li> <li>▪ MSM B-2 – Low NOx Retrofits for In-Use Engines</li> <li>▪ MSM B-3 – Efficient Drive Trains</li> <li>▪ MSM C-1 – Construction and Farming Equipment</li> <li>▪ MSM C-2 – Lawn and Garden Equipment</li> <li>▪ MSM C-3 – Recreational Vessels</li> </ul>	<p>Mobile Source Control Measures that would reduce emissions by accelerating the replacement of older, dirtier vehicles and equipment, through programs such as the BAAQMD’s Vehicle Buy-Back and Smoking Vehicle Programs, and promoting advanced technology vehicles that reduce emissions. The implementation of these measures rely heavily upon incentive programs, such as the Carl Moyer Program and the Transportation Fund for Clean Air, to achieve voluntary emission reductions in advance of, or in addition to, CARB requirements. CARB has new regulations that require the replacement or retrofit of on-road trucks, construction equipment, and other specific equipment that is diesel powered. Land Use Alternative A would not hinder the ability of BAAQMD to implement these regional programs.</p>
Transportation Control Measures	<ul style="list-style-type: none"> <li>▪ TCM A-1 – Improve Local and Regional Rail Service</li> <li>▪ TCM A-2 – Improve Local and Regional Rail Service</li> <li>▪ TCM B-1 – Implement Freeway Performance Initiative</li> <li>▪ TCM B-2 – Improve Transit Efficiency and Use</li> <li>▪ TCM B-3 – Bay Area Express Land Network</li> </ul>	<p>Transportation Control Measures (TCM) are strategies to reduce vehicle trips, vehicle use, VMT, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions. While most of the TCMs are implemented at the regional level—that is, by the MTC or Caltrans—there are measures for which the 2010 Bay Area Clean Air Plan relies upon local communities to assist with implementation.</p>



**LAND USE ALTERNATIVE A**

**TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
<ul style="list-style-type: none"> <li>▪ TCM B-4 – Goods Movement Improvements and Emission Reduction Strategies</li> <li>▪ TCM C-1 – Support Voluntary Employer-Based Trip Reduction Program</li> <li>▪ TCM C-2 – Implement Safe Routes to Schools and Safe Routes to Transit</li> <li>▪ TCM C-3 – Promote Rideshare Service and Incentives</li> <li>▪ TCM C-4 – Conduct Public Outreach and Education</li> <li>▪ TCM C-5 – Promote Smart Driving/Speed Moderation</li> <li>▪ TCM D-1 – Improve Bicycle Access and Facilities</li> <li>▪ TCM D-2 – Improve Pedestrian Access and Facilities</li> <li>▪ TCM D-3 – Support Local Land Use Strategies</li> <li>▪ TCM E-1 – Value Pricing Strategies</li> <li>▪ TCM E-2 Parking Pricing and Management</li> <li>▪ TCM E-3 – Implement Transportation Pricing Reform</li> </ul>	<p>Land Use Alternative A includes policies and strategies related to transportation and land use that would assist BAAQMD in meeting the regional goals of the 2010 Bay Area Clean Air Plan, including:</p> <ul style="list-style-type: none"> <li>▪ Policy 2-1: Focus Development in Mixed-Use Special Areas. In the mixed-use Special Areas (shown in Figure 2-B) where office, commercial and residential uses are allowed, focus higher intensity development and increased building heights where appropriate in designated corridors, gateways, and nodes.</li> <li>▪ Policy 2-2: Connections Between Special Areas, Employment Centers and the Community. Provide strong connections between the mixed-use Special Areas, employment centers and the surrounding community.                             <ul style="list-style-type: none"> <li>Strategy 1. Neighborhood Connections. Enhance pedestrian and bicycle connections from the mixed-use Special Areas and employment centers to surrounding neighborhoods.</li> <li>Strategy 2. Public Access. Provide pedestrian and bicycle paths through new and redevelopment projects to enhance public access to and through the development.</li> </ul> </li> <li>▪ Policy 2-19: Compatibility of Lot Sizes. Ensure that zoning, subdivision and lot line adjustment requests related to lot size or lot design consider the need to preserve neighborhood lot patterns.                             <ul style="list-style-type: none"> <li>Strategy 1. Minimum Lot Size. Increase the minimum lot size if the proposed new lot size is smaller than and not compatible with the surrounding neighborhood.</li> <li>Strategy 2. Flag Lots. Create flag lots in proposed subdivisions when they are the only reasonable alternative that integrates with the lot pattern in the neighborhood.</li> </ul> </li> <li>▪ Policy 2-26: Heart of the City Special Area. Create a positive and memorable image along Stevens Creek Boulevard of mixed-use development; enhanced activity gateways and nodes; and safe and efficient circulation and access for all modes of transportation.                             <ul style="list-style-type: none"> <li>Strategy 1. Heart of the City Specific Plan. Maintain the Heart of the City Specific Plan as the primary implementation tool for the City to use for this area.</li> <li>Strategy 2. Traffic Calming. Evaluate options on Stevens Creek Boulevard to improve the pedestrian environment by proactively managing speed limits and traffic signal synchronization.</li> </ul> </li> <li>▪ Policy 4-5: Pedestrian Access. Create pedestrian access between new subdivisions and school sites. Review existing neighborhood circulation plans to improve safety and access for pedestrians and bicyclists to school sites, including</li> </ul>	

## LAND USE ALTERNATIVE A

TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN

Type	Measure Number / Title	Consistency
		<p>completing accessible network of sidewalks and paths.</p> <ul style="list-style-type: none"> <li>▪ Policy 4-1: City Participation in Regional Transportation Planning. Participate actively in developing regional approaches to meeting the transportation needs of the residents of the Santa Clara Valley. Work closely with neighboring jurisdictions and agencies responsible for roadways, transit facilities and transit services in Cupertino.</li> </ul> <p>Strategy 1. Regional Transportation Planning. Participate in regional transportation planning in order to minimize adverse impacts on Cupertino’s circulation system. Work with all regional transportation agencies to develop programs consistent with the goals and policies of Cupertino’s General Plan. Work with neighboring cities to address regional transportation and land use issues of mutual interest.</p> <p>Strategy 2. Jobs–Housing Balance. Minimize regional traffic impacts on Cupertino by supporting regional planning programs to manage the jobs-housing balance throughout Santa Clara County and the Silicon Valley, including the Bay Area region’s Sustainable Communities Strategy and Regional Transportation Plan.</p> <p>Strategy 3. Interchange Improvements. Identify potential interchange improvements, such as I-280 with the Lawrence Expressway Stevens Creek Boulevard, and North Wolfe Road, that would encourage the use of the freeway and reduce the use of local streets..</p> <p>Strategy 4. Congestion Management Plan (CMP). Actively participate in the preparation of the CMP and other regional efforts to control traffic congestion and limit air pollution.</p> <p>Strategy 5. Traffic Impact Analysis (TIA). Require TIA reports that meet the requirements of the Santa Clara Valley Transportation Authority (VTA) for all developments projected to generate more than 100 trips in the morning or afternoon peak hour.</p> <p>Strategy 6. Multi-modal Transportation. Ensure that connections are provided to enable travelers to transition from one mode of transportation to another (e.g. bicycle to bus).</p> <p>Strategy 7. Regional Bus and Rapid Transit Service. Support the expansion of the VTA’s regional bus transit system and extension of bus and/or light rail rapid transit into the Stevens Creek and De Anza Corridors to fulfill the “spoke and wheel” transit system designed to serve all of Santa Clara County. Specific actions to implement this strategy are:</p> <ul style="list-style-type: none"> <li>○ Review all right-of-way improvement projects for potential</li> </ul>

**LAND USE ALTERNATIVE A**

**TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>opportunities and constraints to rapid transit development.</p> <ul style="list-style-type: none"> <li>○ Encourage higher density and mixed-use development in rapid transit corridors and ensure developments are designed to enhance the use of transit.</li> <li>○ Seek the cooperative support of residents, property owners and businesses in planning rapid transit extensions.</li> <li>○ Actively seek to have Cupertino represent West Valley cities and ultimately chair the VTA Board of Directors to promote the above policy</li> </ul> <p>■ Policy 4-3: Reduced Reliance on the Use of Single-Occupant Vehicles .Promote a general decrease in reliance on private, mostly single-occupant vehicles (SOV) by encouraging attractive alternatives.</p> <p>Strategy 1. Alternatives to the SOV. Encourage the use of alternatives to the SOV including increased car-pooling, use of public transit, bicycling and walking.</p> <p>Strategy 2. Transportation System Management (TSM) Programs. Encourage TSM programs for employees in both the public and private sectors by including preferred parking for carpools, providing bus passes, encouraging compressed workweeks, and providing incentives and rewards for bicycling and walking.</p> <p>Strategy 3. Telecommuting, Teleconferencing and Other Electronic Communication. Encourage employers to use the internet to reduce commute travel. Encourage schools, particularly at the college and high school levels, to make maximum use of the internet to limit the need to travel to and from the campus.</p> <p>Strategy 4. Design of New Developments. Encourage new commercial developments to provide shared office facilities, cafeterias, day-care facilities, lunchrooms, showers, bicycle parking, home offices, shuttle buses to transit facilities and other amenities that encourage the use of transit, bicycling, walking or telecommuting as commute modes to work. Provide pedestrian pathways and orient buildings to the street to encourage pedestrian activity.</p> <p>Strategy 5. Street Space for Alternative Transportation. Provide space on appropriate streets for bus turnouts, or safe and accessible bike lanes or pedestrian paths.</p> <p>Strategy 6. Alternative Transportation Information. Use the Cupertino Scene and other media to provide educational material on alternatives to the SOV.</p> <p>Strategy 7. Citizen Participation. Continue to work with the City Bicycle Pedestrian Commission, community groups and residents to eliminate hazards</p>

## LAND USE ALTERNATIVE A

TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN

Type	Measure Number / Title	Consistency
		<p>and barriers to bicycle and pedestrian transportation.</p> <p>Strategy 8. Transportation Demand Management (TDM) Programs. Require large employers to develop and maintain TDM programs to reduce the vehicle trips generated by their employees. Work together with the large employers to develop a tracking system for the TDM programs to allow ongoing assessment of results.</p> <ul style="list-style-type: none"> <li>▪ Policy 4-4: Improved Pedestrian and Bicycle Circulation Throughout Cupertino. Expand the city-wide pedestrian and bicycle network in order to provide improved recreation, mobility and safety.</li> </ul> <p>Strategy 1. The Pedestrian Transportation Plan. Implement the projects recommended in the Pedestrian Transportation Plan including:</p> <ul style="list-style-type: none"> <li>○ After engineering review, and where found to be feasible, improve safety at selected intersections by one or more of the following: prohibit right-turn-on-red, add time to the pedestrian signal phase, construct a median and/or reduce corner radii.</li> <li>○ Where feasible provide missing sidewalks on arterial and collector streets and on neighborhood streets as desired by residents.</li> <li>○ Identify a citywide pedestrian circulation grid including shortcuts, pathways and bridges, where needed, to close gaps in the pedestrian circulation system.</li> </ul> <p>Strategy 2. Pedestrian Grid. Consider developing a quarter-mile grid of safe, walkable sidewalks and paths to provide pedestrian access among residential, shopping, recreation and business locations.</p> <p>Strategy 3. Schools. Work with the School District to encourage students to walk, bike, or carpool to school.</p> <p>Strategy 4. Pedestrian Time on Traffic Signals. With engineering review, provide additional time for pedestrians to cross streets at appropriate intersections. Added time would be most appropriate near shopping districts, schools and senior citizen developments. This strategy should be considered even if it could reduce the level of service for automobile traffic.</p> <p>Strategy 5. Pedestrian Improvements. To enhance walking, consider various improvements to roadways to make them more pedestrian friendly and less auto-centric. Where a median is provided, it should be wide enough to safely accommodate pedestrians. Streets that connect major pedestrian activity centers should be evaluated for potential improvements for pedestrians. Working with the neighborhood, consider reducing residential street widths to promote slower traffic.</p>

**LAND USE ALTERNATIVE A**

**TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>Strategy 6. Crosswalk Marking, Medians, and “Chokers.” Following engineering review, mark crosswalks with pavement treatment scaled to the speed of traffic. Use medians and “chokers” to narrow the width of the street where feasible and appropriate, and to indicate and identify entrances to neighborhoods.</p> <p>Strategy 7. Preparation of Transportation Impact Analysis (TIA). Encourage all public construction and private development projects that require a TIA to analyze potential bicycle and pedestrian impacts in accordance with the Santa Clara County Valley Transportation Authority (VTA) TIA Guidelines.</p> <p>Strategy 8. Cupertino Bicycle Transportation Plan. Maintain the Cupertino Bicycle Transportation Plan, as needed. Include top priority bicycle projects in the annual Capital Improvement Program. Continue to identify barriers to safe and convenient bicycle access and then identify how and when these barriers will be removed.</p> <p>Strategy 9. Bicycle Transportation Plan Improvements. Implement the specific improvements identified in the Bicycle Transportation Plan. The existing Network is shown in Figure 4-B.</p> <p>Strategy 10. Bicycle Facilities in New Developments. Encourage the developers of major new or remodeled buildings to include secure interior and/or fully weather protected bicycle parking. Continue to implement the Ordinance requirement for 10% of bicycle parking to be Class 1.</p> <p>Strategy 11. Traffic Calming on Bicycle Routes. Where feasible and appropriate, implement traffic calming on those bicycle routes where automobile traffic volumes are low. Reference the Santa Clara County Valley Transportation Authority’s Bicycle Technical Guidelines for recommended traffic calming measures. Bicycle traffic flows best where automobile traffic volume and speeds are low and where there are no stop signs or traffic signals to hinder through traffic flow.</p> <p>Strategy 12. Bicycle Parking. Provide bicycle parking in multi-family residential developments and in commercial districts as required under the parking requirements of the Municipal Code.</p> <p>Strategy 13. Funding Sources. Identify funding sources for regular maintenance and cleaning of all public bicycle and pedestrian facilities as part of the City’s operation budget, and prioritize routine street maintenance for streets with bike facilities.</p> <p>Strategy 14. Public and Private Partnerships. Partner with other agencies and/or organizations to establish programs for bicyclists, pedestrians, and motorists of all ages.</p> <ul style="list-style-type: none"> <li>▪ Policy 4-6: Regional Trail Development. Continue to plan and provide for a</li> </ul>

## LAND USE ALTERNATIVE A

TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN

Type	Measure Number / Title	Consistency
		<p>comprehensive system of trails and pathways consistent with regional systems, including the Bay Trail, Stevens Creek Corridor and Ridge Trail, and with the policies contained in the Land Use and Community Design Element. The General Alignment of the Bay Trail, as shown in the Association of Bay Area Governments' Bay Trail planning document, is incorporated in the General Plan by reference.</p> <ul style="list-style-type: none"> <li>▪ Policy 4-7: Increased Use of Public Transit. Support and encourage the increased use of public transit.                             <p>Strategy 1. Transit Facilities in New Developments. Ensure all new development projects include amenities to support public transit such as: bus stop shelters; space for transit vehicles to stop and maneuver as needed; transit maps and schedules. Encourage commercial and institutional developments to support bus passes for employees.</p> <p>Strategy 2. Transit Stop Amenities. Work with the VTA and adjacent property owners to provide attractive amenities such as seating, lighting and signage at all bus stops.</p> <p>Strategy 3. Vallco Park Transit Station. Work with the VTA to study and develop a transit transfer station at South Vallco Park Gateways.</p> <p>Strategy 4. Rapid Transit. Work with the Santa Clara Valley Transportation Authority (VTA) to plan for and develop bus and/or light rail rapid transit services in the Stevens Creek and north De Anza corridors to take advantage of the potential increase in mixed-use activities in the De Anza College customer base. Consider increased frequency of service to encourage ridership. Review impacts to ensure that operations are optimized.</p> </li> <li>▪ Policy 4-9: Traffic Service and Pedestrians Needs. Balance the needs of pedestrians with desired traffic service. Where necessary and appropriate, allow a lowered level of service standard to better accommodate pedestrians on major streets and at specific intersections.</li> <li>▪ Policy 4-12: Street Improvement Planning. Plan street improvements such as curb cuts, sidewalks, bus stop turnouts, bus shelters, light poles, benches and trash containers as an integral part of a project to ensure an enhanced streetscape and the safe movement of people and vehicles with the least possible disruption to the streetscape.                             <p>Strategy 1. Sidewalk Access to Parking or Buildings. Examine sidewalk to parking areas or building frontages at the time individual sites develop to regulate the entry to the site at a central point. Sidewalks in the Crossroads Area shall be wide</p> </li> </ul>

**LAND USE ALTERNATIVE A**

**TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>enough to accommodate increased pedestrian activity.</p> <p>Strategy 2. Bus Stop Turnouts in Street Frontages. Require bus stop turnouts, or partial turnouts, within the street frontage of a new or redeveloping site. This policy does not apply to the Crossroads Area. Bus stops should include shelters, benches, trash receptacles and other amenities as appropriate. Follow the VTA specifications for improving bus stops.</p> <p>Strategy 3. Roadway Maintenance Funding. Identify and secure new funding sources to fund the on-going routine maintenance of roadways.</p> <p>Strategy 4. Timing of Improvements. Integrate the financing, design and construction of pedestrian and bicycle facilities with street projects. Build pedestrian and bicycle improvements at the same time as improvements for vehicular circulation.</p> <ul style="list-style-type: none"> <li>▪ Policy 4-13: Safe Parking Lots. Require parking lots that are safe for pedestrians.                     <p>Strategy 1. Safe Spaces for Pedestrians. Require parking lot design and construction to include clearly defined spaces for pedestrians so that foot traffic is separated from the hazards of car traffic and people are directed from their cars to building entries.</p> </li> <li>▪ Policy 4-15: School Traffic Impacts on Neighborhoods. Minimize the impact of school drop-off, pick-up and parking on neighborhoods.                     <p>Strategy 1. Coordination with School Districts. Coordinate with the School Districts to develop plans and programs that encourage car/van-pooling, stagger hours of adjacent schools, drop-off locations, encourage walking and bicycling to school.</p> <p>Strategy 2. Teen Commission. Encourage the Teen Commission to work with schools to encourage year-round programs to incentivize walking and biking to school.</p> </li> <li>▪ Policy 5-3: Conservation and Efficient Use of Energy Resources. Encourage the maximum feasible conservation and efficient use of electrical power and natural gas resources for new and existing residences, businesses, industrial and public uses.                     <p>Strategy 1. Alternate Energy Sources. Continue to ensure the ease of access to and use of solar energy and other alternate, renewable energy resources for all new and significantly renovated private and public buildings through effective policies, programs and incentives.</p> <p>Strategy 2. Comprehensive Energy Management Plan. Prepare and implement a comprehensive energy management plan for all applicable public facilities,</p> </li> </ul>

**LAND USE ALTERNATIVE A**

**TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>equipment to achieve the energy goals established in the City’s municipal Climate Action Plan. Embed this plan into the City’s Environmentally Preferable Procurement Policy to ensure measures are achieved through all future procurement and construction practices.</p> <p>Strategy 3. Consistency with State and Federal Regulation. Continue to evaluate, and revise as necessary, applicable City codes, ordinances and procedures for inclusion of local, state and federal policies and standards that promote energy and water conservation.</p> <p>Strategy 4. Energy Efficient Replacements. Continue to use life cycle cost analysis to identify City assets for replacement with more energy efficient technologies.</p> <p>Strategy 5. Incentive Program. Support incentive programs to include such items as reduced permit fees for building projects that exceed the City’s Green Building Ordinance and CalGreen. Continue to promote other incentives from the state, county and federal governments for improving energy efficiency and expanding renewable energy installations by posting information regarding incentive, rebate and tax credit programs on the City’s web site.</p> <p>Strategy 6. Solar Access Standards. Continue to ensure compliance with the State of California Subdivision Map Act solar access standards in order to maximize natural heating and cooling opportunities for future residences and businesses. Encourage the inclusion of additional shade trees and landscaping for energy efficiency.</p> <p>Strategy 7. Educational Programs. Continue to:</p> <ul style="list-style-type: none"> <li>○ Offer conservation/efficiency educational programs and leverage those available through the County and the Bay Regional Energy Network to serve all utility users.</li> <li>○ Provide informational materials and host energy conservation workshops for businesses and residents.</li> <li>○ Provide, or partner with other agencies to offer, educational materials, seminar and staff training on energy conservation/efficiency for those who design, build and manage building facilities, and for those who regulate building design and construction, per the City’s GreenBiz Program. In partnership with De Anza College develop a “Sustainable Building Practices” guide for Cupertino residents and businesses that builds upon the City’s Green Building Ordinance. The Guide should include information regarding current rebates and subsidies to make implementing a sustainable building more financially attractive with</li> </ul>



**LAND USE ALTERNATIVE A**

**TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
Land Use and	▪ LUM 1 – Goods Movement	The 2010 Bay Area Clean Air Plan also includes land use measures to reduce air

references back to the City, State, Federal and other web sites for up-to-date information. Provide, or partner with other agencies to offer, educational materials, seminars and a certification program for contractors and architects who have participated in “Sustainable Building” courses. Many of the curriculums are currently available at De Anza College. As an incentive for participating in the “Sustainable Building” program the City will maintain a “Sustainable Builder/ Developer” page on their current City website. This page will not be an endorsement of the individual or company listed, but a resource center for the community.

- Establish and maintain an Energy Information Center or Kiosk at City Hall where information concerning energy issues, building standards, recycling and assistance is available.

Strategy 8. Energy Cogeneration Systems. Encourage the use of energy cogeneration systems through the provision of an awareness program targeting the larger commercial and industrial users and public facilities.

Strategy 9. Regulation of Building Design. Ensure designer, developers, applicants and builders meet the City’s Green Building Ordinance and CalGreen and encourage architects, building designers and contractors to exceed these requirements for new projects through the provision of incentives. Encourage either passive solar heating and/or dark plaster interior with a cover for swimming pools, cabanas and other related accessory uses where solar access is available. Encourage the use of renewable energy sources where feasible, and continue to offer energy audits and/or subvention programs that also advance community adoption of alternative energy technologies.

Strategy 10. Use of Discretionary Development Permits (Use Permits). Require, as conditions of approval for new and renovated projects, the provision of energy conservation/efficiency applications, aligned with the City’s Green Building Ordinance and CalGreen.

Strategy 11. Energy Efficient Transportation Modes. Continue to encourage alternative, fuel-efficient transportation modes such as “clean” multi-modal public transit, car and vanpooling, flexible work hours, safe routes to schools, and pedestrian and bicycle paths through community education and training, infrastructure investment, and financial incentives, including commuter benefits programs.

## LAND USE ALTERNATIVE A

TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN

Type	Measure Number / Title	Consistency
Local Impact Control Measures	<ul style="list-style-type: none"> <li>▪ LUM 2 – Indirect Source Review</li> <li>▪ LUM 3 – Enhanced CEQA Program</li> <li>▪ LUM 4 – Land Use Guidelines</li> <li>▪ LUM 5 – Reduce Risk in Impacted Communities</li> <li>▪ LUM 6 – Enhanced Air Quality Monitoring</li> </ul>	<p>quality emissions and/or air quality exposure in the SFBAAB. The following proposed Project policies support these land use measures:</p> <ul style="list-style-type: none"> <li>▪ Policy 5-5: Air Pollution Effects of New Development. Minimize the air quality impacts of new development projects and the impacts affecting new development.                             <ul style="list-style-type: none"> <li>Strategy 1. Toxic Air Contaminants. Continue to review projects for potential generation of toxic air contaminants at the time of approval and confer with BAAQMD on controls needed if impacts are uncertain.</li> <li>Strategy 2. Dust Control. Continue to require water application to non-polluting dust control measures during demolition and the duration of the construction period.</li> <li>Strategy 3. Planning Decisions. Continue to assess the potential for air pollution effects of future land use and transportation planning, and ensure that planning decisions support regional goals of improving air quality.</li> <li>Strategy 4. Environmental Review. Continue to evaluate the relationship of sensitive receptors, such as convalescent hospitals and residential uses, to pollution sources through the environmental assessment of new development.</li> </ul> </li> <li>▪ Policy 5-6: Air Pollution Effects of Existing Development. Minimize the air quality impacts of existing development.                             <ul style="list-style-type: none"> <li>Strategy 1. Public Education Program. Establish a Citywide public education program regarding the implications of the Clean Air Act and provide information on ways to reduce and control emissions; continue to provide information about alternative commutes, carpooling and restricting exacerbating activities on “Spare the Air” high-pollution days.</li> <li>Strategy 2. Home Occupations. Expand the allowable home occupations in residentially zoned properties to reduce the need to commute to work.</li> <li>Strategy 3. Tree Planting. Continue to implement the City’s tree planting program to increase the City’s urban canopy on City property and encourage native, shade-producing, drought-tolerant tree and other plantings on private property.</li> <li>Strategy 4. Fuel-efficient Vehicles. Per the City’s Environmentally Preferable Procurement Policy, prioritize the City’s purchase, replacement and ongoing use of fuel-efficient and low polluting vehicles. Update the City’s Vehicle Replacement Policy and Budget to require vehicle lifecycle cost analyses and include alternative fueling infrastructure review and related funding allocations. Update the City’s Vehicle Use Policy to encourage alternative vehicle use across all departments and fuel-saving driver behaviors and habits. Review and</li> </ul> </li> </ul>

**LAND USE ALTERNATIVE A**

**TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
Energy and Climate Control Measures	<ul style="list-style-type: none"> <li>▪ ECM 1 – Energy Efficiency</li> <li>▪ ECM 2 – Renewable Energy</li> <li>▪ ECM 3 – Urban Heat Island Mitigation</li> <li>▪ ECM 4 – Tree Planting</li> </ul>	<p>implement fleet management best practices to support fuel conservation, including scheduled maintenance and fleet fuel tracking. Pursue available grant funding to offset the cost of implementing these programs.</p> <p>Strategy 5. Monitor Quarry Emissions. Continue to work with County to monitor and influence/encourage improvement of emissions and dust from the Hanson and Stevens Creek Quarries on the West end of the City.</p> <ul style="list-style-type: none"> <li>▪ Policy 2-8: Neighborhood Compatibility. Minimize potential conflicts with residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, limitations, site design and other appropriate measures. Create zoning or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through measures such as: daylight planes for single-family development, minimum setback standards, landscape screening, acoustical analysis, location and orientation of service areas away from residential uses and limitations on hours of operation.</li> <li>▪ Policy 6-28: Proximity of Residents to Hazardous Materials. Assess future residents’ exposure to hazardous materials when new residential development or childcare facilities are proposed in existing industrial and manufacturing areas. Do not allow residential development or childcare facilities if such hazardous conditions cannot be mitigated to an acceptable level of risk.</li> </ul> <p>The 2010 Bay Area Clean Air Plan also includes measures to reduce energy use, water use, and waste generation. The following policies support these energy efficiency and other sustainability measures:</p> <ul style="list-style-type: none"> <li>▪ Policy 5-1: Principles of Sustainability. Incorporate the principles of sustainability into Cupertino’s planning and development system in order to improve the environment, reduce greenhouse gas emission and meet the needs of the present community without compromising the needs of future generations.</li> </ul> <p>Strategy 1. Greenhouse Gas Emission Reduction Target. The City shall adopt and maintain a Climate Action Plan consistent with State Law.</p> <p>Strategy 2. Sustainability Task Force or Commission. Appoint a Task Force or Commission to oversee the implementation of the City’s Climate Action Plan. The goals of this Task Force/Commission would be:</p> <ol style="list-style-type: none"> <li>a. Write and keep current the Climate Action Plan through ongoing measurement of municipal and city-wide programs to help achieve the Environmental Resources and Sustainability section of the General Plan.</li> <li>b. Identify resources, technologies, and products to attain the greenhouse</li> </ol>

**LAND USE ALTERNATIVE A**

**TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>gas emissions reductions targets established in the City’s Climate Action Plan and evaluate the life-cycle cost of ownership for each recommended.</p> <p>c. Work with City staff to evaluate the financial feasibility of these recommendations on an ongoing basis.</p> <p>Strategy 3. Implementation Programs. Continue to adopt and implement new energy efficiency and renewable energy policies and implementation programs that incorporate the City’s existing planning and regulatory process.</p> <p>Strategy 4. City-Wide Inventory. Continue to conduct an ongoing municipal and community-wide greenhouse gas emissions inventory and periodically review the City’s Climate Action Plan in order to identify issues, opportunities and planning alternatives.</p> <p>Strategy 5. Sustainable Energy and Water Conservation Plan. Prepare and implement a comprehensive Climate Action Plan that prioritizes energy and water conservation measures. This plan will specifically include recommendations regarding:</p> <ul style="list-style-type: none"> <li>a. Reduction of energy consumption.</li> <li>b. Reduction of fossil fuel use.</li> <li>c. Maximum use of renewable energy resources.</li> <li>d. Improve City-wide water conservation.</li> <li>e. Reduce water consumption within municipal operations.</li> <li>f. Promote and incentivize reduced residential and business water use.</li> </ul> <p>Strategy 6. Community Gardens. Encourage community and school gardens, which provide a more livable environment by regulating temperature, noise and pollution, and create access to healthy, local sources of food.</p> <p>Strategy 7. Fiscally Sustainable Waste Management. Consider environmental and social costs in all decision-making and budget decisions.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-3: Conservation and Efficient Use of Energy Resources. Encourage the maximum feasible conservation and efficient use of electrical power and natural gas resources for new and existing residences, businesses, industrial and public uses.</li> </ul> <p>Strategy 1. Alternate Energy Sources. Continue to ensure the ease of access to and use of solar energy and other alternate, renewable energy resources for all new and significantly renovated private and public buildings through effective policies, programs and incentives.</p> <p>Strategy 2. Comprehensive Energy Management Plan. Prepare and implement a comprehensive energy management plan for all applicable public facilities, equipment</p>

**LAND USE ALTERNATIVE A**

**TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>to achieve the energy goals established in the City’s municipal Climate Action Plan. Embed this plan into the City’s Environmentally Preferable Procurement Policy to ensure measures are achieved through all future procurement and construction practices.</p> <p>Strategy 3. Consistency with State and Federal Regulation. Continue to evaluate, and revise as necessary, applicable City codes, ordinances and procedures for inclusion of local, state and federal policies and standards that promote energy and water conservation.</p> <p>Strategy 4. Energy Efficient Replacements. Continue to use life cycle cost analysis to identify City assets for replacement with more energy efficient technologies.</p> <p>Strategy 5. Incentive Program. Support incentive programs to include such items as reduced permit fees for building projects that exceed the City’s Green Building Ordinance and CalGreen. Continue to promote other incentives from the state, county and federal governments for improving energy efficiency and expanding renewable energy installations by posting information regarding incentive, rebate and tax credit programs on the City’s web site.</p> <p>Strategy 6. Solar Access Standards. Continue to ensure compliance with the State of California Subdivision Map Act solar access standards in order to maximize natural heating and cooling opportunities for future residences and businesses. Encourage the inclusion of additional shade trees and landscaping for energy efficiency.</p> <p>Strategy 7. Educational Programs. Continue to:</p> <ul style="list-style-type: none"> <li>o Offer conservation/efficiency educational programs and leverage those available through the County and the Bay Regional Energy Network to serve all utility users.</li> <li>o Provide informational materials and host energy conservation workshops for businesses and residents.</li> <li>o Provide, or partner with other agencies to offer, educational materials, seminar and staff training on energy conservation/efficiency for those who design, build and manage building facilities, and for those who regulate building design and construction, per the City’s GreenBiz Program. In partnership with De Anza College develop a “Sustainable Building Practices” guide for Cupertino residents and businesses that builds upon the City’s Green Building Ordinance. The Guide should include information regarding current rebates and subsidies to make implementing a sustainable building more financially attractive with references back to the City, State, Federal and other web sites for up-to-date information. Provide, or partner with other agencies to offer, educational materials, seminars and a certification program for contractors and architects</li> </ul>

**LAND USE ALTERNATIVE A**

**TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>who have participated in “Sustainable Building” courses. Many of the curriculums are currently available at De Anza College. As an incentive for participating in the “Sustainable Building” program the City will maintain a “Sustainable Builder/ Developer” page on their current City website. This page will not be an endorsement of the individual or company listed, but a resource center for the community.</p> <ul style="list-style-type: none"> <li>o Establish and maintain an Energy Information Center or Kiosk at City Hall where information concerning energy issues, building standards, recycling and assistance is available.</li> </ul> <p>Strategy 8. Energy Cogeneration Systems. Encourage the use of energy cogeneration systems through the provision of an awareness program targeting the larger commercial and industrial users and public facilities.</p> <p>Strategy 9. Regulation of Building Design. Ensure designer, developers, applicants and builders meet the City’s Green Building Ordinance and CalGreen and encourage architects, building designers and contractors to exceed these requirements for new projects through the provision of incentives. Encourage either passive solar heating and/or dark plaster interior with a cover for swimming pools, cabanas and other related accessory uses where solar access is available. Encourage the use of renewable energy sources where feasible, and continue to offer energy audits and/or subvention programs that also advance community adoption of alternative energy technologies.</p> <p>Strategy 10. Use of Discretionary Development Permits (Use Permits). Require, as conditions of approval for new and renovated projects, the provision of energy conservation/efficiency applications, aligned with the City’s Green Building Ordinance and CalGreen.</p> <p>Strategy 11. Energy Efficient Transportation Modes. Continue to encourage alternative, fuel-efficient transportation modes such as “clean” multi-modal public transit, car and vanpooling, flexible work hours, safe routes to schools, and pedestrian and bicycle paths through community education and training, infrastructure investment, and financial incentives, including commuter benefits programs.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-4: Green Building Design. Set standards for the design and construction of energy and resource conserving/ efficient building (Green Building Design).</li> </ul> <p>Strategy 1. “Green Building” Program. Periodically review and revise the City’s Green Building Ordinance to ensure alignment with state CalGreen requirements for all major private and public projects that ensure reduction in energy and water use for new development through site selection and building design.</p>

**LAND USE ALTERNATIVE A**

**TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>Strategy 2. Building Energy Audits. Continue to offer and leverage regional partners’ programs to conduct building energy assessments for homes, commercial, industrial and city facilities and recommend improvements that lead to energy and cost savings opportunities for participants.</p> <p>Strategy 3. “Green Buildings” Evaluation Guide. Prepare a “Green Building” evaluation guide based upon the City’s Green Building Ordinance, CalGreen, and above listed “essential components” for use by the city staff when reviewing projects.</p> <p>Strategy 4. Staff Training. Continue to train appropriate staff in the design principles, costs, and benefits of sustainable building and landscape design. Encourage staff to attend outside trainings on these topics and attain relevant program certifications (e.g. Green Point Rater, LEED Accredited Professional).</p> <p>Strategy 5. “Green Buildings” Informational Seminars. Conduct and/or participate in “Green Building” informational seminars and workshops for members of the design and construction industry, land development, real estate sales, lending institutions, landscaping and design, the building maintenance industry and prospective project applicants. Consider modeling this program after the CERT program.</p> <p>Strategy 6. Public Communication. Further accelerate community adoption of green building practices through regularly featured articles in the Cupertino Scene, media outreach to the Courier and the Guide (San Jose Mercury), streaming sustainable building and other conservation courses or seminars on the City Channel, and make these recordings available at the Library.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-7: Use of Open Fires and Fireplaces. Discourage high pollution fireplace use.</li> </ul> <p>Strategy 1. Bay Area Air Quality Management District (BAAQMD) Literature. Continue to make available BAAQMD literature on reducing pollution from fireplace use.</p> <p>Strategy 2. Installation of New Fireplaces. Continue to prohibit the use of wood-burning fireplaces in new construction, except for Environmental Protection Agency Certified Woodstoves.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-28: Interagency Coordination. Continue to actively pursue interagency coordination for regional water supply problem solving.</li> <li>▪ Policy 5-29: Coordination of Local Conservation Policies with Regionwide Conservation Policies. Continue to coordinate citywide water conservation efforts with the Santa Clara Valley Water District (SCVWD), San Jose Water Company and Cal Water.</li> </ul> <p>Strategy. Water Conservation Measures. Implement the drought plans from the</p>

**LAND USE ALTERNATIVE A**

**TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>City’s water retailers (San Jose Water Company and California Water Company) and SCVWD when water conservation efforts are needed.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-30: Public Information Effort. Provide the public information regarding water conservation/efficiency techniques, including how paving and other impervious surfaces impact runoff.</li> </ul> <p>Strategy 1. Outreach. Participate in regional public outreach with other stormwater co-permittees. Also continue to send educational information and notices to households and businesses with water prohibitions, water allocations and conservation tips. Continue to offer featured articles in the Cupertino Scene and Cupertino Courier. Provide conservation Public Service Announcements on the City’s Channel and Cupertino Radio.</p> <p>Strategy 2. Demonstration Gardens. Include water-wise demonstration gardens in some parks where feasible as they are relandscaped or improved using drought tolerant native and non-invasive, non-native plants.</p> <p>Strategy 3. Master Gardeners. Work with the County Master Gardeners and other relevant stewardship partners to identify water-wise plant materials and irrigation methods for use in public and private areas. This information should be shared on the City’s Green web site and included in Cupertino Scene Environmental Section.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-31: Water Use Efficiency. Promote efficient use of water throughout the City.</li> </ul> <p>Strategy 1. Recycled Water. Encourage onsite water recycling including the use of cisterns to collect rain runoff and treated gray water systems.</p> <p>Strategy 2. Landscaping Plans. Per the City’s Greywater Ordinance, require water-efficient landscaping plans that incorporate the usage of recycled water for landscape irrigation as part of the development review process.</p> <p>Strategy 3. Water Conservation Programs. Continue to work with the Santa Clara Valley Water District, San Jose Water and Cal Water to undertake programs that promote water use efficiency for municipal, residential, and commercial customers. Continue activities that support the City’s Green Business Certification goals of long-term water conservation within City buildings, including installation of low-flow toilets and showers, installation of automatic shut off valves in lavatories and sinks and water efficient outdoor irrigation, per the City’s Water Efficient Landscaping Ordinance, Environmentally Preferable Procurement Policy, and the Parks &amp; Recreation Green Policies.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-38: Commercial/Industrial Recycling. Expand existing commercial and</li> </ul>



**LAND USE ALTERNATIVE A**

**TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>industrial recycling programs to meet and surpass AB 939 waste stream reduction goals.</p> <p>Strategy. Increase Recycling. Request that all commercial and industrial uses to increase their recycling efforts to help the city achieve its recycling goals.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-39: Residential Recycling. A comprehensive recycling program is to be provided for all residential and multi-family dwellings.</li> </ul> <p>Strategy 1. Coordination with Solid Waste and Recycling Contractor. Work closely with the City’s solid waste and recycling contractor to develop and implement efficient and effective recycling methods.</p> <p>Strategy 2. E-Waste Recycling Program. Continue/make permanent the e-waste recycling program.</p> <p>Strategy 3. Curbside Recycling of Yard Waste and Compostables. Include vegetable, fruit and other appropriate food items, as well as recycling of non-reusable batteries.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-40: On-site Garbage and Organic Collection Area Dedication. Modify existing, and require for new developments, on-site waste facility requirements for all multi-family residential, commercial and industrial land uses to have adequate covered area for a combination of garbage, recycling and organic collection.</li> </ul> <p>Strategy. Ordinance Revisions. Revise existing ordinances as needed relative to on-site waste facility requirements for all multi-family residential, commercial and industrial zoning districts to require adequate covered area for a combination of garbage, recycling and organic collection.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-41: Public Education. Promote the existing public education program regarding the reduction of solid waste disposal while encouraging recycling and organic diversion.</li> </ul> <p>Strategy 1. Recycling Program Information. Use the local television channel, the Cupertino Scene, the Internet and other available media to provide information to the residents about the objectives of the City’s recycling and organic diversion programs.</p> <p>Strategy 2. Reusable Products. Encourage use of reusable products.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-42: City Recycling and Organic Diversion. Encourage City staff to recycle and compost at all City facilities.</li> </ul> <p>Strategy 1. Recycling and Organic Diversion Opportunities. Provide collection bins and increase the number of existing recycling and organic bins at strategically located areas to facilitate disposal of recyclable and organic materials, including all City parks.</p> <p>Strategy 2. Schools and Institutions. Partner with schools/institutions in Cupertino</p>

## LAND USE ALTERNATIVE A

TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN

Type	Measure Number / Title	Consistency
Further Study Control Measures	<ul style="list-style-type: none"> <li>▪ FSM 1 – Adhesives and Sealants</li> <li>▪ FSM 2 – Reactivity in Coating and Solvents</li> <li>▪ FSM 3 – Solvent Cleaning and Degreasing Operations</li> <li>▪ FSM 4 – Emissions from Cooling Towers</li> <li>▪ FSM 5 – Equipment Leaks</li> <li>▪ FSM 6 – Wastewater from Coke Cutting</li> <li>▪ FSM 7 – SO<sub>2</sub> from Refinery Processes</li> <li>▪ FSM 8 – Reduce Emission from LPG, Propane, Butane, and other Pressurized Gases</li> </ul>	<p>to ensure that they understand and are adhering to the City’s recycling and organic diversion goals and providing adequate recycling and composting opportunities to staff and students.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-43: Re-distribution of Reusable Materials. Through public education, encourage residents and businesses to re-distribute reusable materials (e.g. garage sales, materials exchange).                             <ul style="list-style-type: none"> <li>Strategy 1. Dissemination of Recycling Information. Disseminate information to both businesses and residents regarding the benefits of recycling and further reducing the solid waste stream.</li> <li>Strategy 2. Use of the Internet. Set up a web site for the benefit of the public where information can be posted identifying the availability of recyclable materials and the location of exchanges.</li> <li>Strategy 3. Encouragement of Product Stewardship. Per the City’s Extended Producer Responsibility (EPR) policy, support EPR initiatives and statewide legislation that will give incentive for the redesign of products and packaging to facilitate the re-use of materials and to make the overall products less toxic and easier to recycle.</li> </ul> </li> <li>▪ Policy 5-44: Reuse of Building Materials. Encourage the recycling and reuse of building materials, including recycling materials generated by the demolition and remodeling of buildings.                             <ul style="list-style-type: none"> <li>Strategy 1. Post Demolition and Remodeling Projects. Encourage contractors to post demolition and remodeling projects on the Internet announcing the availability of potential reusable materials.</li> <li>Strategy 2. Public and Private Projects. Require contractors working on City projects to use recycled building materials and sustainably harvested wood products to the maximum extent possible and encourage them to do the same on private projects.</li> </ul> </li> </ul> <p>The majority of the Further Study control measures apply to sources regulated directly by BAAQMD. Because BAAQMD is the implementing agency, new and existing sources of stationary and area sources in the City would be required to comply with these additional further study control measures in the 2010 Bay Area Clean Air Plan.</p>

**LAND USE ALTERNATIVE A**

**TABLE 5.2-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
	<ul style="list-style-type: none"> <li>▪ FSM 9 – Greenhouse Gas Mitigation in BACT and TBACT Determinations</li> <li>▪ FSM 10 Further Reductions from Commercial Cooking Equipment</li> <li>▪ FSM 11 – Magnet Source Rule</li> <li>▪ FSM 12 – Wood Smoke</li> <li>▪ FSM 13 – Energy Efficiency and Renewable Energy</li> <li>▪ FSM 14 – Winery Fermentation</li> <li>▪ FSM 15 – Composting Operations</li> <li>▪ FSM 16 – Vanishing Oils and Rust Inhibitors</li> <li>▪ FSM 17 – Ferry System Expansion</li> <li>▪ FSM 18 – Greenhouse Gas Fee</li> </ul>	

Source: Bay Area Air Quality Management District, 2011 Revised, California Environmental Quality Act Air Quality Guidelines.

## LAND USE ALTERNATIVE A

### Regional Growth Projections for VMT and Population and Employment

Future development under Land Use Alternative A would result in additional sources of criteria air pollutants. Growth accommodated within the City would occur over a 20-year or longer time horizon. As a result, BAAQMD's approach to evaluating impacts from criteria air pollutants generated by long-term growth associated with a plan is done in comparison to BAAQMD's Air Quality Management Plan (AQMP) rather than a comparison of emissions to project-level significance thresholds. This is because BAAQMD's AQMP plans for growth in the SFBAAB are based on regional population and employment projections identified by ABAG and growth in VMT identified by VTA. Changes in regional, community-wide emissions in Cupertino could affect the ability of BAAQMD to achieve the air quality goals identified in the AQMP. Consequently, air quality impacts for a plan-level analysis are based on consistency with the regional growth projections.

As previously discussed under subheading "Attain Air Quality Standards" above, the additional residential population resulting from implementation of Land Use Alternative A would be within the regional population projections (7,827 fewer residents) and would not exceed the regional employment projections (667 less employees). Future growth under Land Use Alternative A would come incrementally over approximately 26 years and would be guided by a policy framework that is generally consistent with many of the principal goals and objectives established in regional planning initiatives for the Bay Area. Growth identified under Land Use Alternative A would be consistent with the regional planning objectives established for the Bay Area, which concentrates new development within infill sites. The General Plan includes policies and strategies, that once adopted would ensure coordination with regional agencies on regional planning initiatives. Policy 5-5, Air Pollution Effects of New Development, would require the City to minimize the air quality impacts of new development projects and the impacts affecting new development. Supporting Strategy 3 would require the City to assess the potential for air pollution effects of future land use and transportation planning, to ensure that planning decisions support regional goals of improving air quality. The Circulation Element also includes policies regarding coordination with regional transportation planning agencies. Policy 4-1, City Participation in Regional Transportation Planning, would require the City actively participate in developing regional approaches to meeting the transportation needs of the residents of the Santa Clara Valley.

Citywide VMT estimates derived from assumed 2040 land use under Land Use Alternative A were calculated by Hexagon Transportation Consultants, using the VTA model. Land uses in the City generate 897,419 VMT per day (10.47 miles per service population per day in 2013). Based on the future estimates of VMT per person for Cupertino as projected by the VTA model for year 2040, 1,063,199 VMT per day (11.02 miles per service population per day in 2040) would be generated in the City. Table 5.2-3 compares the projected increase in service population with the projected increase in VMT. As shown in this table, daily VMT in the Project Study Area would increase at a greater rate (18.5 percent) between 2013 and 2040 than would the service population of the Project Study Area (12.6 percent). However, BAAQMD's AQMP would require that the VMT increase be less than or equal to the projected population increase of the project. Land Use Alternative A would result in a higher VMT rate of growth than rate of service population growth. Consequently, impacts for the City of Cupertino would be *significant*.

**LAND USE ALTERNATIVE A**

**TABLE 5.2-3 COMPARISON OF THE CHANGE IN SERVICE POPULATION AND VMT FOR LAND USE ALTERNATIVE A**

Category	2013	2040 Land Use Alt. A	Change	Percent Change
Population	58,302	63,873	5,571	9.6%
Employment	27,387	32,593	5,206	19.0%
Total Service Population	85,689	96,466	10,777	12.6%
VMT/Day	897,419	1,063,199	165,780	18.5%

Notes: VMT is provided by Hexagon based on the VTA model.

*Applicable Regulations*

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations (CCR): Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code
- CARB Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- CARB Rule 2477 (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate
- BAAQMD, Regulation 2, Rule 2, New Source Review
- BAAQMD, Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
- BAAQMD Regulation 6, Rule 1, General Requirements
- BAAQMD Regulation 6, Rule 2, Commercial Cooking Equipment
- BAAQMD Regulation 7, Odorous Substances
- BAAQMD Regulation 8, Rule 3, Architectural Coatings
- BAAQMD Regulation 8, Rule 4, General Solvent and Surface Coatings Operations
- BAAQMD Regulation 8, Rule 7, Gasoline Dispensing Facilities
- BAAQMD Regulation 11, Rule 2, Asbestos, Demolition, Renovation and Manufacturing

While Land Use Alternative A would support the primary goals of the 2010 Bay Area Clean Air Plan, the buildout of Land Use Alternative A would conflict with the BAAQMD Bay Area Clean Air Plan goal for community-wide VMT to increase at a slower rate compared to population and employment growth. The rate of growth in VMT would exceed the rate of population and employment growth, resulting in a substantial increase in regional criteria air pollutant emissions in Cupertino. Consequently, impacts are *significant*.

## LAND USE ALTERNATIVE A

### Mitigation Measures

While the Land Use Alternative A would support the primary goals of the 2010 Bay Area Clean Air Plan, the buildout of the Land Use Alternative A would conflict with the BAAQMD Bay Area Clean Air Plan goal for community-wide VMT to increase at a slower rate compared to population and employment growth. The rate of growth in VMT would exceed the rate of population and employment growth, resulting in a substantial increase in regional criteria air pollutant emissions in Cupertino.

There are no additional mitigation measures available.

The Plan Bay Area aims to improve transportation efficiency and reduce regional infrastructure costs in the region. Policies and development standards in the Land Use Alternative A would facilitate continued City participation/cooperation with BAAQMD and VTA to achieve regional air quality improvement goals, promote energy conservation design and development techniques, encourage alternative transportation modes, and implement transportation demand management strategies. However, due to the level of growth forecast in the city and the programmatic nature of the Land Use Alternative A, no additional mitigating policies or development standards are available and impacts are considered *significant and unavoidable*.

**Significance With Mitigation:** Significant and unavoidable.

---

<b>AQ-2</b>	<b>Implementation of Land Use Alternative A would violate any air quality standard or contribute substantially to an existing or projected air quality violation.</b>
-------------	---

---

BAAQMD has identified thresholds of significance for criteria pollutant emissions and criteria air pollutant precursors, including Reactive Organic Gases (ROG), Nitric Oxide (NO), PM<sub>10</sub> and PM<sub>2.5</sub>. Development projects below the significance thresholds are not expected to generate sufficient criteria pollutant emissions to violate any air quality standard or contribute substantially to an existing or projected air quality violation. According to BAAQMD's CEQA Guidelines, long-range plans (e.g. general plan, redevelopment plans, specific plans, area plans, community plans, regional plans, congestion management plans, etc.) present unique challenges for assessing impacts. Due to the SFBAAB's nonattainment status for ozone and PM and the cumulative impacts of growth on air quality, these plans almost always have significant, unavoidable adverse air quality impacts.

### Operational Emissions

Although BAAQMD's CEQA Air Quality Guidelines only require an emissions inventory of criteria air pollutants for project-level analyses, an inventory of criteria air pollutants was generated for Land Use Alternative A, since enough information regarding the buildout of the General Plan is available and can be used to identify the magnitude of emissions from buildout of Land Use Alternative A. Table 5.2-4 identifies the emissions associated with buildout of Land Use Alternative A. Subsequent environmental review of development projects would be required to assess potential impacts under BAAQMD's project-level thresholds.

**LAND USE ALTERNATIVE A**

**TABLE 5.2-4 COMMUNITY-WIDE CRITERIA AIR POLLUTANTS GENERATED BY LAND USE ALTERNATIVE A**

Category	Criteria Air Pollutants (average lbs/day)			
	ROG	NO <sub>x</sub>	Exhaust PM <sub>10</sub>	Exhaust PM <sub>2.5</sub>
Transportation <sup>a</sup>	64	364	124	54
Energy <sup>b</sup>	53	468	37	37
Area Sources <sup>c</sup>	1,472	752	54	54
<b>Total</b>	<b>1,589</b>	<b>1,584</b>	<b>215</b>	<b>145</b>
Change from 2013 Land Uses	167	1,327	182	122
BAAQMD Average Daily Project-Level Threshold	54	54	82	54
<b>Exceeds Average Daily Threshold</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Total Tons per Year (tpy)	289 tpy	280 tpy	38 tpy	26 tpy
Change from 2013 Land Uses	30 tpy	23 tpy	5 tpy	3 tpy
BAAQMD Annual Project-Level Threshold	10 tpy	10 tpy	15 tpy	10 tpy
<b>Exceeds Annual Threshold</b>	<b>Yes</b>	<b>Yes</b>	No	No

Note: Emissions may note total to 100 percent due to rounding.

a. Transportation. VMT is based on data provided by Hexagon, based on VTA model for Cupertino and modeled with EMFAC2011-PL for running exhaust emissions using 2035 emission rates (note: 2040 emissions rates are not available). VMT is multiplied by 347 days/year to account for reduced traffic on weekends and holidays.

b. Energy. Based on three-year average (2012–2010) of energy use provided by Pacific Gas & Electric (PG&E) and forecast based on Land Use Alternative A housing units (residential), employment (non-residential), and service population (City) projections. The nonresidential sector includes direct access customers, county facilities, and other district facilities within the City boundaries.

c. Area Sources – Off-road Emissions. Generated using OFFROAD2007. Estimated based on population (Landscaping), employment (Light Commercial Equipment), and construction building permits (Construction) for Cupertino as a percentage of Santa Clara County. Annual construction emissions forecasts are assumed to be similar to historic levels. Forecasts for landscaping equipment use are based on Land Use Alternative A population projections, and for light commercial equipment use are based on Land Use Alternative A employment projections. Excludes BAAQMD-permitted sources. ROG emissions from consumer product use based on the emissions rates in CalEEMod 2013.2.2. Daily construction emissions multiplied by 347 days/year to account for reduced/limited construction activity on weekends and holidays. Excludes fugitive emissions from construction sites.

The General Plan includes policies and strategies that, once adopted, would reduce criteria air pollutants from development projects to the maximum extent practicable. Within the Land Use/ Community Design Element, Policy 2-2, Connections Between Special Areas, Employment Centers and the Community and supporting strategies would require the city to provide strong connections between the mixed-use Special Areas, employment centers, and the surrounding community. Policy 2-12, Long Term Growth Boundary, would require the City to allow modification of the long-term growth boundary only in conjunction with a comprehensive review of the City’s General Plan. Policy 2-22, Jobs/Housing Balance and supporting strategies, require the City to strive for a more balanced ratio of jobs and housing units. Policy 2-26, Heart of the City Special Area, and supporting strategies, require the City to create a positive and memorable image along Stevens Creek Boulevard of mixed-use development; enhanced activity gateways and nodes; and safe and efficient circulation and access for all modes of transportation. Policy 4-5, Pedestrian Access, require the City to create pedestrian access between new subdivisions and school sites. Review existing neighborhood circulation plans to improve safety and access for pedestrians and bicyclists to school sites,

## LAND USE ALTERNATIVE A

including completing accessible network of sidewalks and paths. Within the Environmental Resources/Sustainability Element, Policy 5-1, Principles of Sustainability, Policy 5-3, Conservation and Efficient Use of Energy Resources, Policy 5-4, Green Building Design, require the City to apply the principles of sustainability, conserve energy, set standards for the design and construction of energy and resource conserving/ efficient building (Green Building Design). Policy 5-6, Air Pollution Effects of Existing Development, and supporting strategies require the City to minimize the air quality impacts of existing development through citywide public education program regarding the implications of the Clean Air Act expanding home occupations, increase planting of trees on City property and encourage the practice on private property, and maintain City use of fuel-efficient and low polluting vehicles. Policy 5-7, Use of Open Fires and Fireplaces, would require the City to discourage high pollution fireplace use. Within the Circulation Element, Policy 4-1, City Participation in Regional Transportation Planning, and supporting strategies would require the City to participate actively in developing regional approaches to meeting the transportation needs of the residents of the Santa Clara Valley and work closely with neighboring jurisdictions and agencies responsible for roadways, transit facilities and transit services in Cupertino. Policy 4-3, Reduced Reliance on the Use of Single-Occupant Vehicles, and supporting strategies, require the City to promote a general decrease in reliance on private, mostly single-occupant vehicles (SOV) by encouraging attractive alternatives by encouraging the use of alternatives to the SOV including increased car-pooling, use of public transit, bicycling and walking; TSM programs; employers to use the internet to reduce commute travel; schools, particularly at the college and high school levels, to make maximum use of the internet to limit the need to travel to and from the campus, new commercial developments to provide shared office facilities, cafeterias, day-care facilities, lunchrooms, showers, bicycle parking, home offices, shuttle buses to transit facilities and other amenities that encourage the use of transit, bicycling, walking or telecommuting as commute modes to work. Provide pedestrian pathways and orient buildings to the street to encourage pedestrian activity. Require the use the Cupertino Scene and other media to provide educational material on alternatives to the SOV and to continue to work with the City Bicycle/Pedestrian Advisory Committee, community groups and residents to eliminate hazards and barriers to bicycle and pedestrian transportation.

Despite implementation of the existing and amended Project policies and strategies, as identified in Table 5.2-1, criteria air pollutant emissions associated with buildout of Land Use Alternative A would generate a substantial increase in emissions that exceeds the BAAQMD regional significance thresholds (ROG, NO<sub>x</sub>, and PM<sub>10</sub>). Criteria air pollutant emissions would be generated from on-site area sources (e.g. landscaping fuel, consumer products), vehicle trips generated by the project, and energy use (e.g. natural gas used for cooking and heating). This is considered a *significant* impact.

### *Applicable Regulations*

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 CCR: Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code
- CARB Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools



## LAND USE ALTERNATIVE A

- CARB Rule 2477 (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate
- BAAQMD, Regulation 2, Rule 2, New Source Review
- BAAQMD, Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
- BAAQMD Regulation 6, Rule 1, General Requirements
- BAAQMD Regulation 6, Rule 2, Commercial Cooking Equipment
- BAAQMD Regulation 7, Odorous Substances
- BAAQMD Regulation 8, Rule 3, Architectural Coatings
- BAAQMD Regulation 8, Rule 4, General Solvent and Surface Coatings Operations
- BAAQMD Regulation 8, Rule 7, Gasoline Dispensing Facilities
- BAAQMD Regulation 11, Rule 2, Asbestos, Demolition, Renovation and Manufacturing

### Mitigation Measures

Future development under Land Use Alternative A would result in a substantial long-term increase in criteria air pollutants over the 26-year General Plan horizon. Criteria air pollutant emissions would be generated from on-site area sources (e.g. landscaping fuel, consumer products), vehicle trips generated by the project, and energy use (e.g. natural gas used for cooking and heating).

The General Plan includes policies and strategies, listed above and under Impact AQ-1, that once adopted would minimize emissions to the extent feasible; however, there are no additional measures available to mitigate this impact due to the level of growth forecast in the city.

Compliance with the policies and strategies of the Land Use Alternative A would reduce operational emissions from development under the Land Use Alternative A to the maximum extent practicable. In addition, Mitigation Measure AQ-4a (for new sources of TACs), would also reduce criteria air pollutants associated with light industrial land uses within the city. Future development in Cupertino could generate operational emissions in excess of the BAAQMD significance thresholds. Operational emissions from future development would be determined during project-level CEQA review. The total criteria air pollutant emissions from operation of future development projects under Land Use Alternative A would be substantial and would contribute to increases in concentrations of air pollutants, which could contribute to ongoing violations of air quality standards. It should be noted that the identification of this program-level impact does not preclude the finding of less-than-significant impacts for subsequent projects that comply with BAAQMD screening criteria or meet applicable thresholds of significance. However, due to the programmatic nature of the Land Use Alternative A, no additional mitigating policies are available, and the impact is considered *significant and unavoidable*.

**Significance With Mitigation:** Significant and unavoidable.

### Construction Emissions

BAAQMD's plan-level guidelines do not require an evaluation of construction emissions for plan-level projects. There is no proposed development under Land Use Alternative A at this time. Future development

## LAND USE ALTERNATIVE A

proposals under Land Use Alternative A would be subject to separate environmental review pursuant to CEQA in order to identify and mitigate potential air quality impacts. Because the details regarding future construction activities are not known at this time, including phasing of future individual projects, construction duration and phasing, and preliminary construction equipment, construction emissions are evaluated qualitatively in accordance with BAAQMD's plan-level guidance.

Construction emissions associated with individual development projects under Land Use Alternative A would generate an increase in criteria air pollutants and TACs. BAAQMD has developed project-level thresholds for construction activities. Subsequent environmental review of future development projects would be required to assess potential impacts under BAAQMD's project-level thresholds. Construction emissions from buildout of future projects within Cupertino would primarily be 1) exhaust emissions from off-road diesel-powered construction equipment; 2) dust generated by demolition, grading, earthmoving, and other construction activities; 3) exhaust emissions from on-road vehicles and 4) off-gas emissions of ROG's from application of asphalt, paints, and coatings.

The General Plan includes policies and strategies, that once adopted would minimize impacts during construction. Within the Environmental Resources/Sustainability Element, Policy 5-5, Air Pollution Effects of New Development, would require the City to minimize the air quality impacts of new development projects and the impacts affecting new development. Strategy 2, Dust Control, directs the City to require water application to non-polluting dust control measures during demolition and the duration of the construction period. Within the Land Use/Community Design Element, Policy 2-51, Rural Improvement Standards in Hillside Areas, directs the City to require rural improvement standards in hillside areas to preserve the rural character of the hillsides. Strategy 1, Mass Grading in New Construction, would require the City to follow natural land contour and avoid mass grading in new construction, especially in flood hazard or hillside areas. Grading large, flat areas shall be avoided.

Existing federal, State, and local regulations, and policies and strategies of Land Use Alternative A described throughout this chapter protect local and regional air quality. Continued compliance with these regulations and implementation of General Plan policies and strategies, would reduce construction-related impacts to the extent feasible. However, if uncontrolled, fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>) levels downwind of actively disturbed areas during construction or overlapping construction activities could violate air quality standards or contribute substantially to an existing or projected air quality violation and expose sensitive receptors to elevated concentrations of pollutants during construction activities. Consequently, impacts are *significant*.

### *Applicable Regulations*

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 CCR: Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code
- CARB Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools

## LAND USE ALTERNATIVE A

- CARB Rule 2477 (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate
- BAAQMD, Regulation 2, Rule 2, New Source Review
- BAAQMD, Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
- BAAQMD Regulation 6, Rule 1, General Requirements
- BAAQMD Regulation 6, Rule 2, Commercial Cooking Equipment
- BAAQMD Regulation 7, Odorous Substances
- BAAQMD Regulation 8, Rule 3, Architectural Coatings
- BAAQMD Regulation 8, Rule 4, General Solvent and Surface Coatings Operations
- BAAQMD Regulation 8, Rule 7, Gasoline Dispensing Facilities
- BAAQMD Regulation 11, Rule 2, Asbestos, Demolition, Renovation and Manufacturing

### Mitigation Measures

**Mitigation Measure AQ-2a:** As part of the City's development approval process, the City shall require applicants for future development projects to comply with the current Bay Area Air Quality Management District's basic control measures for reducing construction emissions of PM<sub>10</sub>.

**Mitigation Measure AQ-2b:** As part of the City's development approval process the City shall require applicants for future development projects that could generate emissions in excess of the Bay Area Air Quality Management District's (BAAQMDs) current significance thresholds during construction, as determined by project-level environmental review, when applicable, to implement the current BAAQMD construction mitigation measures (e.g. Table 8-3 of the BAAQMD CEQA Guidelines) or any construction mitigation measures subsequently adopted by the BAAQMD.

Mitigation Measure AQ-2a would require adherence to BAAQMD's basic control measures for fugitive dust control and would ensure impacts from fugitive dust generated during construction activities are less than significant. However, applicants for future development in Cupertino could generate construction exhaust emissions in excess of the BAAQMD significance thresholds. An analysis of emissions generated from the construction of future projects under the General Plan would be required to evaluate emissions compared to BAAQMD's project-level significance thresholds during individual environmental review. It should be noted that the identification of this program-level impact does not preclude the finding of less-than-significant impacts for subsequent projects that comply with BAAQMD screening criteria or meet applicable thresholds of significance. However, due to the programmatic nature of the Land Use Alternative A, no additional mitigating policies are available and the impact is considered *significant and unavoidable*.

**Significance With Mitigation:** Significant and unavoidable.

---

## LAND USE ALTERNATIVE A

---

**AQ-3 Implementation of Land Use Alternative A would result in a cumulatively considerable net increase of any criteria pollutant for which the alternative region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors).**

---

This section analyzes potential impacts related to air quality that could occur from the buildout associated with Land Use Alternative A in combination with the regional growth within the air basin. The SFBAAB is currently designated a nonattainment area for California and National O<sub>3</sub>, California and National PM<sub>2.5</sub>, and California PM<sub>10</sub> AAQS. At a plan-level, air quality impacts are measured by the potential for a project to exceed BAAQMD's significance criteria and contribute to the State and Federal nonattainment designations in the SFBAAB. Any project that produces a significant project-level regional air quality impact in an area that is in nonattainment adds to the cumulative impact. Pursuant to the CEQA Guidelines Section 15130(b)(1), cumulative impacts can be based on the growth projections in a local General Plan. Consequently, the analysis in this chapter is Land Use Alternative A's contribution to cumulative impacts. Land Use Alternative A's contribution to cumulative air quality impacts are identified under the impact discussion in Impact AQ-1 and AQ-2. The analyses in these sections identify whether Land Use Alternative A would conflict with the 2010 Bay Area Clean Air Plan (Impact AQ-1) or generate a substantial increase in criteria air pollutants (Impact AQ-2). Land Use Alternative A would result in a higher VMT rate of growth than rate of service population growth and would generate a substantial increase in criteria air pollutant emissions from construction and operational activities. Consequently, Impact AQ-1 and AQ-2 identified a regional air quality impact as *significant*.

### *Applicable Regulations*

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 CCR: Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code
- CARB Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- CARB Rule 2477 (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate
- BAAQMD, Regulation 2, Rule 2, New Source Review
- BAAQMD, Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
- BAAQMD Regulation 6, Rule 1, General Requirements
- BAAQMD Regulation 6, Rule 2, Commercial Cooking Equipment
- BAAQMD Regulation 7, Odorous Substances
- BAAQMD Regulation 8, Rule 3, Architectural Coatings
- BAAQMD Regulation 8, Rule 4, General Solvent and Surface Coatings Operations

## LAND USE ALTERNATIVE A

- BAAQMD Regulation 8, Rule 7, Gasoline Dispensing Facilities
- BAAQMD Regulation 11, Rule 2, Asbestos, Demolition, Renovation and Manufacturing

### Mitigation Measures

There are no additional measures available to mitigate this impact.

Criteria air pollutant emissions generated by land uses within Land Use Alternative A would exceed the BAAQMD thresholds (see AQ-2). Air quality impacts identified in Impact AQ-1 and AQ-2 are Land Use Alternative A's contribution to cumulative air quality impacts in the SFBAAB. Mitigation measures proposed to reduce Project-related emissions would reduce impacts to the extent feasible. Due to the programmatic nature of Land Use Alternative A, no additional mitigating policies or development standards are available. Air pollutant emissions associated with Land Use Alternative A would result in a cumulatively considerable contribution to air quality impacts, and Land Use Alternative A's impacts would be *significant and unavoidable*.

**Significance With Mitigation:** Significant and unavoidable.

---

**AQ-4                      Implementation of Land Use Alternative A would expose sensitive receptors to substantial concentrations of air pollution.**

---

### Carbon Monoxide Hotspots

Areas of vehicle congestion have the potential to create pockets of Carbon Monoxide (CO) called hotspots. These pockets have the potential to exceed the State one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9.0 ppm. Because CO is produced in the greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds.

Land Use Alternative A includes policies and strategies to encourage bicycle, pedestrian, and transit use to tie land use and transportation, which ensures consistency with VTA's 2013 Congestion Management Program. Within the Circulation Element, Policy 4-4, Improve Pedestrian and Bicycle Circulation Throughout Cupertino, would require the City to Expand city-wide pedestrian and bicycle circulation in order to provide improved recreation, mobility and safety. Supporting strategies include implementing the Pedestrian Guidelines; considering developing safe, walk-able sidewalks and paths; promoting the Safe Route to Schools program; providing additional time for pedestrians to cross streets and other pedestrian improvements to roadways to make them more pedestrian friendly and less auto-centric; and implementing the Bicycle Plan. Policy 4-6, Regional Trail Development, would require the City to continue to plan and provide for a comprehensive system of trails and pathways consistent with regional systems, including the Bay Trail, Stevens Creek Special Area and Ridge Trail and with the policies contained in the Land Use and Community Design Element. Policy 4-7, Increased Use of Public Transit, would require the City to support and encourage the increased use of public transit. Policy 4-9, Traffic Service and Pedestrians Needs, would

## LAND USE ALTERNATIVE A

require the City to balance the needs of pedestrians with desired traffic service. Where necessary and appropriate, allow a lowered LOS standard to better accommodate pedestrians on major streets and at specific intersections. Policy 4-12, Street Improvement Planning, would require the City to plan street improvements such as curb cuts, sidewalks, bus stop turnouts, bus shelters, light poles, benches and trash containers as an integral part of a project to ensure an enhanced streetscape and the safe movement of people and vehicles with the least possible disruption to the streetscape. Policy 4-13, Safe Parking Lots, directs the City to require parking lots that are safe for pedestrians. Policy 4-15, School Traffic Impacts on Neighborhoods, would require the City to minimize the impact of school drop-off, pick-up and parking on neighborhoods.

As demonstrated by the policies above, Land Use Alternative A would be consistent with the VTA's 2013 Congestion Management Program.<sup>5</sup> In addition, the SFBAAB has been designated attainment under both the national and California AAQS for CO. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—in order to generate a significant CO impact.<sup>6</sup> Land Use Alternative A would not increase traffic volumes at affected intersections by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited. Trips associated with Land Use Alternative A would not exceed the screening criteria of the BAAQMD. Therefore, Land Use Alternative A would not have the potential to substantially increase CO hotspots at intersections in Cupertino. Localized air quality impacts related to mobile-source emissions would therefore be *less than significant*.

## Toxic Air Contaminants – New Sources of Air Toxics

Various industrial and commercial processes (e.g. manufacturing, dry cleaning) allowed under the current General Plan would be expected to release TACs. TAC emissions generated by stationary and point sources of emissions within the SFBAAB are regulated and controlled by BAAQMD. Emissions of TAC from mobile sources are regulated by statewide rules and regulations, not by BAAQMD, and have the potential to generate substantial concentrations of air pollutants.

Existing land uses that have the potential to generate substantial stationary sources of emissions that would require a permit from BAAQMD for emissions of TACs include industrial land uses, such as chemical processing facilities, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. Emissions of stationary source TACs would be controlled by BAAQMD through permitting and would be subject to further study and health risk assessment prior to the issuance of any necessary air quality permits under BAAQMD Regulation 2, Rule 2, New Source Review, and Rule 5, New Source Review of Toxic Air Contaminants.

---

<sup>5</sup> Santa Clara Valley Transportation Authority (VTA), 2013. 2013 Congestion Management Program <http://www.vta.org/sfc/servlet.shepherd/version/download/068A0000001Q7pt>, October.

<sup>6</sup> Bay Area Air Quality Management District (BAAQMD), 2011 (Revised), *CEQA Air Quality Guidelines*.

**LAND USE ALTERNATIVE A**

Mobile sources of TACs are not regulated by BAAQMD. The primary mobile source of TACs within the City of Cupertino is truck idling and use of off-road equipment at warehousing operations. Warehousing operations could generate a substantial amount of Diesel Particulate Matter (DPM) emissions from off-road equipment use and truck idling. In addition, some warehousing and industrial facilities may include use of transport refrigeration units (TRUs) for cold storage. New land uses in the City of Cupertino that are permitted under Land Use Alternative A that use trucks, including trucks with TRUs, could generate an increase in DPM that would contribute to cancer and non-cancer health risk in the SFBAAB. Impacts could occur at facilities that permit 100 or more truck trips per day or 40 or more trucks with TRUs within 1,000 feet of a sensitive land use. These new land uses could be near existing sensitive receptors within and outside the City of Cupertino. In addition, trucks would travel on regional transportation routes through the SFBAAB contributing to near-roadway DPM concentrations.

To reduce community risk and hazards from placement of new sources of air toxics, implementation of the General Plan policies and strategies would minimize impacts. Within the Environmental Resources/Sustainability Element, Policy 5-5, Air Pollution Effects of New Development, would require the City to minimize the air quality impacts of new development projects and the impacts affecting new development. Supporting strategies requiring the City to review projects for potential generation of toxic air contaminants at the time of approval and confer with BAAQMD on controls needed if impacts are uncertain and assess the potential for air pollution effects of future land use and transportation planning, and ensure that planning decisions support regional goals of improving air quality. Policy 5-6, Air Pollution Effects of Existing Development, require the City to minimize the air quality impacts of existing development. Within the Land Use/Community Design Element, Policy 2-8, Neighborhood Compatibility, would require the City to minimize potential conflicts with residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, limitations, site design and other appropriate measures. Create zoning or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through measures such as: daylight planes for single-family development, minimum setback standards, landscape screening, acoustical analysis, location and orientation of service areas away from residential uses and limitations on hours of operation.

General Plan Policy 5-5, Air Pollution Effects of New Development, and the accompanying Strategy 1, Toxic Air Contaminants, would require that projects that generate new sources of TACs would be required to reduce emissions. However, future projects would need to ensure that they could achieve BAAQMD's performance standards (ten in one million [10E-06], PM<sub>2.5</sub> concentrations exceed 0.3 µg/m<sup>3</sup>, or the appropriate noncancer hazard index exceeds 1.0) and consequently, mitigation is needed to ensure that new projects are evaluated in accordance with BAAQMD's CEQA Guidelines. Community risk and hazard impacts are *significant*.

**Toxic Air Contaminants – Siting of Sensitive Receptors**

Regulation of land uses falls outside California Air Resources Board (CARB) jurisdiction, CARB developed and approved the Air Quality and Land Use Handbook: A Community Health Perspective (2005) to provide guidance regarding the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. This

## LAND USE ALTERNATIVE A

guidance document was developed to assess compatibility and associated health risks when placing sensitive receptors near existing pollution sources.

CARB's recommendations on the siting of new sensitive land uses were based on a compilation of recent studies that evaluated data on the adverse health effects ensuing from proximity to air pollution sources. The key observation in these studies is that proximity to air pollution sources substantially increases both exposure and the potential for adverse health effects. There are three carcinogenic toxic air contaminants that constitute the majority of the known health risks from motor vehicle traffic, DPM from trucks, and benzene and 1,3-butadiene from passenger vehicles. Table 4.2-9, in Chapter 4.2, Air Quality, of this Draft EIR, CARB Recommendations for Siting New Sensitive Land Uses, in Chapter 4.2, Air Quality, of this Draft EIR, shows a summary of CARB recommendations for siting new sensitive land uses within the vicinity of air-pollutant sources. Recommendations in Table 4.2-9 are based on data that show that localized air pollution exposures can be reduced by as much as 80 percent by following CARB minimum distance separations.

Local air pollution sources in the City of Cupertino include mobile (roadways, including SR 85 and I-280) and stationary/area sources (industrial, warehousing, commercial/retail, institutional, and residential land uses). Figure 4.2-3, in Chapter 4.2, Air Quality, of this Draft EIR, identifies several major areas of the city that have the potential to expose sensitive receptors to substantial pollutant concentrations within 1,000 feet of the sources identified.

- Stationary sources in Cupertino were identified using BAAQMD's Stationary Source Screening Analysis Tool. There are approximately 86 potential stationary sources in or near the City of Cupertino. Of these sources, approximately 4 are industrial uses, 25 emergency diesel generators, 4 auto body repair and refinishing facilities, 23 gas stations, 13 dry cleaners, and 17 miscellaneous sources (e.g. technology companies, city services, printing shops, furniture refinishing, etc.).
- High-volume roadways with over 10,000 vehicles per day were also mapped using the California Environmental Health Tracking Program's (CEHTP's) Traffic Linkage web service and 2040 traffic projections from the traffic analysis prepared by Hexagon Transportation Consultants.<sup>7</sup> A total of 13 high volume roadways were identified within 1,000 feet of the City, including I-280 and SR 85.

The Union Pacific (UP) rail line is included in Figure 4.2-3 since UP uses diesel-fueled locomotives, which are a source of TAC emissions. Figure 4.2-3 also identifies a 500-foot screening area around high-volume roadways and a 200-foot screening area for rail lines. Because these are screening distances, refined analysis of the effects from many of the high volume roadways and rail lines may show much lower potential TAC exposure and smaller buffer zones. A refined analysis or site-specific health risk assessment should be conducted for all new sensitive sources that are sited within this area to determine the actual health impact.

The General Plan includes policies and strategies, that once adopted would minimize emissions. Within the Environmental Resources/Sustainability Element, Policy 5-5: Air Pollution Effects of New Development,

---

<sup>7</sup> California Environmental Health Tracking Program (CEHTP), 2013. Traffic linkage web service. [http://www.ehib.org/traffic\\_tool.jsp](http://www.ehib.org/traffic_tool.jsp).



**LAND USE ALTERNATIVE A**

would require the City to minimize the air quality impacts of new development projects and the impacts affecting new development. Supporting strategy 3 and 4 require the City to assess the potential for air pollution effects of future land use and transportation planning, and ensure that planning decisions support regional goals of improving air quality, and evaluate the relationship of sensitive receptors, such as convalescent hospitals and residential uses, to pollution sources through the environmental assessment of new development. Within the Health and Safety Element, Policy 6-28, Proximity of Residents to Hazardous Materials, would require the City to assess future residents' exposure to hazardous materials when new residential development of childcare facilities are proposed in existing industrial and manufacturing areas. Do not allow residential development if such hazardous conditions cannot be mitigated to an acceptable level of risk. In addition, Land Use Element Policy 2-8, Neighborhood Compatibility, would require the City to minimize potential conflicts with residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, limitations, site design and other appropriate measures. Create zoning or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through measures such as: daylight planes for single-family development, minimum setback standards, landscape screening, acoustical analysis, location and orientation of service areas away from residential uses and limitations on hours of operation.

Implementation of General Plan Policy 5-5, Air Pollution Effects of New Development, its accompanying Strategy 4, Environmental Review, and Policy 6-28, Proximity of Residents to Hazardous Materials, would reduce impacts from placement of sensitive receptors proximate to major sources of air pollution. However, future projects proximate to major sources of air pollution (i.e. when within 1,000 feet of an industrial area) would need to ensure that they could achieve BAAQMD's performance standards (ten in one million [10E-06],  $PM_{2.5}$  concentrations exceed  $0.3 \mu\text{g}/\text{m}^3$ , or the appropriate noncancer hazard index exceeds 1.0) and consequently, mitigation is needed to ensure that when new projects are evaluated in accordance with BAAQMD's CEQA Guidelines. Consequently, impacts are *significant*.

*Applicable Regulations*

- CARB Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- CARB Rule 2477 (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate
- BAAQMD, Regulation 2, Rule 2, New Source Review
- BAAQMD, Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
- BAAQMD Regulation 6, Rule 1, General Requirements
- BAAQMD Regulation 6, Rule 2, Commercial Cooking Equipment
- BAAQMD Regulation 7, Odorous Substances
- BAAQMD Regulation 8, Rule 3, Architectural Coatings
- BAAQMD Regulation 8, Rule 4, General Solvent and Surface Coatings Operations

## LAND USE ALTERNATIVE A

- BAAQMD Regulation 8, Rule 7, Gasoline Dispensing Facilities
- BAAQMD Regulation 11, Rule 2, Asbestos, Demolition, Renovation and Manufacturing

### Mitigation Measures

**Mitigation Measure AQ-4a:** Applicants for future non-residential land uses within the city that: 1) have the potential to generate 100 or more diesel truck trips per day or have 40 or more trucks with operating diesel-powered TRUs, and 2) are within 1,000 feet of a sensitive land use (e.g. residential, schools, hospitals, nursing homes), as measured from the property line of Land Use Alternative A to the property line of the nearest sensitive use, shall submit a health risk assessment (HRA) to the City of Cupertino prior to future discretionary Project approval. The HRA shall be prepared in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment and the Bay Area Air Quality Management District. If the HRA shows that the incremental cancer risk exceeds ten in one million (10E-06),  $PM_{2.5}$  concentrations exceed  $0.3 \mu\text{g}/\text{m}^3$ , or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that Best Available Control Technologies for Toxics (T-BACTs) are capable of reducing potential cancer and noncancer risks to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include but are not limited to:

- Restricting idling on-site.
- Electrifying warehousing docks.
- Requiring use of newer equipment and/or vehicles.
- Restricting offsite truck travel through the creation of truck routes.

T-BACTs identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site development plan as a component of Land Use Alternative A.

**Mitigation Measure AQ-4b:** Applicants for residential and other sensitive land use projects (e.g. hospitals, nursing homes, day care centers) in Cupertino within 1,000 feet of a major sources of TACs (e.g. warehouses, industrial areas, freeways, and roadways with traffic volumes over 10,000 vehicle per day), as measured from the property line of the project to the property line of the source/edge of the nearest travel lane, shall submit a health risk assessment (HRA) to the City of Cupertino prior to future discretionary Project approval. The HRA shall be prepared in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment (OEHHA) and the Bay Area Air Quality Management District. The latest OEHHA guidelines shall be used for the analysis, including age sensitivity factors, breathing rates, and body weights appropriate for children age 0 to 16 years. If the HRA shows that the incremental cancer risk exceeds ten in one million (10E-06),  $PM_{2.5}$  concentrations exceed  $0.3 \mu\text{g}/\text{m}^3$ , or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that mitigation measures are capable of reducing potential cancer and non-cancer risks to an acceptable level (i.e. below ten in one million or a hazard index of 1.0), including appropriate enforcement mechanisms. Measures to reduce risk may include but are not limited to:

## LAND USE ALTERNATIVE A

- Air intakes located away from high volume roadways and/or truck loading zones.
- Heating, ventilation, and air conditioning systems of the buildings provided with appropriately sized Maximum Efficiency Rating Value (MERV) filters.

Mitigation measures identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site development plan as a component of Land Use Alternative A. The air intake design and MERV filter requirements shall be noted and/or reflected on all building plans submitted to the City and shall be verified by the City's Planning Division.

Buildout of Land Use Alternative A could result in new sources of criteria air pollutant emissions and/or toxic air contaminants near existing or planned sensitive receptors. General Plan policies would reduce concentrations of TACs and PM<sub>2.5</sub> generated by new development. Review of projects by BAAQMD for permitted sources of air toxics (e.g. industrial facilities, dry cleaners, and gasoline dispensing facilities) would ensure health risks are minimized. Mitigation Measure AQ-4a would ensure that mobile sources of TACs not covered under BAAQMD permits are considered during subsequent project-level environmental review. Development of individual projects would be required to achieve the incremental risk thresholds established by BAAQMD, and impacts would be *less than significant*. Placement of new sensitive receptors near major sources of TACs and PM<sub>2.5</sub> could expose people to substantial pollutant concentrations. General Plan policies would reduce concentrations of criteria air pollutant emissions and air toxics generated by new development. Mitigation Measure AQ-4b would ensure that placement of sensitive receptors near major sources of air pollution would achieve the incremental risk thresholds established by BAAQMD, and impacts would be *less than significant*.

**Significance With Mitigation:** Less than significant.

---

**AQ-5**                    **Implementation of Land Use Alternative A would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).**

---

Sources of objectionable odors may occur within the City. BAAQMD's Regulation 7, Odorous Substances, places general limitations on odorous substances and specific emission limitations on certain odorous compounds. In addition, odors are also regulated under BAAQMD Regulation 1, Rule 1-301, Public Nuisance, which states that "no person shall discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or the public; or which endangers the comfort, repose, health or safety of any such persons or the public, or which causes, or has a natural tendency to cause, injury or damage to business or property." Under BAAQMD's Rule 1-301, a facility that receives three or more violation notices within a 30 day period can be declared a public nuisance.

There are two types of odor impacts: 1) siting sensitive receptors near nuisance odors, and 2) siting new sources of nuisance odors near sensitive receptors. Table 4.2-9, in Chapter 4.2, Air Quality, of this Draft

## LAND USE ALTERNATIVE A

EIR, identifies screening distances from potential sources of objectionable odors within the SFBAAB. Odors from these types of land uses are regulated under BAAQMD Regulation 7, Odorous Substances.<sup>8</sup>

### Siting Receptors Proximate to Odor Sources

Sensitive receptors, such as the residential uses associated with planned development under Land Use Alternative A, may be placed within the distances to these sources specified in Table 4.2-10, in Chapter 4.2, Air Quality, of this Draft EIR. In general, the City's land use plan designates residential areas and commercial/industrial areas of the City to prevent potential mixing of incompatible land use types, with the exception of mixed-use areas that combine commercial with residential. BAAQMD Regulation 7, Odorous Substances, would require abatement of any nuisance generated by an odor complaint. Implementation of the Policy 2-8, Neighborhood Compatibility, would require the City to minimize potential conflicts with residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, limitations, site design and other appropriate measures. Create zoning or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through measures such as daylight planes for single-family development, minimum setback standards, landscape screening, acoustical analysis, location and orientation of service areas away from residential uses, and limitations on hours of operation.

Therefore, because existing sources of odors are required to comply with BAAQMD Regulation 7, impacts to siting of new sensitive land uses would be *less than significant*.

#### *Applicable Regulations*

- California Health & Safety Code, Section 114149
- BAAQMD Regulation 7, Odorous Substances

**Significance Without Mitigation:** Less than significant.

### Siting New Odor Sources

While not all sources in Table 4.2-10, in Chapter 4.2, Air Quality, of this Draft EIR, are found in Cupertino (e.g. rendering plants, confined animal facilities), commercial and industrial areas in the City of Cupertino have the potential to include land uses that generate objectionable odors. Buildout permitted under Land Use Alternative A could include new sources of odors, such as composting, greenwaste, and recycling operations; food processing; chemical manufacturing; and painting/coating operations, because these are permitted uses in the commercial and/or industrial areas in the City. Future environmental review could be required for industrial projects listed in Table 4.2-8, in Chapter 4.2, Air Quality, of this Draft EIR, to ensure that sensitive land uses are not exposed to objectionable odors. BAAQMD Regulation 7, Odorous Substances, would require abatement of any nuisance generating an odor complaint. Typical abatement

---

<sup>8</sup> It should be noted that while restaurants can generate odors, these sources are not identified by BAAQMD as nuisance odors since they typically do not generate significant odors that affect a substantial number people. Larger restaurants that employ five or more people are subject to BAAQMD Regulation 7, Odorous Substances.

## LAND USE ALTERNATIVE A

includes passing air through a drying agent followed by two successive beds of activated carbon to generate odor-free air. Facilities listed in Table 4.2-10, in Chapter 4.2, Air Quality, of this Draft EIR, would need to consider measures to reduce odors as part of their CEQA review.

The General Plan includes policies and strategies, that once adopted would also reduce potential land use incompatibilities regarding objectionable odors. Within the Land Use/Community Design Element, Policy 2-8, Neighborhood Compatibility, would require the City to minimize potential conflicts with residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, limitations, site design and other appropriate measures. Create zoning or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through measures such as: daylight planes for single-family development, minimum setback standards, landscape screening, acoustical analysis, location and orientation of service areas away from residential uses and limitations on hours of operation. Within the Environmental Resources/Sustainability Element, Policy 5-5, Air Pollution Effects of New Development, would require the City to minimize the air quality impacts of new development projects and the impacts affecting new development. Supporting strategies 3 and 4, require the City to assess the potential for air pollution effects of future land use and transportation planning, and ensure that planning decisions support regional goals of improving air quality, and evaluate the relationship of sensitive receptors, such as convalescent hospitals and residential uses, to pollution sources through the environmental assessment of new development. Consequently, review of projects using BAAQMD's odor screening distances during future CEQA review and compliance with BAAQMD Regulation 7 would ensure that odor impacts are minimized and are *less than significant*.

### *Applicable Regulations*

- California Health & Safety Code, Section 114149
- BAAQMD Regulation 7, Odorous Substances

**Significance Without Mitigation:** Less than significant.

---

**AQ-6                      Implementation of Land Use Alternative A, in combination with past, present and reasonably foreseeable projects, would result in significant cumulative impacts with respect to air quality.**

---

As described under AQ-3, regional air quality impacts were identified as significant; therefore, in combination with past, present, and reasonably foreseeable projects, implementation of Land Use Alternative A, even with mandatory compliance with applicable regulations, as well as, the mitigation measures and General Plan policies outlined above, would result in a *significant* cumulative impact with respect to air quality.

**Significance With Mitigation:** Significant and unavoidable.

## LAND USE ALTERNATIVE A

### 5.2.7.3 BIOLOGICAL RESOURCES

---

<b>BIO-1</b>	<b>Implementation of Land Use Alternative A would not have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife, or U.S. Fish and Wildlife Service.</b>
--------------	---

---

Development and land use activities as a result of implementation of Land Use Alternative A would occur in urbanized areas where special-status species are generally not expected to occur. The potential for occurrence of special-status species in developed areas is generally very remote in comparison to undeveloped lands with natural habitat that contain essential habitat characteristics for the range of species known from the west Cupertino vicinity.

The General Plan includes policies and strategies that, once adopted, would minimize impacts to special-status species associated with potential future development under Land Use Alternative A. Policy 5-9, Development Near Sensitive Areas, would require the City to encourage the clustering of new development away from sensitive areas such as riparian corridors, wildlife habitat and corridors, public open space preserves and ridgelines. Additionally, new developments in these areas must have a harmonious landscaping plan approved prior to development. Strategy 1, Riparian Corridor Protection, directs the City to require riparian corridor protection through the development approval process. Policy 5-10, Landscaping Near Natural Vegetation, would require the City to, per the City's Water Efficient Landscaping Ordinance, Environmentally Preferable Procurement Policy, and the Parks & Recreation Green Policies, continue to Emphasize drought tolerant and pest resistant native and non-invasive, nonnative, drought tolerant plants and ground covers when landscaping properties near natural vegetation, particularly for control of erosion from disturbance to the natural terrain. The strategy for this policy, Native Plants, would require the City to encourage drought tolerant native and drought tolerant, noninvasive, non-native plants and trees, and minimize lawn area in the hillsides. Policy 5-14, Recreation and Wildlife Trails, would require the City to provide open space linkages within and between properties for both recreational and wildlife activities, most specifically for the benefit of wildlife that is threatened, endangered, or designated as species of special concern. Policy 5-18, Natural Water Bodies and Drainage Systems, would require the City to require that site design respect the natural topography and drainages to the extent practicable to reduce the amount of grading necessary and limit disturbance to natural water bodies and natural drainage systems caused by development including roads, highways, and bridges. Strategy 1 for this policy, Volunteer Program, would require the City to encourage volunteer organizations to help restore and clean creek beds in Cupertino to reduce pollution and help return waterways to their natural state. Policy 5-21, Compact Development Away from Sensitive Areas, would require the City to, where such measures do not conflict with other municipal purposes or goals, encourage, via zoning ordinances, compact development located away from creeks, wetlands, and other sensitive areas. Policy 5-27, Natural Water Courses, would require the City to retain and restore creek beds, riparian corridors, watercourses and associated vegetation in their natural state to protect wildlife habitat and recreation potential and assist groundwater percolation. Encourage land acquisition dedication of such areas. Strategy 4 under Proposed Policy 2-20, Streetscape Design, would be

## LAND USE ALTERNATIVE A

amended to direct the City to use native trees when conducting new or replacement street tree planting. This policy would serve to improve urban habitat for native and special-status species.

However, some special-status bird species such as Cooper's hawk and white-tailed kite could utilize the remaining riparian corridors and heavily wooded areas for nesting, dispersal and other functions when they pass through urbanized areas. More common birds protected under the Migratory Bird Treaty Act (MBTA) may nest in trees and other landscaping on Land Use Alternative A Component locations. Given the remote potential for occurrence of nesting birds at one or more of Land Use Alternative A Component locations and possibility that nests could be inadvertently destroyed or nests abandoned as a result of construction activities, this would be considered a potentially *significant* impact.

### Mitigation Measures

The following mitigation measure is recommended to minimize the possible loss or abandonment of nests of birds protected under the federal MBTA and California Department of Fish and Game code:

**Mitigation Measure BIO-1:** Nests of raptors and other birds shall be protected when in active use, as required by the federal Migratory Bird Treaty Act and the California Department of Fish and Game Code. If construction activities and any required tree removal occur during the breeding season (February 1 and August 31), a qualified biologist shall be required to conduct surveys prior to tree removal or construction activities. Preconstruction surveys are not required for tree removal or construction activities outside the nesting period. If construction would occur during the nesting season (February 1 to August 31), preconstruction surveys shall be conducted no more than 14 days prior to the start of tree removal or construction. Preconstruction surveys shall be repeated at 14-day intervals until construction has been initiated in the area after which surveys can be stopped. Locations of active nests containing viable eggs or young birds shall be documented and protective measures implemented under the direction of the qualified biologist until the nests no longer contain eggs or young birds. Protective measures shall include establishment of clearly delineated exclusion zones (i.e. demarcated by identifiable fencing, such as orange construction fencing or equivalent) around each nest location as determined by a qualified biologist, taking into account the species of birds nesting, their tolerance for disturbance and proximity to existing development. In general, exclusion zones shall be a minimum of 300 feet for raptors and 75 feet for passerines and other birds. The active nest within an exclusion zone shall be monitored on a weekly basis throughout the nesting season to identify signs of disturbance and confirm nesting status. The radius of an exclusion zone may be increased by the qualified biologist if project activities are determined to be adversely affecting the nesting birds. Exclusion zones may be reduced by the qualified biologist only in consultation with California Department of Fish and Wildlife. The protection measures shall remain in effect until the young have left the nest and are foraging independently or the nest is no longer active.

With incorporation of the above Mitigation Measure BIO-1, impacts to special-status and non-special status bird species that are protected under the federal MBTA and CDFG Code would be *less than significant*.

**Significance With Mitigation:** Less than significant.

## LAND USE ALTERNATIVE A

---

**BIO-2**                    **Implementation of Land Use Alternative A would not have a substantial adverse effect on any riparian habitat or other sensitive natural community type.**

---

Development and land use activities consistent with Land Use Alternative A Components would occur in urbanized areas where sensitive natural communities are absent; therefore, *no impact* would occur.

**Significance Without Mitigation:** No impact.

---

**BIO-3**                    **Implementation of Land Use Alternative A would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act, through direct removal, filling, hydrological interruption, or other means.**

---

Development and land use activities consistent with Land Use Alternative A Components would occur in urbanized areas where jurisdictional waters are absent. Indirect impacts to wetlands and jurisdictional other waters include: 1) an increase in the potential for sedimentation due to construction grading and ground disturbance, 2) an increase in the potential for erosion due to increased runoff volumes generated by impervious surfaces, and 3) an increase in the potential for water quality degradation due to increased levels in non-point pollutants. However, indirect impacts could be largely avoided through effective implementation of Best Management Practices during construction and compliance with water quality controls. As discussed in Section 4.8.1.1, Regulatory Framework, Chapter 4.9, Hydrology and Water Quality, of this Draft EIR, water quality in stormwater runoff is regulated locally by the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), which includes provision C.3 of the Municipal Regional Storm Water National Pollutant Discharge Elimination System (NPDES) Permit (MRP), adopted by the San Francisco Bay Regional Water Quality Control Board (RWQCB). Adherence to these permit conditions would require new development or redevelopment projects to incorporate treatment measures, an agreement to maintain them, and other appropriate source control and site design features that reduce pollutants in runoff to the maximum extent practicable. Many of the requirements involve low impact development (LID) practices such as the use of onsite infiltration that reduce pollutant loading. Incorporation of these measures can even improve on existing conditions.

In addition, future development would be required to comply with the NPDES Permit (Municipal Code Chapter 9.18, Stormwater Pollution Prevention and Watershed Protection) and implement a construction SWPPP that require the incorporation of BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction.

The indirect water quality-related issues are discussed further in Chapter 4.9, Hydrology and Water Quality, of this Draft EIR. As discussed in Impact HYDRO-1, water quality impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.



**LAND USE ALTERNATIVE A**

---

**BIO-4                    Implementation of Land Use Alternative A would not interfere substantially with the movement of any native resident or migratory fish or wildlife species, their wildlife corridors or nursery sites.**

---

Development and land use activities consistent with Land Use Alternative A Components would occur in urbanized areas where sensitive wildlife resources and important wildlife movement corridors are no longer present because of existing development. Wildlife species common to urban and suburban habitat could be displaced where existing structures are demolished and landscaping is removed as part of future development, but these species are relatively abundant, and adapted to human disturbance. Compliance with the General Plan policies and strategies would ensure that new structures and landscaping installed as part of future development would provide replacement habitat for wildlife species adapted to urban areas. Additionally, Strategy 4 under Proposed Policy 2-20, Streetscape Design, would require the City to use native trees when conducting new or replacement street tree planting. This policy would serve to improve urban habitat linkages for migration of native and special-status species. Potential impacts on the movement of fish and wildlife, wildlife corridors, or wildlife nursery sites would be considered *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**BIO-5                    Implementation of Land Use Alternative A would not conflict with any local ordinances or policies protecting biological resources.**

---

Development and land use activities consistent with Land Use Alternative A would occur in urbanized areas where sensitive biological and wetland resources are generally considered to be absent, and no major conflicts with the relevant policies or ordinances in the Cupertino General Plan and/or Municipal Code, as described in section 4.3.1, Environmental Setting, Chapter 4.3, Biological Resources, of this Draft EIR, are anticipated.

With adherence to the General Plan policies listed in impact discussion BIO-1, and the Protected Tree Ordinance and Water Protection Ordinance, no conflicts with local plans and policies are anticipated, and impacts would be considered *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**BIO-6                    Implementation of the No Project alternative, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to biological resources.**

---

This EIR takes into account growth projected by Land Use Alternative A within the Cupertino city boundary and Sphere of Influence (SOI), in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). The geographic scope of the cumulative analysis for biological resources considers the surrounding incorporated and unincorporated lands, and the region.

## LAND USE ALTERNATIVE A

The potential impacts of proposed development on biological resources tend to be site-specific, and the overall cumulative effect would be dependent on the degree to which significant vegetation and wildlife resources are protected on a particular site. This includes preservation of well-developed native vegetation (native grasslands, oak woodlands, riparian woodland, etc.), populations of special-status plant or animal species, and wetland features (including freshwater seeps and tributary drainages).

To some degree, cumulative development contributes to an incremental reduction in the amount of existing wildlife habitat, particularly for birds and larger mammals. Habitat for species intolerant of human disturbance can be lost as development encroaches into previously undeveloped areas, disrupting or eliminating movement corridors and fragmenting the remaining suitable habitat retained within parks, private open space, or undeveloped properties. New development in the region would result in further conversion of existing natural habitats to urban and suburban conditions, limiting the existing habitat values of the surrounding area. This could include further loss of wetlands and sensitive natural communities, reduction in essential habitat for special-status species, removal of mature native trees and other important wildlife habitat features, and obstruction of important wildlife movement corridors. Additional development may also contribute to degradation of the aquatic habitat in the creeks throughout the region, including the Project Study Area.

Grading associated with construction activities generally increases erosion and sedimentation, and urban pollutants from new development would reduce water quality. However, most of the parcels within the Project Component locations are already developed and occur within urbanized areas, thus avoiding or diminishing effects on biological resources. With implementation of the Mitigation Measure BIO-1 identified above, Land Use Alternative A would not make a significant contribution to cumulative impacts to biological resources. Therefore, Land Use Alternative A would result in a *less-than-significant* cumulative impact on biological resources.

**Significance With Mitigation:** Less than significant.

### 5.2.7.4 CULTURAL RESOURCES

---

<b>CULT-1</b>	<b>Implementation of Land Use Alternative A would not have the potential to cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.</b>
---------------	--

---

The types of cultural resources that meet the definition of historical resources under CEQA generally consist of districts, sites, buildings, structures, and objects that are significant for their traditional, cultural, and/or historical associations. Historical architectural resources may be impacted by development allowed under the current General Plan. Archaeological deposits are addressed in CULT-2, and human remains are addressed below in impact discussion CULT-4, below.

As shown on Figure 4.4-1 and listed in Section 4.4.2.3, Historic Sites Within Project Components, in Chapter 4.4, Cultural Resources, of this Draft EIR, several historical resources are within the boundaries of some Cultural Resource Site locations. Therefore, implementation of the Land Use Alternative A could have the potential to directly impact cultural resources, by increasing commercial, office, hotel, and residential

## LAND USE ALTERNATIVE A

development allocations and providing for potential new development at the following Cultural Resource Sites:

### Special Areas Along Major Transportation Corridors

#### South De Anza Special Area

- Cultural Resource Site 15 (Not evaluated for National and/or California Register eligibility)
- Cultural Resource Site 58 (City of Cupertino Commemorative Site)

#### Heart of the City Special Area

- Cultural Resource Site 19 (National Register/California Register/Local Landmark)
- Cultural Resource Site 25 (Local Landmark, National Register/Not evaluated for California Register eligibility)
- Cultural Resource Site 31 (Ineligible for National Register/Not evaluated for California Register eligibility)
- Cultural Resource Site 32 (California Register/Local Landmark)
- Cultural Resource Site 42 (City of Cupertino Local Historic Site)
- Cultural Resource Site 43 (City of Cupertino Local Historic Site)
- Cultural Resource Site 44 (City of Cupertino Local Historic Site)
- Cultural Resource Site 57 (National Register/Commemorative Site)
- Cultural Resource Site 59 (City of Cupertino Commemorative Site)
- Cultural Resource Site 60 (City of Cupertino Commemorative Site)
- Cultural Resource Site 64 (City of Cupertino Community Landmark)
- Cultural Resource Site 65 (City of Cupertino Community Landmark)
- Cultural Resource Site 67 (City of Cupertino Community Landmark)
- Cultural Resource Site 68<sup>9</sup> (City of Cupertino Community Landmark)

#### North De Anza Special Area

- Cultural Resource Site 66 (City of Cupertino Community Landmark)

### Study Areas

#### Study Area 6 (Vallco Shopping District)

- Cultural Resource Site 68<sup>10</sup> (City of Cupertino Community Landmark)

---

<sup>9</sup> Cultural Resource Site 68 is also in Study Area 6 (Vallco Shopping District ) and Housing Element Site 11 (Vallco Mall).

<sup>10</sup> Cultural Resource Site 68 is also in Heart of the City Special Area and Housing Element Site 11 (Vallco Mall).

## LAND USE ALTERNATIVE A

### Other Special Areas including Residential and Non-Residential/Mixed-Use Special Areas

#### Monta Vista Village Neighborhood

- Cultural Resource Site 52 (California Register/Eligible for National Register)
- Cultural Resource Site 53 (City of Cupertino Commemorative Site)
- Cultural Resource Site 54 (City of Cupertino Commemorative Site)
- Cultural Resource Site 62 (City of Cupertino Community Landmark)

#### Bubb Road Special Area

- Cultural Resource Site 55 (City of Cupertino Commemorative Site)

### General Plan and Zoning Ordinance Conformance Sites

- Cultural Resource Site 41 (City of Cupertino Local Historic Site)
- Cultural Resource Site 49 (City of Cupertino Commemorative Site)
- Cultural Resource Site 50 (City of Cupertino Commemorative Site)

Where Project Component locations listed above and their immediate surroundings do not contain properties currently on the California Register or appear to be eligible for listing on the California Register, as described above, impacts from implementation of this Alternative would result in *less-than-significant* impacts on historical resources at these sites. However, for Project Component locations that contain properties currently on the California Register or appear to be eligible for listing on the California Register where the historical buildings might be demolished or materially altered to allow future development, this Alternative would cause significant impacts. The following Project Component locations could be impacted by future development under this Alternative:

#### Heart of the City Special Area

- Cultural Resource Site 19 (National Register/California Register/Local Landmark)
- Cultural Resource Site 25 (Local Landmark, National Register/Not evaluated for California Register eligibility)
- Cultural Resource Site 32 (California Register/Local Landmark)
- Cultural Resource Site 57 (National Register/Commemorative Site)

#### Monta Vista Village Neighborhood

- Cultural Resource Site 52 (California Register/Eligible for National Register)

Even if the historical resources were retained, future development under the Land Use Alternative A permitted by the General Plan could cause a significant impact on the historical resource in question if the new construction were incompatible with the Cultural Resources Site relationships that characterize the existing property (for example, new construction which extends to all property lines where the historical pattern is to have setbacks), or if the massing (height and bulk) of the new construction were incompatible with the historical resource. Lastly, the design characteristics and materials of the new construction could cause an impact on adjoining or nearby historical buildings (for example, a flat-roofed building with

**LAND USE ALTERNATIVE A**

aluminum windows and a rain-screen wall finish next to a gable-roofed building with period-revival stucco walls). Because the purpose of the Alternative is to allow denser new development and because the factors described above which could impair the historic integrity of resources are generally more important with larger and denser new construction, the impacts on historical resources could be *significant*.

However, the General Plan includes policies and strategies that, once adopted, would minimize potential impacts to historic resources. Policy 2-66, Historic Sites, would require future development projects under Land Use Alternative A that would occur on Historic Sites to meet the Secretary of the Interior's Standard for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, and Restoring Historic Buildings and provide a plaque, reader board and/or other educational tools on the site to explain the historic significance of the resource(s). The plaque shall include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. For public and quasi-public sites, the City shall coordinate with property owner to allow public access of the historical site to foster public awareness and provide educational opportunities. For privately-owned sites, property owners should be encouraged, but not required, to provide access to the public. Strategy 1 states that as part of the development review process for projects proposing to demolish or significantly alter existing building(s) more than 45 years old, city staff shall determine if the project is subject to completion of a site-specific historic resources study. Strategy 2 states that if it is determined that a site-specific historic resources study is required, the study shall be prepared by a qualified architectural historian meeting the Secretary of the Interior's Standards for Architecture or Architectural History. Site-specific historic resource studies required under Strategy 1 could include a records search of the California Historical Resources Information System, an intensive-level pedestrian field survey, an evaluation of significance using standard National Register Historic Preservation and California Register Historic Preservation evaluation criteria, and recordation of all identified historic buildings and structures on California Department of Parks and Recreation 523 Site Record forms. These studies also provide a description of the historic context and setting, methods used in the investigation, results of the evaluation, and recommendations for management of identified resources. When applicable, the specific requirements for inventory areas and documentation format required by certain agencies, such as the Federal Highway Administration and California Department of Transportation (Caltrans), would also be required to be adhered to. Where future development or adjacent properties are found to be eligible for listing on the California Register, Policy 2-67, Commemorative Sites, would require that projects on Commemorative Sites are required to provide a plaque, reader board and/or other educational tool on the site to explain the historic significance of the resource. The plaque shall include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. For public and quasi-public sites, the City shall coordinate with property owner to allow public access to the historical site to foster public awareness and provide educational opportunities. For privately-owned sites, property owners should be encouraged, but not required, to provide access to the public. Policy 2-68, Community Landmarks, would require that projects on Landmark Sites provide a plaque, reader board and/or other educational tools on the site to explain the historic significance of the resource. The plaque shall include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. Policy 2-69, Historic Mention/Interest Sites, would require the City to encourage agencies that have jurisdiction over the historical resource to encourage rehabilitation of the resource and provide public access to foster public awareness and provide educational opportunities. These are sites outside the City's jurisdictions, but have

## LAND USE ALTERNATIVE A

contributed to the City's historic past. Policy 2-70, Incentives for Preservation of Historic Resources, would require the City to utilize a variety of techniques to serve as incentives toward fostering the preservation and rehabilitation of Historic Sites including; 1) allowing flexible interpretation of zoning ordinance not essential to public health and safety. This could include flexibility as to use, parking requirements and/or setback requirements; 2) using the California Building Code for rehabilitation of historic structures; 3) tax rebates; and 4) financial incentives such as grants/loans to assist rehabilitation efforts. Policy 2-71, Recognizing Historical Resources, states that an inventory of historically significant structures shall be maintained and periodically updated by the City in order to promote awareness of these community resources. Finally, Policy 2-71 would require the City to maintain an inventory of historically significant structures and periodically updated in order to promote awareness of these community resources. Furthermore, as part of Land Use Alternative A, Site 23, the Seven Springs Ranch, would be added to the City's list of Historically Significant Resources, which would further protect historic resources.

Potential impacts from future development on historical architectural resources could lead to: 1) demolition, which by definition results in the material impairment of a resource's ability to convey its significance; 2) inappropriate modification, which may use incompatible materials, designs, or construction techniques in a manner that alters character-defining features; and 3) Inappropriate new construction, which could introduce incompatible new buildings that clash with an established architectural context. While any of these scenarios, especially demolition and alteration, have the potential to change the historic fabric or setting of an architectural resource such that the resource's ability to convey its significance may be materially impaired, implementation of the General Plan policies and strategies identified above, as well as compliance with federal and State laws, as described in Section 4.4.1.1, Regulatory Framework, above, would ensure future development would not be detrimental or injurious to property or improvements in the vicinity and impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>CULT-2</b>	<b>Implementation of Land Use Alternative A would not have the potential to cause substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.</b>
---------------	---

---

Historical and pre-contact archaeological deposits that meet the definition of historical resources under CEQA could be damaged or destroyed by ground-disturbing activities associated with future development allowed under Land Use Alternative A. Should this occur, the ability of the deposits to convey their significance, either as containing information important in prehistory or history, or as possessing traditional or cultural significance to Native American or other descendant communities, would be materially impaired.

Although future development would be likely occur on sites and in areas either already developed, and/or in close proximity to existing residential and residential-serving development, where development would have a lesser impact on historical archeological resources, the potential remains that archaeological deposits could be discovered because this Alternative would result in development on, or within the vicinity of, several identified cultural resources as shown on Figure 4.4-1, and identified in Section 4.4.2.3, Historic Sites Within Project Components, in Chapter 4.4, Cultural Resources, of this Draft EIR. In addition, the City of Cupertino in its entirety has not been systematically surveyed, and much of the land remains

## LAND USE ALTERNATIVE A

unsurveyed. Approximately 25 percent of the land within the city boundary and existing Sphere of Influence (SOI) has been surveyed for cultural resources. Therefore, it is possible that unrecorded Native American prehistoric archaeological sites exist throughout the city that may have not been identified or surveyed, including those that are buried under alluvial or fill soils due to the age of geologic deposits within the city, which have the potential to contain prehistoric archaeological resources. Furthermore, prior to its development, much of the land within Cupertino was comprised of ranches and/or vineyards. Therefore, there is a potential for significant subsurface historical archaeological features, including hollow-filled features (e.g. privies and wells) and other historic debris.

Although soils throughout the city and any potential historic features have been disturbed by farming operations and grading and trenching for development of existing buildings and structures, future development permitted under this Alternative could still contain subsurface archaeological deposits. Any ground-disturbing activities related to future development permitted under this Alternative have the potential to affect subsurface prehistoric archaeological resources that may be present. Based on the significance criteria identified above, future development permitted under this Alternative would have a significant impact on the environment if these ground-disturbing activities cause a substantial adverse change in the significance of a historical archaeological resource. A substantial adverse change in the significance of an historical archaeological resource would occur from its demolition, destruction, relocation, or alteration such that the significance of the resource would be materially impaired (CEQA Guidelines Section 15064.5(b)(1)).

The General Plan includes a policy and supporting strategies that would protect archaeologically sensitive areas and would provide for the identification of archaeological deposits prior to actions that may disturb such deposits. Policy 2-72, Archaeologically Sensitive Areas, protects archaeologically sensitive areas and would provide for the identification of archaeological deposits prior to actions that may disturb such deposits and would require the City to protect archaeologically sensitive areas, through supporting Strategy 1, which would require an investigation for development proposed in areas likely to be archaeologically sensitive, such as along stream courses and in oak groves, to determine if significant archaeological resources may be affected by the project. This strategy also would require appropriate mitigation measures in the project design. In addition, Strategy 2 would require the City to ensure that City, State, and Federal historic preservations laws, regulations, and Codes are enforced, including laws related to archaeological and paleontological resources, to ensure the adequate protection of historic and pre-historic resources. Therefore, compliance of the General Plan policy and strategies above, and with federal and State laws described in Section 4.4.1.1, Regulatory Framework, above, potential impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

## LAND USE ALTERNATIVE A

---

**CULT-3                    Implementation of Land Use Alternative A would not have the potential to directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature.**

---

A review of the University of California’s Museum of Paleontology’s (UCMP) fossil locality database was conducted for the entire Project Study Area. No paleontological resources have been identified within the Project Component locations; however, the presence of Pleistocene deposits that are known to contain fossils indicates that the city could contain paleontological resources.

Consequently, future development permitted under Land Use Alternative A would have a significant effect on the environment if it would directly or indirectly destroy a unique paleontological resource or site. Although implementation of Land Use Alternative A would not in and of itself result in direct physical development, future development as a result of implementation of this Alternative could result in potentially significant impacts to a unique paleontological resources or site, or unique geologic feature. Policy 2-72, Archaeologically Sensitive Areas, would require the City to protect paleontological sensitive areas, through supporting Strategy 2, which would require the City to ensure that City, State, and Federal historic preservations laws, regulations, and Codes are enforced, including laws related to archaeological and paleontological resources, to ensure the adequate protection of historic and pre-historic resources. Therefore, compliance Policy 2-72 along with compliance with federal and State laws described in Section 4.4.1.1, Regulatory Framework, in Chapter 4.4, Cultural Resources, would minimize the potential impact related to directly or indirectly destroying a unique paleontological resource or site relating to construction and other ground-disturbing activities associated with future development, would be less than significant.

**Significance Without Mitigation:** Less than significant.

---

**CULT-4                    Implementation of Land Use Alternative A would not have the potential to disturb any human remains, including those interred outside of formal cemeteries.**

---

Human remains associated with pre-contact archaeological deposits could exist in throughout Cupertino, and could be encountered at the time potential future development occurs. The associated ground-disturbing activities, such as site grading and trenching for utilities, have the potential to disturb human remains interred outside of formal cemeteries. Descendant communities may ascribe religious or cultural significance to such remains, and may view their disturbance as an unmitigable impact. Disturbance of unknown human remains would be a significant impact.

However, future development under this Alternative would be subject to federal, State, and local regulations, such as the California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and the CCR Section 15064.5(e) (CEQA), as described in Section 4.4.1.1, Regulatory Framework, of Chapter 4.4, Cultural Resources, of this Draft EIR, which state the mandated procedures of conduct following the discovery of human remains.

Moreover, any human remains encountered during ground-disturbing activities associated with future development under implementation of Land Use Alternative A would be subject to federal, State, and local



**LAND USE ALTERNATIVE A**

regulations, such as the California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and the CCR Section 15064.5(e) (CEQA), which state the mandated procedures of conduct following the discovery of human remains. According to the provisions in CEQA, if human remains are encountered at the site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The Santa Clara County Coroner shall be notified immediately. The Coroner shall then determine whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner shall notify the NAHC within 24 hours, who will, in turn, notify the person the NAHC identifies as the MLD of any human remains. Further actions shall be determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC. In addition, Policy 2-73, Native American Burials, would require the City to protect Native American burial sites and the supporting strategy would require that upon the discovery of such burials during construction, project applicants shall take action prescribed by State law.

Therefore, with the mandatory regulatory procedures and compliance with the General Plan policy and strategy described above, potential impacts related to the potential discovery or disturbance to any human remains accidentally unearthed during construction activities associated with future development as a result of implementation of Land Use Alternative A would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**CULT-5                    Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would not result in a significant cumulative impacts with respect to cultural resources.**

---

This EIR takes into account growth projected by this Alternative within the Cupertino city boundary and SOI, in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). Potential future development permitted under this Alternative, in conjunction with buildout of the city and the region, has the potential to cumulatively impact historical resources. Such impacts could result from more intensive land uses, incompatible site designs that impact the historical integrity of nearby historical buildings and districts, and demolition of historical resources. Further, development within the city boundary also has the potential to adversely affect archaeological resources, paleontological resources, and human remains through their destruction or disturbance. Therefore, before mitigation, development allowed under this Alternative, in combination with other future development in the region, has the potential to cause adverse cumulative impacts to cultural resources due to their destruction or loss of integrity. However, the current and amended General Plan policies and strategies, and mandatory regulation described in Impact Discussions CULT-1 through CULT-4 and Section 4.4.1, Regulatory Framework, in Chapter 4.4, Cultural Resources, of this Draft EIR, would avoid impacts to such resources that would occur from development and land use changes allowed under Land Use Alternative A. Therefore, past, present, and reasonably

## LAND USE ALTERNATIVE A

foreseeable future development in Cupertino is not expected to have a significant effect on cultural resources.

Land Use Alternative A is not anticipated to have a significant impact on cultural resources. Therefore, implementation of this Alternative would result in a *less-than-significant* contribution to cumulative cultural resources impacts.

**Significance With Mitigation:** Less than significant.

### 5.2.7.5 GEOLOGY, SOILS, AND SEISMICITY

---

GEO-1	<b>Implementation of Land Use Alternative A would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving surface rupture along a known active fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; and landslides.</b>
-------	---

---

To date, only one Alquist-Priolo Earthquake Fault Zone has been mapped within Cupertino, as shown on Figure 4.5-2 in Chapter 4.5, Geology, Soils, and Seismicity, of this Draft EIR, namely, the zone that flanks the San Andreas Fault in the southwestern-most part of the city. However, as shown on Figure 4.5-2, none of the Project Component Locations are located on this fault zone. Protections afforded by the Alquist-Priolo Act, as well as Municipal Code ordinances, as described in Section 4.5.1.1, Regulatory Framework, of Chapter 4.5, Geology, Soils, and Seismicity, of this Draft EIR, that empower the City to require detailed geotechnical reports in areas of suspected geological hazards, suggest that the potential for ground rupture would be mitigated for future development or construction in the city. However, in the event of a large,  $M_w$  6.7 or greater seismic event, much of the city is projected to experience “strong” ground shaking, with the most intense shaking forecast for the northeast part of Cupertino. Based on published studies and maps of the city, the potential for seismically-induced liquefaction appears low and limited to narrow areas that flank natural drainages such as Stevens, Regnart, and Calabazas Creeks. Future development permitted by Land Use Alternative A would be concentrated on sites either developed and/or underutilized, and would not be in proximity to these natural drainages. In contrast, the State-mapped hazards for seismic-induced landslides appear to be extensive in the Foothills that occupy the southwest part of the Project Study Area.

Municipal Code ordinances that empower the City to require detailed soils and/or geotechnical reports in areas of suspected geological hazards, would minimize the potential for seismically-induced landsliding for future development or construction in the southwest part of the Project Study Area.

In addition to compliance with the Municipal Code building standards, Land Use Alternative A includes General Plan policies and strategies that, once adopted, would minimize risk from seismic hazards. Policy 6-1, Regional Hazard Risk Reduction Planning, would require the City to coordinate with Santa Clara County and local agencies to implement the Multi-Jurisdictional LHMP for Santa Clara County. Strategy 1 would require the City to monitor and evaluate the success of the LHMP, including local strategies provided in the Cupertino Annex and work with Santa Clara County to ensure that strategies are prioritized and implemented through the Capital Improvement Program and provide adequate budget for on-going

**LAND USE ALTERNATIVE A**

programs and department operations. Strategy 2 would require the City to ensure that mitigation actions identified in the LHMP are being incorporated into upcoming City sponsored projects, where appropriate. Strategy 3 would require the City to support Santa Clara County in its role as the lead agency that prepares and updates LHMP. Policy 6-2, Seismic/Geologic Review Process, would require the City to evaluate new development proposals within mapped potential hazard zones using a formal seismic/geologic review process and use Table 6-D, Technical Investigations Required based on Acceptable Risk, to determine the level of review required. Table 6-D applies the land use activity category group provided in Table 6-C, Acceptable Exposure to Risk Related to Various Land Uses, to determine what type of evaluation is required. For example, Group 4, involuntary occupancy facilities such as schools, and high occupancy buildings, such as large office or apartment buildings, would be required to comply with the CBC, complete a soils and foundation investigation, determine ability of local soil conditions to support structures, determine subsidence potential, faulting hazard, slope stability, and prepare a detailed Soils/Structural evaluation to certify adequacy of normal CBC earthquake regulations or to recommend more stringent measures. Strategy 1 would require any site with a slope exceeding 10 percent to reference the Landslide Hazard Potential Zone maps of the State of California for all required geotechnical and structural analysis. Strategy 2 would require that any residential facility that is being increased more than 50 percent in price or physical size conform to all provisions of the current building code throughout the entire structure. Owners of residential buildings with known structural defects, such as un-reinforced garage openings, “Soft first story” construction, unbolted foundations, or inadequate sheer walls are encouraged to take steps to remedy the problem and bring their buildings up to the current building code. Strategy 3 would require the City to continue to implement geologic review procedure for Geologic Reports required by Chapter 19 of the Municipal Code that incorporates these concerns into the development review process. Policy 6-3, Public Education on Seismic Safety, would require the City to encourage various public education programs to help residents reduce earthquake hazards. Strategy 1 would require developers to record a covenant to tell future residents in high-risk areas about the risk and inform them that more information is in City Hall records. This is in addition to the State requirement that information on the geological report is recorded on the face of subdivision maps. Strategy 2 would require the City to publish and promote emergency preparedness activities and drills. Use the Cupertino Scene and website to provide safety tips that may include identifying and correcting household hazards, knowing how and when to turn off utilities, helping family members protect themselves during and after an earthquake, recommending neighborhood preparation activities, and advising residents to maintain an emergency supply kit containing first-aid supplies, food, drinking water and battery operated radios and flashlight. Strategy 3 would require the City to encourage participation in Community Emergency Response Team (CERT) training. Train neighborhood groups to care for themselves during disasters. Assist in neighborhood drills. Strategy 4 would require the City to actively cooperate with State agencies that oversee facilities for vulnerable populations, to ensure that such facilities conform to all health and safety requirements, including emergency planning, training, exercises and employee education. Strategy 5 would require the City to obtain translated emergency preparedness materials and make them available to appropriate foreign language populations.

In addition, new development in Cupertino would be required to comply with the CBC and the City’s Building Code, which contain criteria and standards that are designed to reduce ground rupture risks to acceptable levels.

## LAND USE ALTERNATIVE A

Through the implementation of the policies and strategies discussed above, along with compliance with the CBC and City Building Code, as described in Section 4.5.1.1, Regulatory Framework, of Chapter 4.5, Geology, Soils, and Seismicity, the City would mitigate the risks associated with fault rupture, and the impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>GEO-2</b>	<b>Implementation of Land Use Alternative A would not result in substantial soil erosion or the loss of topsoil.</b>
--------------	--

---

Implementation of Land Use Alternative A would not result in substantial soil erosion or the loss of topsoil. Substantial soil erosion or loss of topsoil during construction could undermine structures and minor slopes, and this could be a concern during buildout under Land Use Alternative A. However, compliance with existing regulatory requirements, such as implementation of grading erosion control measures as specified in the City of Cupertino's Municipal Code, as described in Section 4.5.1.1, Regulatory Framework, of Chapter 4.5, Geology, Soils, and Seismicity, of this Draft EIR, would reduce impacts from erosion and the loss of topsoil. Specifically, Section 16.08.110, would require the preparation of an Interim Erosion and Sediment Control Plan, either integrated with the site map/grading plan or submitted separately, to the Director of Public Works that calculates the maximum runoff from the site for the 10-year storm event and describes measures to be undertaken to retain sediment on the site, a brief description of the surface runoff and erosion control measures to be implemented, and vegetative measures to be undertaken.

In addition, Land Use Alternative A implements policies and supporting strategies to reduce soil erosion; thereby minimizing impacts related to loss of topsoil. Policy 5-10, Landscaping Near Natural Vegetation, implements the city's Water Efficient Landscaping Ordinance, Environmentally Preferable Procurement Policy, and the Parks & Recreation Green Policies, and would require the City to continue to emphasize drought tolerant and pest-resistant native and non-invasive, non-native, drought tolerant plants and ground covers when landscaping public and private properties near natural vegetation, particularly for control of erosion from disturbance to the natural terrain. Policy 5-19, Reduction of Impervious Surfaces, would require the City to minimize storm water flow and erosion impacts resulting from development. Strategy 1 would require the City to change City codes to include a formula regulating how much paved surface is allowable on each lot. This would include driveways and patios installed at the time of building or remodeling. Strategy 2 would require the City to encourage the use of non-impervious materials for walkways and driveways. If used in a City or quasi-public area, mobility and access for the disabled should always take precedent. Strategy 3 would require the City to minimize impervious surface areas, minimizing directly-connected impervious surfaces, maximizing onsite infiltration and using on-site retaining facilities. Finally, Policy 6-47, Hillside Grading, would require the City to restrict the extent and timing of hillside grading operation to April through October. Require performance bonds during the remaining time to guarantee the repair of any erosion damage. All graded slopes must be planted as soon as practical after grading is complete.

**LAND USE ALTERNATIVE A**

Furthermore, the future development permitted by Land Use Alternative A would be concentrated on sites either developed and/or underutilized, where development would result in limited soil erosion or loss of topsoil. Therefore, adherence to existing regulatory requirements in the Municipal Code and implementation of the proposed General Plan policies would ensure that impacts associated with substantial erosion and loss of topsoil during the buildout of the Project Study Area would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**GEO-3                      Implementation of Land Use Alternative A would not result in a significant impact related to development on unstable geologic units and soils or result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.**

---

Implementation of Land Use Alternative A would not result in a significant impact related to development on unstable geologic units and soils or result in on- or off-site landslide, later spreading, subsidence, liquefaction, or collapse. Unstable geologic units are known to be present within the city. The impacts of such unstable materials include, but may not be limited to subsidence where fill material may be highly compressible. Such subsidence has been exacerbated by historical groundwater overdraft. Areas underlain by thick colluvium or poorly engineered fill as well as low-lying areas may also be prone to subsidence. Future development in Cupertino in areas limited to land flanking natural drainages such as Stevens, Regnart, and Calabazas Creeks may be at greater risk for seismically-induced liquefaction. However, the Project Component Locations where new development would occur is not in these areas. The future development permitted by Land Use Alternative A would be concentrated on sites either developed and/or underutilized. Compliance with Municipal Code requirements and General Plan policies outlined under Impact GEO-1 and GEO-2 above, which can require site-specific soils and/or geotechnical studies for land development or construction in areas of potential geologic instability (as shown on the City's geologic hazard maps), would reduce the potential impacts associated with soil instability to a *less-than-significant* level.

**Significance Without Mitigation:** Less than significant.

---

**GEO-4                      Implementation of Land Use Alternative A would not create substantial risks to life or property as a result of its location on expansive soil, as defined Section 1803.5.3 of the California Building Code, creating substantial risks to life or property.**

---

The pattern of expansive soils within the city is such that expansive soils (denoted by soils with high linear extensibility and plasticity index) are most prevalent in the northeast part of Cupertino as shown in Figure 4.5-1 in Chapter 4.5, Geology, Soils, and Seismicity. However, future development in these areas would be subject to the CBC regulations and provisions, as adopted in Chapter 16.04, Building Code, of the City's Municipal Code and enforced by the City during plan review prior to building permit issuance. The CBC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition, and also regulates grading activities, including drainage and erosion control. General Plan Policies 6-1, 6-2 and 6-3, and supporting strategies in the Safety Element outlined in Impact GEO-1 above,

## LAND USE ALTERNATIVE A

require the formal seismic and geologic evaluation of new development proposals that lie within mapped potential hazard zones. Thus, compliance with existing regulations and policies would ensure that the potential future development impacts permitted under Land Use Alternative A would be reduced to a *less-than-significant* level.

**Significance Without Mitigation:** Less than significant.

---

**GEO-5                    Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would not result in less than significant cumulative impacts with respect to geology and soils.**

---

This EIR takes into account growth projected by Land Use Alternative A within the Cupertino city boundary and Sphere of Influence (SOI), in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). Potential cumulative geological impacts could arise from a combination of the development of Land Use Alternative A together with future development in the immediate vicinity of the adjoining jurisdictions.

Only one active earthquake fault (i.e. the San Andreas Fault Zone) has been mapped by the State of California within the city, which is approximately 5 miles from Land Use Alternative A Component Locations, the risk of primary fault rupture on occupied buildings is judged low. Furthermore, new development under Land Use Alternative A would be subject to CBC and Municipal Code requirements, as described in Section 4.5.1.1, Regulatory Framework, of Chapter 4.5, Geology, Soils, and Seismicity, of this Draft EIR. Compliance with these building code requirements would, to the maximum extent practicable, reduce cumulative, development-related impacts that relate to seismically-induced ground-shaking, liquefaction, and expansive soils.

Similarly, compliance with the General Plan policy and strategies, as listed above in impact discussion GEO-1 of this chapter, as well as the City's Ordinances pertaining to excavation and grading (i.e. Chapter 16.08, Excavations, Grading and Retaining Walls) including implementation of an Interim Erosion Control Plan and various control measures, would minimize the cumulative impacts associated with soil erosion and loss of topsoil to the maximum extent practicable. Therefore, Land Use Alternative A would result in a *less-than-significant* cumulative impact with respect to geology, soils, and seismicity.

**Significance Without Mitigation:** Less than significant.

## 5.2.7.6 GREENHOUSE GAS EMISSIONS

---

**GHG-1            Implementation of Land Use Alternative A would not directly or indirectly generate GHG emissions that may have a significant impact on the environment.**

---

Development under Land Use Alternative A would contribute to global climate change through direct and indirect emissions of GHG from transportation sources, energy (natural gas and purchased energy), water use and wastewater generation, waste generation, and other, off-road equipment (e.g. landscape equipment, construction activities).

### Community-Wide GHG Emissions – Land Use Alternative A

BAAQMD has not adopted a 2040 per capita GHG threshold for operation-related GHG emissions. However, a 2040 efficiency target was derived for Land Use Alternative A based on the long-term GHG reduction target for 2050 interpolated from Executive Order S-03-05, which is an 80 percent reduction from 1990 levels by 2020. This methodology is consistent with CARB’s recommendations in the Update to the Scoping Plan.<sup>11</sup> The 2040 efficiency target would be 3.1 MTCO<sub>2</sub>e per service population for the city. The community-wide GHG emissions inventory for the Land Use Alternative A compared to existing conditions is included in Table 5.2-5.

The GHG emissions in the City of Cupertino under Land Use Alternative A would decrease by 25,736 MTCO<sub>2</sub>e in 2040 compared to existing conditions. As shown in Table 5.2-5, community-wide GHG emissions in the city at 2040 would also meet the 3.1 MTCO<sub>2</sub>e threshold, which is based on the long-term GHG reduction goal of Executive Order S-03-05. Impacts from GHG emissions within the City of Cupertino would be *less than significant* for long-term growth anticipated under Land Use Alternative A.

The General Plan includes policies and strategies that, once adopted, would reduce GHG emissions from development projects to the maximum extent practicable. Within the Community Design Element, Policy 2-2, Connections Between Special Areas, Employment Centers and the Community, would require the City to provide strong connections between the major mixed-use Special Areas, employment centers, and the surrounding community. Supporting strategies would require the City to enhance pedestrian and bicycle connections from the major mixed-use Special Areas and employment centers to surrounding neighborhoods and provide pedestrian and bicycle paths through new and redevelopment projects to enhance public access to and through the development. Policy 2-12, Long Term Growth Boundary, would require the City to allow modification of the long-term growth boundary only in conjunction with a comprehensive review of the City’s General Plan. Policy 2-22, Jobs/Housing Balance, would require the City to strive for a more balanced ratio of jobs and housing units. Policy 2-26, Heart of the City Special Area, would require the City to create a positive and memorable image along Stevens Creek Boulevard of

---

<sup>11</sup> California Air Resources Board (CARB), 2014, Proposed First Update to the Climate Change Scoping Plan: Building on the Framework, [http://www.arb.ca.gov/cc/scopingplan/2013\\_update/draft\\_proposed\\_first\\_update.pdf](http://www.arb.ca.gov/cc/scopingplan/2013_update/draft_proposed_first_update.pdf), February

## LAND USE ALTERNATIVE A

mixed-use development; enhanced activity gateways and nodes; and safe and efficient circulation and access for all modes of transportation. Supporting strategies 1 and 2 require the City to maintain the Heart of the City Specific Plan as the primary implementation tool for the City to use for this area and evaluate options on Stevens Creek Boulevard to improve the pedestrian environment by proactively managing speed limits and traffic signal synchronization. Policy 4-5, Pedestrian Access, require the City to create pedestrian access between new subdivisions and school sites. Review existing neighborhood circulation plans to improve safety and access for pedestrians and bicyclists to school sites, including completing accessible network of sidewalks and paths. Supporting strategies require the City to implement the recommendations of the Cupertino Pedestrian Transportation Plan and trail projects, evaluate any safety, security and privacy impacts and mitigations associated with trail development and work with affected neighborhoods in locating trails.

Within the Environmental Resources/Sustainability Element, Policy 5-1, Principles of Sustainability, would require the City to incorporate the principles of sustainability into Cupertino's planning and development system. Supporting strategies include requiring the City to appoint a Task Force or Commission to develop an appropriate comprehensive annual Sustainability and Resource Plan for the City to write and keep current the annual Tactical Plan and measurement of City-wide programs to help achieve the Environmental Resources and Sustainability section of the General Plan; identify and evaluate resources, technologies, products and the lifecycle cost of ownership for each recommended; and work with City staff to evaluate the financial feasibility of the recommendations. The City would be required to encourage community gardens, which provide a more livable environment by controlling physical factors such as temperature, noise, and pollution. In addition, the City is required to adopt and implement energy policies and implementation programs that include the City's planning and regulatory process; conduct a Citywide sustainability inventory in order to identify issues, opportunities and planning alternatives; and prepare and implement a comprehensive sustainability energy plan as a part of the City's General Plan. The supporting energy plan would be designed to include the following:

- Reduction of energy consumption.
- Reduction of fossil fuels.
- Use of renewable energy resources whenever possible.
- Improve City-wide water usage and conservancy.
- Reduce water consumption by the City.
- Promote residential and business water reduction.



LAND USE ALTERNATIVE A

TABLE 5.2-5 LAND USE ALTERNATIVE A COMMUNITY GREENHOUSE GAS EMISSIONS INVENTORY

Category	GHG Emissions (MTCO <sub>2</sub> e/Year)						
	Existing 2013	2040 BAU (Without State and Federal GHG Reductions)	2040 Adjusted BAU (With State and Federal GHG Reductions)	Change from 2013	Percent Change	Change from BAU	Percent Change
Transportation <sup>a</sup>	123,518	149,165	103,661	-19,857	-16%	-45,504	-31%
Residential (Natural Gas and Electricity) <sup>b</sup>	74,579	81,183	72,660	-1,919	-3%	-8,524	-10%
Nonresidential* (Natural Gas and Electricity) <sup>b</sup>	85,416	101,653	82,618	-2,798	-3%	-19,034	-19%
City (Natural Gas and Electricity) <sup>b</sup>	1,081	1,216	920	-161	-15%	-296	-24%
Waste <sup>c</sup>	7,095	7,987	7,987	892	13%	0	0%
Water/Wastewater <sup>d</sup>	3,712	3,949	2,843	-869	-23%	-1,106	-28%
Other - Offroad Equipment <sup>e</sup>	14,006	14,422	12,980	-1,026	-7%	-1,442	-10%
Total Community Emissions	309,406	359,576	283,670	-25,736	-8%	-75,906	-21%
Service Population <sup>f</sup>	85,689		96,466	—	—	—	—
MTCO <sub>2</sub> e/Service Population (SP)	3.6	3.7	2.9	—	—	—	—
BAAQMD GHG 2040 Plan-Level Threshold	—	—	3.1	—	—	—	—
Achieves BAAQMD GHG Plan-Level Threshold?	—	—	Yes	—	—	—	—

Notes: Emissions may not total to 100 percent due to rounding. BAU: business as usual; ABAU: adjusted business as usual. Based on GWPs in the IPCC Second Assessment Report.

a. Transportation. VMT is based on data provided by Hexagon based on VTA model for Cupertino and modeled with EMFAC2011-PL for running exhaust emissions using 2035 emission rates (note: 2040 emissions rates are not available). VMT is multiplied by 347 days/year to account for reduced traffic on weekends and holidays.

b. Energy. Based on 3-year average (2012–2010) of energy use provided by Pacific Gas & Electric (PG&E) and forecast based on Land Use Alternative A housing units (residential), employment (non-residential), and service population (City) projections. The nonresidential sector includes direct access customers, county facilities, and other district facilities within the city boundaries. PG&E energy based on PG&E’s carbon intensity for 2020. The 2020 emissions rate is estimated by PG&E. It includes reductions from 33 percent RPS, Cap-and-Trade, and other regulatory reductions for HGWP gases such as reductions of SF<sub>6</sub>. Direct access energy based on the eGRID carbon intensity and assumes 33 percent RPS.

c. Waste. Based on CARB Landfill Emissions Tool Version 1\_2013. Waste generation based on 3-year average (2012-2010) waste commitment for the City of Cupertino obtained from CalRecycle and forecast based on the service population increase. Assumes 75 percent of fugitive GHG emissions are captured within the landfill’s Landfill Gas Capture System with a landfill gas capture efficiency of 75 percent. The Landfill gas capture efficiency is based on the CARB’s LGOP, Version 1.1.

d. Water/Wastewater. Includes fugitive emissions from wastewater processing and energy associated with water/wastewater treatment and conveyance. The net increase in water use was based on the Water Supply Evaluation prepared for Land Use Alternative A.

e. Area Sources – Off-Road Emissions. Generated using OFFROAD2007. Estimated based on population (Landscaping), employment (Light Commercial Equipment), and construction building permits (Construction) for Cupertino as a percentage of Santa Clara County. Annual construction emissions forecasts are assumed to be similar to historic levels. Forecasts for landscaping equipment use are based on Land Use Alternative A population projections, and for light commercial equipment use are based on Land Use Alternative A employment projections. Excludes BAAQMD permitted sources. Daily construction emissions multiplied by 347 days/year to account for reduced/limited construction activity on weekends and holidays. Excludes fugitive emissions from construction sites.

f. Based on: Existing service population of 85,689 people (58,302 residents and 27,387 employees). 2040 service population of 96,466 people (63,873 residents and 32,593 employees).

## LAND USE ALTERNATIVE A

Policy 5-3, Conservation and Efficient Use of Energy Resources, would require the City to encourage the maximum feasible conservation and efficient use of electrical power and natural gas resources for new and existing residences, businesses, industrial and public uses. Supporting strategies require the City to do the following:

- Prepare and implement a comprehensive energy management plan for all applicable public facilities, equipment and procurement and construction practices.
- Review and evaluate applicable City codes, ordinances, and procedures for inclusion of local, state and federal policies and standards that promote the conservation and efficient use of energy and for consistency with the goal of sustainability. Change those that will promote energy efficiency without a punitive effect.
- Using life cycle cost analysis, identify City assets for replacement with more energy efficient replacements.
- implement an incentive program to include such items as reduced permit fees for building projects that exceed Title 24 requirements. Promote other incentives from the State, County and Federal Governments for improving energy efficiency by posting information regarding incentive, rebate and tax credit programs on the City's web site. Let's make learning about this easy and help those interested get started!
- Encourage the use of energy cogeneration systems through the provision of an awareness program targeting the larger commercial and industrial users and public facilities.
- Ensure designer, developers, applicants and builders meet California Title 24 Energy Efficient Building Standards and encourage architects, building designers and contractors to exceed "Title 24" requirements for new projects through the provision of incentives. Encourage either passive solar heating and/or dark plaster interior with a cover for swimming pools, cabanas and other related accessory uses where solar access is available. Encourage the use of alternative renewable sources where feasible, and develop energy audits or subvention programs.
- Require, as conditions of approval for new and renovated projects, the provision of energy conservation/efficiency applications.
- Encourage alternative, energy efficient transportation modes such as "clean" multi-modal public transit, car and vanpooling, flexible work hours, and pedestrian and bicycle paths.

Policy 5-4, Green Building Design, would require the City to set standards for the design and construction of energy and resource conserving/efficient building (Green Building Design). Supporting strategies require the City to prepare and implement "Green Building" standards for all major private and public projects that ensure reduction in energy consumption for new development through site and building design. The City would be required to participate in and encourage building energy audits, where feasible, for commercial, industrial and city facilities and convey to the business and industrial communities that energy conservation/efficiency is, in the long term, economically beneficial. PG&E also offers energy evaluation tools and services free of charge. In addition, the City would prepare a "Green Buildings" evaluation guide for use by the city staff when reviewing projects, train appropriate staff in the design principles, costs and

**LAND USE ALTERNATIVE A**

benefits of energy conservation/efficient buildings and landscape design, conduct and/or participate in “Green Buildings” informational seminars and workshops to include people involved in the design and construction industry, land development, real estate sales, lending institutions, landscaping and design, the building maintenance industry and prospective project applicants, and become a regular feature article in the Cupertino Scene, do media outreach to the Courier and the Guide (San Jose Mercury) tape the Sustainable Building and other conservation courses, or seminars and broadcast them on the City Channel as well, and make them available at the Library. Policy 5-6, Air Pollution Effects of Existing Development, would require the City to minimize the air quality impacts of existing development. Supporting strategies require the City to establish a Citywide public education program regarding the implications of the Clean Air Act and provide information on ways to reduce and control emissions; provide information about carpooling and restricting physical activities on “Spare the Air” high-pollution days, expand the allowable home occupations in residentially zoned properties to reduce the need to commute to work, increase planting of trees on City property and encourage the practice on private property, maintain City use of fuel-efficient and low polluting vehicles, and work with County to monitor and influence improvement of emissions and dust from the Hanson and Stevens Creek Quarries on the West end of the City. Policy 5-7, Use of Open Fires and Fireplaces, would require the City to discourage high pollution fireplace use. Policy 5-28, Interagency Coordination, actively pursue interagency coordination for regional water supply problem solving. Policy 5-29, Coordination of Local Conservation Policies with Regionwide Conservation Policies, would require the City to Coordinate city-wide water conservation efforts with the Santa Clara Valley Water District efforts being conducted on a regional scale. Many of these conservation efforts are outlined in the Santa Clara Valley Water District Drought Plan and Countywide Water Use Reduction program. Policy 5-30, Public Information Effort, would require the City to provide the public information regarding water conservation/efficiency techniques, including how paving and other impervious surfaces impact runoff. Policy 5-31, Water Use Efficiency, would require the City to promote efficient use of water throughout the City. Policy 5-38, Commercial/Industrial Recycling, would require the City to expand existing commercial and industrial recycling programs to meet and surpass AB 939 waste stream reduction goals. Policy 5-39, Residential Recycling, would require the City to streamline the residential curbside recycling program in the next decade. Include all city-wide residential zoning districts in the curbside recycling program. Policy 5-40, On-Site Garbage and Organic Collection Area Dedication, would require the City to modify existing, and require for new developments, on-site waste facility requirements for all multi-family residential, commercial and industrial land uses to have adequate covered area for a combination of garbage, recycling and organic collection. Supporting strategy, Ordinance Revisions, would require the City to revise existing ordinances relative to on-site waste facility requirements for all multi-family residential, commercial and industrial zoning districts to require that a minimum of 50 percent of garbage area be dedicated to recycling. Policy 5-41, Public Education, would require the City to promote the existing public education program regarding the reduction of solid waste disposal and recycling. Supporting strategy, Recycling Program Information, would require the City to use the local television channel, the Cupertino Scene, the Internet and other available media to provide information to the residents about the objectives of the City’s recycling program. Policy 5-42, City Recycling and Organic Diversion, would require the City to encourage City staff to recycle and compost at all City facilities. Policy 5-43, Re-distribution of Reusable Materials, would require the City to re-distribute reusable materials, e.g. garage sales, materials exchange through public education, encourage residents and businesses. Policy 5-44, Reuse of Building Materials, would require the City to encourage the recycling and reuse of building materials, including recycling materials generated by the demolition and remodeling of buildings.

## LAND USE ALTERNATIVE A

Within the Circulation Element, Policy 4-1, City Participation in Regional Transportation Planning, would require the City to participate actively in developing regional approaches to meeting the transportation needs of the residents of the Santa Clara Valley. Work closely with neighboring jurisdictions and agencies responsible for roadways, transit facilities and transit services in Cupertino. Supporting strategies require the City to minimize regional traffic impacts on Cupertino by supporting regional planning programs to manage the jobs-housing balance throughout Santa Clara County and the Silicon Valley; ensure that connections are provided to enable travelers to transition from one mode of transportation to another, e.g. bicycle to bus ;support the expansion of the VTA’s regional bus transit system and extension of bus and/or light rail rapid transit into the Stevens Creek and De Anza Special Areas to fulfill the “spoke and wheel” transit system designed to serve all of Santa Clara County. Policy 4-3, Reduced Reliance on the Use of Single-Occupant Vehicles, require the City to promote a general decrease in reliance on private, mostly single-occupant vehicles (SOV) by encouraging attractive alternatives. Supporting strategies require the City to encourage the use of alternatives to the SOV including increased car-pooling, use of public transit, bicycling and walking; encourage TSM programs for employees in both the public and private sectors by including preferred parking for carpools, providing bus passes, encouraging compressed workweeks, and providing incentives and rewards for bicycling and walking; encourage employers to use the internet to reduce commute travel. Encourage schools, particularly at the college and high school levels, to make maximum use of the internet to limit the need to travel to and from the campus; encourage new commercial developments to provide shared office facilities, cafeterias, day-care facilities, lunchrooms, showers, bicycle parking, home offices, shuttle buses to transit facilities and other amenities that encourage the use of transit, bicycling, walking or telecommuting as commute modes to work. Provide pedestrian pathways and orient buildings to the street to encourage pedestrian activity; provide space on appropriate streets for bus turnouts, or safe and accessible bike lanes or pedestrian paths; use the Cupertino Scene and other media to provide educational material on alternatives to the SOV; continue to work with the City Bicycle/Pedestrian Advisory Committee, community groups and residents to eliminate hazards and barriers to bicycle and pedestrian transportation.

### *Applicable Regulations*

- California Global Warming Solutions Act (AB 32)
- Sustainable Communities and Climate Protection Act (SB 375)
- Greenhouse Gas Emission Reduction Targets (Executive Order S-3-05)
- Clean Car Standards – Pavely (AB 1493)
- Renewable Portfolio Standards (SB 1078)
- California Integrated Waste Management Act of 1989 (AB 939)
- California Mandatory Commercial Recycling Law (AB 341)
- California Advanced Clean Cars CARB/ Low-Emission Vehicle Program – LEV III (Title 13 CCR)
- Heavy-Duty Vehicle Greenhouse Gas Emissions Reduction Measure (Title 17 CCR)
- Low Carbon Fuel Standard (Title 17 CCR)
- California Water Conservation in Landscaping Act of 2006 (AB 1881)
- California Water Conservation Act of 2009 (SBX7-7)
- Statewide Retail Provider Emissions Performance Standards (SB 1368).
- Airborne Toxics Control Measure to Limit School Bus Idling and Idling at Schools (13 CCR 2480)
- Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling (13 CCR 2485)

**LAND USE ALTERNATIVE A**

- In-Use Off-Road Diesel Idling Restriction (13 CCR 2449)
- Building Energy Efficiency Standards (Title 24, Part 6)
- California Green Building Code (Title 24, Part 11)
- Appliance Energy Efficiency Standards (Title 20)

The General Plan establishes the framework for future growth and development in Cupertino. A General Plan does not directly result in development without additional approvals. Before any development can occur in the City, it is required to be analyzed for conformance with the General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits. As identified in Table 5.2-5, Land Use Alternative A would achieve the 2035 performance criteria, which would ensure that the City is on a trajectory that is consistent with the statewide GHG reduction goals. Consequently, long-term GHG emissions impacts of Land Use Alternative A are *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**GHG-2                      Implementation of Land Use Alternative A would not conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.**

---

The following plans have been adopted and are applicable for development in the City of Cupertino:

**CARB’s Scoping Plan**

In accordance with AB 32, CARB developed the Scoping Plan to outline the State’s strategy to achieve 1990 level emissions by year 2020. To estimate the reductions necessary, CARB projected statewide 2020 BAU GHG emissions (i.e. GHG emissions in the absence of statewide emission reduction measures). CARB identified that the State as a whole would be required to reduce GHG emissions by 28.5 percent from year 2020 BAU to achieve the targets of AB 32.<sup>12</sup>The revised BAU 2020 forecast shows that the state would have to reduce GHG emissions by 21.6 percent from BAU without implementation of the Pavley GHG emissions standards for passenger vehicles and the 33 percent renewable portfolio standard (RPS) for electricity, or 15.7 percent from the adjusted baseline (i.e. with Pavley and 33 percent RPS).<sup>13</sup>

Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard (LCFS), California Appliance Energy Efficiency regulations; California Building Standards (i.e. CALGreen and the 2008 Building and Energy Efficiency Standards); California Renewable Energy Portfolio standard (33 percent RPS); changes in the corporate average fuel economy standards (e.g. Pavley I and Pavley II); and other measures that would ensure the State is on target to achieve the GHG emissions reduction goals of AB 32.

---

<sup>12</sup> California Air Resources Board (CARB). 2008. October. *Climate Change Proposed Scoping Plan, a Framework for Change*.

<sup>13</sup> California Air Resources Board (CARB), 2012. *Status of Scoping Plan Recommended Measures*, [http://www.arb.ca.gov/cc/scopingplan/status\\_of\\_scoping\\_plan\\_measures.pdf](http://www.arb.ca.gov/cc/scopingplan/status_of_scoping_plan_measures.pdf).

## LAND USE ALTERNATIVE A

Statewide GHG emissions reduction measures that are being implemented over the next six years would reduce the City's GHG emissions.

As shown in Table 5.2-5, the City would achieve the 2020 target of AB 32 for cities within the San Francisco Bay Area Air Basin (SFBAAB). New residential and non-residential construction in the City would achieve the current building and energy efficiency standards. The new buildings would be constructed in conformance with CALGreen, which would require high-efficiency water fixtures for indoor plumbing and water efficient irrigation systems. Therefore, impacts would be less than significant.

### MTC's Plan Bay Area

To achieve ABAG's/MTC's sustainable vision for the Bay Area, the Plan Bay Area land use concept plan for the region concentrates the majority of new population and employment growth in the region in PDAs. PDAs are transit-oriented, infill development opportunity areas within existing communities. Overall, well over two-thirds of all regional growth by 2040 is allocated within PDAs. PDAs are expected to accommodate 80 percent (or over 525,570 units) of new housing and 66 percent (or 744,230) of new jobs.<sup>14</sup> In Cupertino, Plan Bay Area includes the Santa Clara VTA – City Cores, Special Areas & Station Areas PDA.<sup>15</sup>

The General Plan includes policies and strategies that, once adopted, would encourage use of alternative modes of travel, which is also consistent with Plan Bay Area's vision. Within the Circulation Element, Policy 4-3, Reduced Reliance on the Use of Single-Occupant Vehicles, would require the City to promote a general decrease in reliance on private, mostly single-occupant vehicles (SOV) by encouraging attractive alternatives. Supporting strategies require the City to do the following:

- Encourage the use of alternatives to the SOV including increased car-pooling, use of public transit, bicycling and walking.
- Encourage TSM programs for employees in both the public and private sectors by including preferred parking for carpools, providing bus passes, encouraging compressed workweeks, and providing incentives and rewards for bicycling and walking.
- Encourage employers to use the internet to reduce commute travel. Encourage schools, particularly at the college and high school levels, to make maximum use of the internet to limit the need to travel to and from the campus.
- Encourage new commercial developments to provide shared office facilities, cafeterias, day-care facilities, lunchrooms, showers, bicycle parking, home offices, shuttle buses to transit facilities and other amenities that encourage the use of transit, bicycling, walking or telecommuting as commute modes to work. Provide pedestrian pathways and orient buildings to the street to encourage pedestrian activity.
- Provide space on appropriate streets for bus turnouts, or safe and accessible bike lanes or pedestrian paths.

---

<sup>14</sup> Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG), 2013. *Plan Bay Area: Strategy for a Sustainable Region*, July 18.

<sup>15</sup> Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG), 2013. *Plan Bay Area*, <http://geocommons.com/maps/141979>.

## LAND USE ALTERNATIVE A

- Use the Cupertino Scene and other media to provide educational material on alternatives to the SOV.
- Continue to work with the City Bicycle/Pedestrian Advisory Committee, community groups and residents to eliminate hazards and barriers to bicycle and pedestrian transportation.

Policy 4-4, Improve Pedestrian and Bicycle Circulation Throughout Cupertino, would require the City Expand city-wide pedestrian and bicycle circulation in order to provide improved recreation, mobility and safety. Supporting strategies require the City to implement the projects recommended in the Pedestrian Guidelines including consider developing a quarter-mile grid of safe, walk-able sidewalks and paths to provide pedestrian access among residential, shopping, recreation and business locations and work with the School Districts to promote the Safe Route to Schools program. The City is also required to provide additional time for pedestrians to cross streets at appropriate intersections, consider various improvements to roadways to make them more pedestrian friendly and less auto-centric, encourage all public construction and private development projects to submit a Pedestrian/Bicycle Impact Statement to assess the impact of the project on pedestrians and bicycles. The City is required to implement Bicycle Plan, encourage the developers of major new or remodeled buildings to include secure interior and/or fully weather protected bicycle parking, and provide bicycle parking in multi-family residential developments and in commercial districts as required under Section 19.100.040 of the City code. Policy 4-6, Regional Trail Development, would require the City to continue to plan and provide for a comprehensive system of trails and pathways consistent with regional systems. Policy 4-7, Increased Use of Public Transit, would require the City to support and encourage the increased use of public transit. Policy 4-9, Traffic Service and Pedestrians Needs, would require the City to balance the needs of pedestrians with desired traffic service. Policy 4-12, Street Improvement Planning, would require the City to plan street improvements such as curb cuts, sidewalks, bus stop turnouts, bus shelters, light poles, benches and trash containers as an integral part of a project to ensure an enhanced streetscape and the safe movement of people and vehicles with the least possible disruption to the streetscape.

Policy 2-1, Focus Development in Mixed-Use Special Areas, which would encourage new growth in the PDA mixed-use corridor, is consistent with Plan Bay Area's vision. Policy 2-1 focuses new development in major mixed-use corridors in the City by allowing higher intensity development and increased building heights where appropriate in designated corridors, gateways, sub areas and nodes. As identified by the list of policies that encourage use of alternative modes of transportation and Policy 2-1 that focuses new growth in mixed-use areas, Land Use Alternative A is consistent with the objectives of Plan Bay Area for growth within this PDA. Therefore, Land Use Alternative A is consistent with land use concept plan for Cupertino identified in Plan Bay Area. Therefore, impacts would be *less than significant*.

### *Applicable Regulations*

- California Global Warming Solutions Act (AB 32)
- Sustainable Communities and Climate Protection Act (SB 375)
- Greenhouse Gas Emission Reduction Targets (Executive Order S-3-05)
- Clean Car Standards – Pavely (AB 1493)
- Renewable Portfolio Standards (SB 1078)
- California Integrated Waste Management Act of 1989 (AB 939)
- California Mandatory Commercial Recycling Law (AB 341)

## LAND USE ALTERNATIVE A

- California Advanced Clean Cars CARB/ Low-Emission Vehicle Program – LEV III (Title 13 CCR)
- Heavy-Duty Vehicle Greenhouse Gas Emissions Reduction Measure (Title 17 CCR)
- Low Carbon Fuel Standard (Title 17 CCR)
- California Water Conservation in Landscaping Act of 2006 (AB 1881)
- California Water Conservation Act of 2009 (SBX7-7)
- Statewide Retail Provider Emissions Performance Standards (SB 1368).
- Airborne Toxics Control Measure to Limit School Bus Idling and Idling at Schools (13 CCR 2480)
- Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling (13 CCR 2485)
- In-Use Off-Road Diesel Idling Restriction (13 CCR 2449)
- Building Energy Efficiency Standards (Title 24, Part 6)
- California Green Building Code (Title 24, Part 11)
- Appliance Energy Efficiency Standards (Title 20)

Implementation of Land Use Alternative A policies as well as compliance with applicable State standards listed and described above would ensure that consistency with state and regional GHG reduction planning efforts; therefore, this impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**GHG-3                      Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to GHG emissions.**

---

As described above, GHG emissions related to Land Use Alternative A are not confined to a particular air basin but are dispersed worldwide. Therefore, the analysis in GHG-1 addresses cumulative impacts.

As identified above, the General Plan is a regulatory document that sets the framework for future growth and development. A General Plan does not directly result in development without further approvals. Before any development can occur in the city, it is required to be analyzed for conformance with the General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits. Furthermore, existing federal, State, and local regulations and policies, including the City's draft CAP, described throughout this chapter serve to reduce community-wide GHG emissions. Continued compliance with these regulations and implementation of existing policies, including applicable policies, would reduce impacts. As identified in Impact GHG-1, Table 5.2-5 shows that Land Use Alternative A would achieve the 2035 performance criteria, which would ensure that the City is on a trajectory that is consistent with the statewide GHG reduction goals. Consequently, cumulative GHG emissions impacts of Land Use Alternative A are *less than significant*.

**Significance Without Mitigation:** Less than significant.



### 5.2.7.7 HAZARDS AND HAZARDOUS MATERIALS

---

**HAZ-1                    Implementation of Land Use Alternative A would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.**

---

While commercially available hazardous materials (e.g. fuels, solvents, paints, and some consumer electronics) would be used at various new construction sites and may generate small amounts of hazardous waste, the waste would be handled in accordance with applicable federal, State, and local laws, policies, and regulations, as described in Section 4.7.1.1, Regulatory Framework, of Chapter 4.7, Hazards and Hazardous Materials. As a general matter, Land Use Alternative A has office, commercial and residential land uses and, therefore, would not include manufacturing or research processes that generate substantial quantities of hazardous materials. The SCCFD and City of Cupertino Building Division coordinate the review of building permits to ensure that hazardous materials requirements are met prior to construction, including required separation between hazardous materials and sensitive land uses, and proper hazardous materials storage facilities. Any businesses that transport, generate, use, and/or dispose of hazardous materials within the Project Study Area would also be subject to existing hazardous materials regulations, such as those implemented by HMCD, and hazardous materials permits from the SCCFD. The SCCFD also conducts inspections for fire safety and hazardous materials management of businesses and multi-family dwellings, in accordance with the City of Cupertino Hazardous Materials Storage Ordinance.

In addition, the General Plan contains the following policies and strategies that, once adopted, would further ensure that new development would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Within the Health and Safety Element, Policy 6-27, Hazardous Materials Storage and Disposal, directs the City to require the proper storage and disposal of hazardous materials to prevent leakage, potential explosions, fire, or the release of harmful fumes. Policy 6-28, Proximity of Residents to Hazardous Materials, requires the City to assess future residents' exposure to hazardous materials when new residential development or childcare facilities are proposed in existing industrial and manufacturing areas and does not allow residential development or childcare facilities if such hazardous conditions cannot be mitigated to an acceptable level of risk. Policy 6-29, Electromagnetic Fields, requires the City to consider potential hazards from Electromagnetic Fields in the project review process. Policy 6-30, Alternative Products, requires the City to continue to encourage residents and businesses to use non- and less-hazardous products, especially less toxic pest control products, to slow the generation of new hazardous waste requiring disposal through the county-wide program. Policy 6-31, Household Hazardous Wastes, requires the City to continue to support and facilitate for residences and businesses a convenient opportunity to properly dispose of hazardous waste. Policy 6-32, Hazardous Waste Dumping, requires the City to maintain information channels to the residential and business communities about the illegality and danger of dumping hazardous material and waste in the storm drain system or in creeks.

## LAND USE ALTERNATIVE A

Compliance, with applicable federal, State, and local laws and regulations regarding handling of these materials, as described in Section 4.7.1.1, Regulatory Framework, of Chapter 4.7, Hazards and Hazardous Materials and the General Plan policies listed above would ensure the risks associated with release of hazardous materials into the environment from the routine transport, use, storage, or disposal of hazardous materials following construction would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**HAZ-2**                    **Implementation of Land Use Alternative A would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.**

---

Land Use Alternative A would facilitate new development, including residential, mixed-use, and commercial uses, within Cupertino. Some of the new development could occur on properties that possibly are contaminated and inactive, undergoing evaluation, and/or undergoing corrective action, as indicated in Table 4.7.1. Construction of new buildings and improvements could have the potential to release potentially hazardous soil-based materials into the environment during site grading and excavation operations. Likewise, demolition of existing structures could potentially result in release of hazardous building materials (e.g. asbestos, lead paint, etc.) into the environment. Use of hazardous materials on newly developed properties after construction could potentially include cleaning solvents, fertilizers, pesticides, and other materials used in the regular maintenance and operation of the proposed uses. Compliance with applicable federal, State, and local laws and regulations regarding handling of these materials described in Section 4.7.1.1, Regulatory Framework, of Chapter 4.7, Hazards and Hazardous Materials, the General Plan policies listed under Impact HAZ-1, and compliance with the Stormwater Pollution Prevention Plan and Best Management Practices required for Land Use Alternative A (see Chapter 4.8, Hydrology and Water Quality, for additional detail), would ensure future development under Land Use Alternative A would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; therefore, impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**HAZ-3**                    **Implementation of Land Use Alternative A would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.**

---

Several public and private schools, including preschools, elementary, middle, and high schools, are located within one-quarter mile of known hazardous wastes sites that may be redeveloped as part of Land Use Alternative A. The location of schools in proximity to each Project Component location is described in detail in Chapter 3, Project Description, of this Draft EIR.

## LAND USE ALTERNATIVE A

The SCCFD and City of Cupertino Building Division coordinate the review of building permits to ensure that hazardous materials use requirements are met prior to construction, including required separation between hazardous materials and sensitive land uses, and proper hazardous materials storage facilities. In addition, Land Use Alternative A could use hazardous materials. Future development under Land Use Alternative A would be required by the HMCD and the City of Cupertino to store, manage, and dispose of the materials in accordance with the Unified Program.

While compliance with existing regulations described in Section 4.7.1.1, Regulatory Framework, of Chapter 4.7, Hazards and Hazardous Materials along with the General Plan policies listed under Impact HAZ-1 would reduce the potential for school children to be exposed to hazardous materials during both construction and operation from future development permitted under Land Use Alternative A, impacts would be potentially significant.

However, implementation of Mitigation Measures HAZ-4a and HAZ-4b, as discussed in Impact HAZ-4 below, would reduce the potential for school children to be exposed to hazardous materials from future development permitted under Land Use Alternative A to a *less-than-significant* level.

**Significance With Mitigation:** Less than significant.

---

**HAZ-4                      Implementation of Land Use Alternative A would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.**

---

As shown on Table 4.7-2, the search of the DTSC's EnviroStor Database revealed five sites, and the GeoTracker database search revealed 27 LUST sites, on or within close proximity to the Project Component locations. The status of the LUST sites that are listed as "Completed-Case Closed," indicates that appropriate response actions have been completed to the satisfaction of the San Francisco Bay RWQCB or the Santa Clara Water District and, in recent years, the Santa Clara County DEH, as the local oversight agency. The status of the Hazardous Site Number 23 (Tosco #11220), in the Heart of the City Special Area, a listed LUST site, is "Open-Verification Monitoring," indicating that remediation phases are essentially completed and a monitoring program is occurring to confirm successful completion of cleanup at the Site. The on-going monitoring at this Hazardous Material Site is currently being reviewed by Santa Clara County DEH with RWQCB oversight.

Out of the 32 Hazardous Materials Sites, the following have a status that indicates additional action is required to address the hazardous materials at these locations. These are described as follows:

- Hazardous Site 1 (Cupertino Village Cleaners), located in the North Vallco Special Area, North Vallco Gateway and Study Area 5 (Cupertino Village) is listed as "voluntary cleanup," which means, in this case, the Site has a confirmed release of tetrachloroethylene (PCE) that has impacted site soil, and the project proponents have requested the DTSC to oversee evaluation, investigation, and/or cleanup activities and have agreed to provide coverage for the DTSC's costs. Based on the potential human health risk to future tenants of the former dry cleaners tenant space, the DTSC has concluded that remediation (soil excavation or soil vapor extraction [SVE]) would be required at this location.

## LAND USE ALTERNATIVE A

- Hazardous Site 2 (Anderson Chevrolet Dealership), located in the Heart of the City Special Area and North Crossroads Node, is listed as sites where the DTSC has determined that a Preliminary Endangerment Assessment (PEA) or other evaluation is required.
- Hazardous Site 3 (Four-Phase System), located in the South De Anza Special Area, is listed as undergoing closure.
- Hazardous Site 5 (Acrian Incorporated), located in the Bubb Road Special Area, is listed as sites where the DTSC has determined that a Preliminary Endangerment Assessment (PEA) or other evaluation is required.
- Hazardous Site 13 (PG&E), located in Study Area 3 (PG&E), is listed as LUST site. Case closure for the Site was issued by the Santa Clara County DEH on June 29, 2005. However, Santa Clara County DEH has determined that residual contamination in soil remains at the Site that could pose an unacceptable risk under certain site development activities such as site grading, excavation, or the installation of water wells. Therefore, the impact of the disturbance of any residual contamination or the installation of water well(s) in the vicinity of the residual contamination must be assessed and appropriate action taken so that there is no significant impact to human health, safety, or the environment. This could necessitate additional sampling, health risk assessment, and mitigation measures.

Because hazardous materials are known to be present in soil, soil gas, and/or groundwater due to past land uses at certain sites that may be redeveloped as part of Land Use Alternative A, the direct contact, inhalation, or ingestion of hazardous materials could potentially cause adverse health effects to construction workers and future site users. The severity of health effects would depend on the contaminant(s), concentration, use of personal protective equipment during construction, and duration of exposure. The disturbance and release of hazardous materials during earthwork activities, if present, could pose a hazard to construction workers, nearby receptors, and the environment and impacts could be potentially *significant*.

## Mitigation Measures

The following mitigation measures are recommended to minimize potential impacts related to sites with known hazardous materials:

**Mitigation Measure HAZ-4a:** Construction at the sites with known contamination shall be conducted under a project-specific Environmental Site Management Plan (ESMP) that is prepared in consultation with the Regional Water Quality Control Board (RWQCB) or the Department of Toxic Substances Control (DTSC), as appropriate. The purpose of the ESMP is to protect construction workers, the general public, the environment, and future site occupants from subsurface hazardous materials previously identified at the site and to address the possibility of encountering unknown contamination or hazards in the subsurface. The ESMP shall summarize soil and groundwater analytical data collected on the project site during past investigations; identify management options for excavated soil and groundwater, if contaminated media are encountered during deep excavations; and identify monitoring, irrigation, or other wells requiring proper abandonment in compliance with local, State, and federal laws, policies, and regulations.

**LAND USE ALTERNATIVE A**

The ESMP shall include measures for identifying, testing, and managing soil and groundwater suspected of or known to contain hazardous materials. The ESMP shall: 1) provide procedures for evaluating, handling, storing, testing, and disposing of soil and groundwater during project excavation and dewatering activities, respectively; 2) describe required worker health and safety provisions for all workers potentially exposed to hazardous materials in accordance with State and federal worker safety regulations; and 3) designate personnel responsible for implementation of the ESMP.

**Mitigation Measure HAZ-4b:** For those sites with potential residual contamination in soil, gas, or groundwater that are planned for redevelopment with an overlying occupied building, a vapor intrusion assessment shall be performed by a licensed environmental professional. If the results of the vapor intrusion assessment indicate the potential for significant vapor intrusion into an occupied building, project design shall include vapor controls or source removal, as appropriate, in accordance with regulatory agency requirements. Soil vapor mitigations or controls could include vapor barriers, passive venting, and/or active venting. The vapor intrusion assessment and associated vapor controls or source removal can be incorporated into the ESMP (Mitigation Measure HAZ-4a).

**Significance With Mitigation:** Less than significant.

---

**HAZ-5                      Implementation of Land Use Alternative A would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.**

---

As discussed previously, the City of Cupertino Office of Emergency Services is responsible for coordinating agency response to disasters or other large-scale emergencies in the City of Cupertino with assistance from the Santa Clara County Office of Emergency Services and the SCCFD. The Cupertino EOP establishes policy direction for emergency planning, mitigation, response, and recovery activities within the city. The Cupertino EOP addresses interagency coordination, procedures to maintain communications with county and State emergency response teams, and methods to assess the extent of damage and management of volunteers.

In addition, the General Plan contains policies and strategies that, once adopted, would ensure that new development would not conflict with emergency operations in Cupertino. Within the Health and Safety Element, Policy 6-1, Regional Hazard Risk Reduction Planning, directs the City to coordinate with Santa Clara County and local agencies to implement the Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) for Santa Clara County. This policy also includes three new strategies that would direct the City to enact this Policy. Strategy 1, Monitoring and Budgeting, requires the City to monitor and fund the LHMP program. Strategy 2, Mitigation Incorporation, requires the City to ensure that individual projects and developments incorporate appropriate LHMP mitigation measures. Strategy 3, Hazard Mitigation Plan Amendments and Updates, supports Santa Clara County's efforts as the lead agency for the LHMP. Through Policy 6-1, Regional Hazard Risk Reduction Planning, and its attendant strategies, the City of Cupertino would actively facilitate regional emergency response plans. Policy 6-8, Early Project Review, requires the City to involve the Fire Department in the early design stage of all projects requiring public review to assure Fire Department input and modifications as needed. Policy 6-9, Commercial and Industrial Fire Protection Guidelines, requires the City to coordinate with the Fire Department to develop new guidelines for fire

## LAND USE ALTERNATIVE A

protection for commercial and industrial land uses. Policy 6-10, Fire Prevention and Emergency Preparedness, requires the City to promote fire prevention and emergency preparedness through city-initiated public education programs, through the government television channel, the Internet and the Cupertino Scene. Policy 6-13, Roadway Design, requires the City to involve the Fire Department in the design of public roadways for review and comments. Attempt to ensure that roadways have frequent median breaks for timely access to properties. Policy 6-14, Dead-End Street Access, requires the City to allow the public use of private roadways during an emergency for hillside subdivisions that have dead-end public streets longer than 1,000 feet or find a secondary means of access. Policy 6-15, Hillside Access Routes, directs the city to require new hillside development to have frequent grade breaks in access routes to ensure a timely response from fire personnel. Policy 6-16, Hillside Road Upgrades, directs the city to require new hillside development to upgrade existing access roads to meet Fire Code and City standards. Policy 6-17, Private Residential Electronic Security Gates, requires the City to discourage the use of private residential electronic security gates that act as a barrier to emergency personnel. Policy 6-33, Promote Emergency Preparedness, requires the City to distribute multi-hazard emergency preparedness information for all threats identified in the emergency plan. Information will be provided through Cardio-Pulmonary Resuscitation (CPR), First Aid and Community Emergency Response Team (CERT) training, lectures and seminars on emergency preparedness, publication of monthly safety articles in the Cupertino Scene, posting of information on the Emergency Preparedness website and coordination of video and printed information at the library. Policy 6-38, Emergency Operations Center, requires the City to ensure ongoing training of identified City employees on their functions/responsibilities in the EOC. Policy 6-39, Emergency Public Information, requires the City to maintain an Emergency Public Information program to be used during emergency situations. Policy 6-42, Evacuation Map, requires the City to prepare and update periodically an evacuation map for the flood hazard areas and distribute it to the general public.

Compliance with applicable federal, State, and local laws and regulations regarding handling of these materials, as described in Section 4.7.1.1, Regulatory Framework, of Chapter 4.7, Hazards and Hazardous Materials, and the General Plan policies listed above that require adequate access and prompt response time, would ensure future development under Land Use Alternative A would not interfere with an adopted emergency response plan, or emergency evacuation plan and impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>HAZ-6</b>	<b>Implementation of Land Use Alternative A would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.</b>
--------------	--

---

According to CAL FIRE, there are no very high fire hazard severity zones within the Local Responsibility Areas of Cupertino. Furthermore, in 2009 the City adopted a Wildland Urban Interface Fire Area map, which also identified that there are no high or very high fire risk areas near Land Use Alternative A Component locations. Although this information indicates that the wildfire risk in the Project Component location areas is low, there are many resources available to address wildland fires should they arise, including the aforementioned CAL FIRE Strategic Plan, the CFC, and cooperative fire services from SCCFD. Because

**LAND USE ALTERNATIVE A**

the overall Project Study Area is located in a highly urbanized area at a distance from regional open space areas, they are not subjected to wildland fires.

In addition, the current General Plan contains the following policies that, once adopted, would further ensure that wildfire hazards would be minimized. Within the Health and Safety Element, Policy 6-1, Regional Hazard Risk Reduction Planning, directs the City to coordinate with Santa Clara County and local agencies to implement the Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) for Santa Clara County. This policy also includes three new strategies that would direct the City to enact this Policy. Strategy 1, Monitoring and Budgeting, requires the City to monitor and fund the LHMP program. Strategy 2, Mitigation Incorporation, ensures that individual projects and developments incorporate appropriate LHMP mitigation measures. Strategy 3, Hazard Mitigation Plan Amendments and Updates, supports Santa Clara County's efforts as the lead agency for the LHMP. Through Policy 6-1, Regional Hazard Risk Reduction Planning and its attendant strategies, the City of Cupertino would comply with regional plans for addressing local hazards, including wildfire. Policy 6-4, Wild Fire Prevention Efforts, requires the City to coordinate wild fire prevention efforts with adjacent jurisdictions. Policy 6-5, County Fire Hazard Reduction, requires the City to encourage the County to put into effect the fire reduction policies of the County Public Safety Element. Policy 6-6, Fuel Management to Reduce Fire Hazard, requires the City to encourage the Midpeninsula Open Space District and the County Parks Department to continue efforts in fuel management to reduce fire hazards. Policy 6-7, Green Fire Breaks, requires the City to encourage the Midpeninsula Open Space District to consider "green" firebreak uses for open space lands. Policy 6-8, Early Project Review, requires the City to involve the Fire Department in the early design stage of all projects requiring public review to assure Fire Department input and modifications as needed. Policy 6-9, Commercial and Industrial Fire Protection Guidelines, requires the City to coordinate with the Fire Department to develop new guidelines for fire protection for commercial and industrial land uses. Policy 6-11, Multi-Story Buildings Fire Risks, requires the City to recognize that multi-story buildings of any land use type increase risks of fire, and ensure that adequate fire protection is built into the design and require on-site fire suppression materials and equipment to ensure the safety of the community. Policy 6-12, Smoke Detectors, directs the City to require smoke detectors in all new residential units, and in all residential units at time of sale or rental, in conformance with State law, and to continue to use the Cupertino Scene to publicize fire hazards correction methods. Strategy 1, Code Amendment, requires the City to adopt an ordinance to incorporate the smoke detector requirement in Chapter 16.04 of the Cupertino Municipal Code.

Compliance with these General Plan policies and strategies, combined with the policies listed under Impact HAZ-5, would ensure that impacts from wildland hazards would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

## LAND USE ALTERNATIVE A

---

**HAZ-7                    Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to hazards and hazardous materials.**

---

As discussed in Chapter 4, Environmental Evaluation, of this Draft EIR, this EIR takes into account growth projected by Land Use Alternative A within the Cupertino city boundary and Sphere of Influence (SOI), in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). This chapter analyzes potential cumulative hazardous impacts that could arise from a combination of the development of Land Use Alternative A together with the regional growth in the immediate vicinity of the Project Study Area.

As discussed previously, development allowed by Land Use Alternative A would not result in significant impacts from the increased use of hazardous household materials and would not increase exposure to potential hazards associated with wildland fires. Land Use Alternative A would not interfere with implementation of emergency response plans. In addition, potential project-level impacts associated with hazards and hazardous materials would be further reduced through compliance with General Plan policies and strategies, other local, regional, State, and federal regulations, and with implementation of Mitigation Measures HAZ-4a and HAZ-4b. Since impacts associated with hazardous materials and wildland fire, are, by their nature, focused on specific sites or areas, the less-than-significant impacts within the Project Study Area from Land Use Alternative A would not contribute to a cumulative increase in hazards in the immediate vicinity of the Project Study Area or throughout the region. Therefore, the potential for cumulative impacts associated with safety and hazards would be *less than significant*.

**Significance With Mitigation:** Less than significant.

### 5.2.7.8 HYDROLOGY AND WATER QUALITY

**HYDRO-1                    Implementation of Land Use Alternative A would not violate any water quality standards or waste discharge requirements.**

---

Development or redevelopment that could occur under the Land Use Alternative A could affect drainage patterns and increase the overall amount of impervious surfaces, thus creating changes to storm water flows and water quality. Increasing the total area of impervious surfaces can result in a greater potential to introduce pollutants to receiving waters. Urban runoff can carry a variety of pollutants (i.e. oil and grease, metals, sediments, and pesticide residues from roadways, parking lots, rooftops, landscaped areas) and deposit them into an adjacent waterway via the storm drain system. New construction could also result in the degradation of water quality with the clearing and grading of sites, releasing sediment, oil and greases, and other chemicals to nearby water bodies. However, future development permitted by the Land Use Alternative A would be located on underutilized, infill sites, all of which have already been developed and currently have a high percentage of impervious surfaces.



## LAND USE ALTERNATIVE A

As discussed in Section 4.8.1.1 Regulatory Framework, in Chapter 4.8, Hydrology and Water Quality, of this Draft EIR, water quality in storm water runoff is regulated locally by the Santa Clara Valley Urban Runoff Pollution Prevention Program, which includes the Municipal Regional Storm Water National Pollutant Discharge Elimination System Permit (MRP) C.3 provisions set by the San Francisco Bay RWQCB.

Adherence to these permit conditions would require new development or redevelopment projects to incorporate treatment measures, an agreement to maintain them, and other appropriate source control and site design features that reduce pollutants in runoff to the maximum extent practicable. Many of the requirements involve LID practices such as the use of onsite infiltration that reduce pollutant loading. Incorporation of these measures can even improve on existing conditions.

In addition, future development would be required to comply with the NPDES Permit (Municipal Code Chapter 9.18, Stormwater Pollution Prevention and Watershed Protection) and implement a construction SWPPP that require the incorporation of BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction.

The General Plan includes policies and strategies that, once adopted, would protect water quality and reduce potential impacts to water quality as a result of implementation of potential future development in the city. Policy 5-18, Natural Water Bodies and Drainage Systems, directs the City to require that site design respect the natural topography and drainages to the extent practicable to reduce the amount of grading necessary and limit disturbance to natural water bodies and natural drainage systems caused by development including roads, highways and bridges. The supporting Strategy would require the City to encourage volunteer organizations to help restore and clean creek beds in Cupertino to reduce pollution and help return waterways to their natural state. Policy 5-19, Reduction of Impervious Surfaces, would require the City to minimize storm water flow and erosion impacts resulting from development. Strategy 1 would require the City to include a formula regulating how much paved surface is allowable on each lot. This would include driveways and patios installed at the time of building or remodeling. Strategy 2 would require the City to encourage the use of non-impervious materials for walkways and driveways. If used in a City or quasi-public area, mobility and access for the disabled should always take precedent. Strategy 3 would require the City to minimize impervious surface areas, minimizing directly-connected impervious surfaces, maximizing onsite infiltration and using on-site retaining facilities. Policy 5-20, Pollution and Flow Impacts, states that the City, prior to making land use decisions, estimate increases in pollutant loads and flows resulting from projected future development to avoid surface and groundwater quality impacts. Strategy 1, require incorporation of structural and non-structural Best Management Practices (BMPs) to mitigate the projected increases in pollutant loads and flows. Policy 5-21, Compact Development Away from Sensitive Areas, directs the City that where such measures do not conflict with other municipal purposes or goals, to encourage, via zoning ordinances, compact development located away from creeks, wetlands, and other sensitive areas. Policy 5-22, Storm Drainage Management and Conformance with Watershed-Based Planning, encourage development projects to follow watershed-based planning and zoning by examining the project in the context of the entire watershed area. Strategy 1 would require the City to develop and maintain a Storm Drainage Master Plan and work with other agencies to develop broader Watershed Management Plans to model the City's hydrology. The Storm Drainage Master Plan should identify facilities needed to prevent "10-year" event street flooding and "100-year" event structure flooding.

## LAND USE ALTERNATIVE A

Also identify opportunities to meet water quality protection needs in a cost-effective manner. Policy 5-32, Urban Runoff Pollution Prevention Program, would require the City to support and participate in the SCVURPPP in order to work cooperatively with other cities to improve the quality of storm water runoff discharge into San Francisco Bay. Strategy 1, Post-Construction Urban Runoff Management, would require the City to implement the Post-Construction Urban Runoff Management requirements of the City's Municipal NPDES Permit to reduce urban runoff from project sites. Strategy 2, would require the City to implement the Hydromodification Management requirements of the City's Municipal NPDES Permit to manage runoff flow and volume from project sites. Policy 5-33, Illicit Discharge into Storm Drains and Waterways, would require the City to prohibit the discharge of pollutants and the illicit dumping of wastes into the storm drains, creeks and waterways. The supporting Strategy would require the City to partner with public, private, and non-profit agencies on public outreach and education on the importance of responsible stormwater management. Policy 5-34, Storm Water Runoff, would require the City to investigate opportunities to retain or detain storm runoff on new development. Strategy 1 Would require the City to ensure that private development includes adequate measures to treat stormwater runoff and maximize opportunities to filter, infiltrate, store and reuse or evaporate stormwater runoff onsite. Policy 5-36, Mitigation for Potential Storm Water Impacts, directs the City to require mitigation measures for potential storm water pollutant impacts for projects subject to environmental review. Policy 5-37, Pest-Resistant Landscaping and Design Features, would require the City to encourage the consideration of pest-resistant landscaping and design features, including the landscaping and design of storm water detention and retention facilities proposed in development projects. Other design features that are encouraged include green roofs and onsite treatment of grey water for irrigation.

While implementation of this Alternative would permit new office, commercial and hotel development, and new housing units to meet projected housing demands, as described above, it does not contain any policies that would directly or indirectly result in violations of water quality standards. Therefore, implementation of this alternative would have a *less-than-significant* impact on water quality.

**Significance Without Mitigation:** Less than significant.

---

<b>HYDRO-2</b>	<b>Implementation of the Land Use Alternative A would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).</b>
----------------	---

---

Planned future development for this Alternative could result in an increase in impervious surfaces, which would reduce infiltration and could lead to reduced groundwater recharge. However, as previously described, future development permitted by this Alternative would be located on underutilized, infill sites, most of which have already been developed and currently have a high percentage of impervious surfaces. The Applicants for new development and redevelopment would be encouraged to implement site design measures, LID, and BMPs, including infiltration features, that will contribute to groundwater recharge and minimize storm water runoff. As discussed in Impact HYDRO-1, General Plan Policy 5-19, Reduction of

## LAND USE ALTERNATIVE A

Impervious Surfaces, would require minimizing impervious surface areas, minimizing directly connected impervious surfaces, maximizing onsite infiltration and using on-site retaining facilities among other strategies. In addition, given the Project Component locations, future development would not interfere with groundwater recharge that takes place in the McClellan Ponds recharge facility located within the City of Cupertino or the creeks and streams that run through the city.

While buildout of this Alternative could lead to an increased demand for water, which could lead to an increase in groundwater pumping, water supply impacts are discussed in Chapter 4.14, Utilities and Service Systems, of this Draft EIR. As discussed in Chapter 4.14, Utilities and Service Systems, water retailers for the City of Cupertino obtain their water from groundwater wells and purchases from SCVWD. The SCVWD's 2010 Urban Water Management Plan (UWMP) indicates that there is a sufficient supply of water through 2035 even for multiple dry years.<sup>16</sup> In addition, the SCVWD operates and maintains an active groundwater recharge program with 18 major recharge systems, over 70 off-stream ponds with a combined surface area of more than 320 acres, and over 30 local creeks. Runoff is captured in the SCVWD's reservoirs and released into both in-stream and off-stream recharge ponds for percolation into the groundwater basin. In addition, imported water is delivered by the raw water conveyance system to streams and ponds.<sup>17</sup>

The use of site design features required by C.3 provisions of the MRP and compliance with the City of Cupertino General Plan policies listed in Impact HYDRO-1 would reduce the impact of increased impervious surfaces on groundwater recharge. Therefore, implementation of this Alternative would have a *less-than-significant* impact with respect to groundwater supplies or groundwater recharge.

**Significance Without Mitigation:** Less than significant.

---

**HYDRO-3      Implementation of the Land Use Alternative A would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion, siltation, or flooding on- or off-site.**

---

Development within the Project Component and the change in land uses will result in an increase in impervious surfaces. This could result in an increase in storm water runoff, higher peak discharges to drainage channels, and the potential to cause erosion or sedimentation in drainage swales and streams. Increased runoff volumes and velocities could create nuisance flooding in areas without adequate drainage facilities. However, none of the future development would require alteration of the course of an existing stream. Most of the future development sites are in infill areas that are already developed or paved and new development on these sites should not create a substantial increase in the amount of impervious surfaces.

All new development and redevelopment projects will be required, pursuant to the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and MRP, to implement construction phase BMPs,

---

<sup>16</sup> Santa Clara Valley Water District, 2010. *Urban Water Management Plan*.

<sup>17</sup> Santa Clara Valley Water District, 2010. *Urban Water Management Plan*.

## LAND USE ALTERNATIVE A

post-construction design measures that encourage maximize infiltration in pervious areas, and post-construction source control measures to help keep pollutants out of storm water. In addition, post-construction storm water treatment measures are required for most projects with 10,000 square feet or more of impervious surface and post-construction storm water quantity (flow peak, volume, and duration) controls are required for projects in certain locations with one acre or more of impervious surface, in accordance with the SCVURPPP's Hydromodification Management Plan (HMP). This would minimize the amount of storm water runoff from new development and redevelopment sites within the city.

During construction, project applicants are subject to the NPDES construction permit requirements, including preparation of a SWPPP. In addition, Section 16.08.110, Interim Erosion and Sediment Control Plan, of the City's Municipal Code would require preparation of an Interim Erosion and Sediment Control Plan, either integrated with the site map/grading plan or submitted separately, that calculates the maximum runoff from the site for the ten-year storm event and describes measures to be undertaken to retain sediment on the site, a brief description of the surface runoff and erosion control measures to be implemented, and vegetative measures to be undertaken. These control measures would further reduce the potential for substantial erosion or siltation and would ensure that runoff from the site is protective of the beneficial uses of receiving waters. Once constructed, the requirements for new development or redevelopment would include source control measures and site design measures that address storm water runoff and would reduce the potential for erosion or siltation.

In addition, Provisions C.3 of the MRP require new development and redevelopment projects, meeting certain criteria, to implement storm water treatment measures to contain site runoff, using specific numeric sizing criteria based on volume and flow rate. For hydromodification projects, post-project runoff shall not exceed estimated pre-project rates and durations where the increased storm water discharge rates and durations would result in increased potential for erosion.<sup>18</sup>

The General Plan includes policies and strategies that, once adopted, would further prevent soil erosion and reduce impacts to water quality. Policy 5-10, Landscaping Near Natural Vegetation, per the City's Water Efficient Landscaping Ordinance, Environmentally Preferable Procurement Policy, and the Parks & Recreation Green Policies, would require the City to continue to emphasize drought tolerant and pest-resistant native and non-invasive, non-native, drought tolerant plants and ground covers when landscaping public and private properties near natural vegetation, particularly for control of erosion from disturbance to the natural terrain. Policy 5-19, discussed above, would require the City to minimize storm water flow and erosion impacts resulting from development. Policy 5-20, Pollution and Flow Impacts, states that the City, prior to making land use decisions, estimate increases in pollutant loads and flows resulting from projected future development to avoid surface and groundwater quality impacts. Strategy 1, require incorporation of structural and non-structural Best Management Practices (BMPs) to mitigate the projected increases in pollutant loads and flows. In addition Policy 6-47, Hillside Grading, would require the City to restrict the extent and timing of hillside grading operation to April through October. Require performance bonds

---

<sup>18</sup> Santa Clara Valley Urban Runoff Pollution Prevention Program, 2014. Website: [http://www.scvurppp-w2k.com/nd\\_wp.shtml#other](http://www.scvurppp-w2k.com/nd_wp.shtml#other) accessed on May 3, 2014.

**LAND USE ALTERNATIVE A**

during the remaining time to guarantee the repair of any erosion damage. All graded slopes must be planted as soon as practical after grading is complete.

With implementation of the erosion and sediment control measures and regulatory provisions to limit runoff for new development and redevelopment sites, and implementation of the General Plan policies and strategies, future development under this Alternative would not result in significant increases in erosion and sedimentation or contribute to on-site or off-site flooding. Therefore, implementation of Land Use Alternative A would have a *less-than-significant* impact with respect to drainage patterns.

**Significance Without Mitigation:** Less than significant.

---

**HYDRO-4      Implementation of the Land Use Alternative A would create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.**

---

As discussed previously, an increase in impervious surfaces with implementation of this Alternative could result in an increase in storm water runoff that could exceed the capacity of existing or planned storm water drainage systems. Under existing conditions, portions of the City's storm drainage systems are not capable of containing the runoff from 10-year storm events.<sup>19</sup> As shown in Table 4.8-2, in Chapter 4.8, Hydrology and Water Quality, of this Draft EIR, there are existing deficiencies in the Project Component locations that could be exacerbated by potential future development under this Alternative.

In accordance with established City and County requirements, new development and redevelopment projects must be designed such that the storm water runoff generated from the ten-year storm is conveyed in the storm drainage system (underground pipes or open channels) and the storm water runoff generated from the 100-year design storm must be safely conveyed away from the site without creating and/or contributing to downstream or upstream flooding conditions.<sup>20</sup> In addition, the City of Cupertino would require that post-project storm water runoff rates be less than or equal to pre-project values for projects subject to hydromodification requirements and where storm drain facilities are at or have exceeded system capacities.<sup>21</sup> Therefore, future development associated with this Alternative would not be expected to result in downstream flooding but could exacerbate existing conditions of the storm drain system, which is undersized to convey the 10-year storm event at some locations.

New development and redevelopment within the city would not create substantial additional sources of polluted runoff. During the construction phase, projects would be required to prepare SWPPPs and erosion and sediment control plans, thus limiting the discharge of pollutants from the site. During operation, projects must implement BMPs and LID measures that minimize the amount of storm water runoff and associated pollutants. Additionally, new development or redevelopment projects would be required to pay

---

<sup>19</sup> City of Cupertino, 1993. *Storm Drain Master Plan*.

<sup>20</sup> Santa Clara County, 2007. *Drainage Manual*. Adopted August 14, 2007.

<sup>21</sup> Verbal communication with Fletcher Parsons, BKF and Chad Mosley, City of Cupertino, March 19, 2014.

## LAND USE ALTERNATIVE A

storm drainage fees pursuant to City Council Resolution No. 12-033 to support expansion and improvements to the existing storm drain system. Also, as discussed in Impact HYDRO-1 and HYDRO-3, the General Plan includes policies and strategies that, once adopted, would require the City to minimize storm water flow and erosion impacts resulting from development, Support and participate in the SCVURPPP, implement the Post-Construction Urban Runoff Management requirements of the City's Municipal NPDES Permit to reduce urban runoff from project sites, require mitigation measures for potential storm water pollutant impacts for projects subject to environmental review, and encourage the consideration of design features, including the landscaping and design of storm water detention and retention facilities proposed in development projects. Specifically, Policy 5-22, Storm Drainage Management and Conformance with Watershed-Based Planning, would encourage development projects to follow watershed-based planning and zoning by examining the project in the context of the entire watershed area. By encouraging improved stormwater drainage, including project-practices to prevent runoff, this policy would serve to deploy strategies to decrease runoff and prevent increases to stormwater entering the drainage system.

Within the Environmental Resources Element, Policy 5-22, Storm Drainage Management and Conformance with Watershed-Based Planning, would encourage development projects to follow watershed-based planning and zoning by examining the project in the context of the entire watershed area. Policy 5-32 would incorporate new proposed Strategy 1, which would direct the City to implement the Post-Construction Urban Runoff Management requirements of the City's Municipal NPDES Permit to reduce urban runoff from project sites, and Strategy 2, which would direct the City to implement the Hydromodification Management requirements of the City's Municipal NPDES Permit to manage runoff flow and volume from project sites. Policy 5-32, Urban Runoff Pollution Prevention Program, would require the City to support and participate in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) in order to work cooperatively with other cities to improve the quality of storm water runoff discharge into San Francisco Bay. Strategy 1, Post-Construction Urban Runoff Management, would require the City to implement the Post-Construction Urban Runoff Management requirements of the City's Municipal NPDES Permit to reduce urban runoff from project sites. Strategy 2, Hydromodification Management, would require the City to implement the Hydromodification Management requirements of the City's Municipal NPDES Permit to manage runoff flow and volume from project sites. Policy 5-34, Storm Water Runoff, includes a new strategy that would direct the City to "ensure that private development includes adequate measures to treat stormwater runoff," and to "maximize opportunities to filter, infiltrate, store and reuse or evaporate stormwater runoff onsite." By encouraging improved stormwater drainage, management, and retention, these policies would serve to prevent or reduce unmanaged runoff that could exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

Implementation of General Plan policies and strategies aimed at reducing storm water and compliance with the mandatory regulation outlined in this discussion would ensure development consistent with this Alternative would not require significant expansions of the existing storm water drainage infrastructure. Therefore, impacts associated with future development runoff would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**HYDRO-5      Implementation of Land Use Alternative A would not otherwise substantially degrade water quality.**

---

Increased runoff from the construction of impermeable surfaces as the Project Component locations are developed could worsen water quality in the storm water runoff. Pollutants commonly associated with construction sites that can impact storm water are sediments, nutrients, trace metals, pesticides, oil, grease, fuels, and miscellaneous construction wastes. Pollutants generated from the proposed land uses of the Project Study Area may include sediment, nutrients, bacteria and viruses, oil and grease, metals, organics, pesticides/herbicides, and trash/debris.

As required by City and County storm water management guidelines, BMPs would be implemented during both construction and operation of this Alternative. These BMPs would control and prevent the release of sediment, debris, and other pollutants into receiving water bodies. Implementation of BMPs during construction would be in accordance with the provisions of the SWPPP, which would minimize the release of sediment, soil, and other pollutants. Operational BMPs would be required to meet MRP requirements, which include site design, source control, and treatment control measures to treat and control runoff before it enters the storm drain system or receiving water bodies.

Additionally, implementation of Policy 5-22 Storm Drainage Management and Conformance with Watershed-Based Planning would direct the City to “identify opportunities to meet water quality protection needs in a cost-effective manner,” which would also serve to prevent degradation of water quality. Policy 5-22, Storm Drainage Management and Conformance with Watershed-Based Planning, would encourage development projects to follow watershed-based planning and zoning by examining the project in the context of the entire watershed area. Policy 5-32, Ground Water Recharge Sites, would incorporate new Strategy 1, which would direct the City to implement the Post-Construction Urban Runoff Management requirements of the City’s Municipal NPDES Permit to reduce urban runoff from project sites, and Strategy 2, which would direct the City to implement the Hydromodification Management requirements of the City’s Municipal NPDES Permit to manage runoff flow and volume from project sites. Policy 5-32, Urban Runoff Pollution Prevention Program, would require the City to support and participate in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) in order to work cooperatively with other cities to improve the quality of storm water runoff discharge into San Francisco Bay. Strategy 1, Post-Construction Urban Runoff Management, would require the City to implement the Post-Construction Urban Runoff Management requirements of the City’s Municipal NPDES Permit to reduce urban runoff from project sites. Strategy 2, Hydromodification Management, would require the City to implement the Hydromodification Management requirements of the City’s Municipal NPDES Permit to manage runoff flow and volume from project sites. Policy 5-34, Storm Water Runoff, includes a new strategy that would direct the City to “ensure that private development includes adequate measures to treat stormwater runoff,” and to “maximize opportunities to filter, infiltrate, store and reuse or evaporate stormwater runoff onsite.” By encouraging improved stormwater drainage, management, and retention, these policies would serve to prevent or reduce unmanaged runoff that could substantially degrade water quality.

With implementation of these BMPs in accordance with City and County requirements, the potential impact on water quality would be *less than significant*.

## LAND USE ALTERNATIVE A

**Significance Without Mitigation:** Less than significant.

---

<b>HYDRO-6</b>	<b>Implementation of Land Use Alternative A would not place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place structures that would impede or redirect flood flows within a 100-year flood hazard area.</b>
----------------	---

---

Implementation of the Land Use Alternative B would not result in the development of residential structures in existing FEMA-designated 100-year floodplains or Special Flood Hazard Areas (SFHAs). As shown on Figure 4.8-4, the areas within Cupertino and the Sphere of Influence that are within the 100-year floodplain are limited and are areas located immediately adjacent to creeks and drainage channels that travel through the city. The Project Components locations relative to the 100-year floodplains are shown on Figure 4.8-4 in Chapter 4.8, Hydrology and Water Quality, of this Draft EIR.

Regnant Creek and Calabasas Creek and their associated 100-year floodplains pass through portions of the South De Anza and the Heart of the City Special Areas, which are proposed to include new housing and/or new development. However, the FEMA floodplain maps state that the 100-year flood would be contained within the channels of these creeks at some of the locations within the Special Areas. At other locations, the width of the floodplain parallels the creek channels and varies in width between 50 to 100 feet. Because the City of Cupertino and Santa Clara County have restrictions on construction within 50 feet of a stream, new residences or structures would not be located within the 100-year floodplain. Calabasas Creek and its associated 100-year floodplain also passes through the North Vallco Park Special Area. However, no new housing is proposed in the portion of the North Vallco Park Special Area where the 100-year floodplain is located. Also, because the floodplain is only 100 feet wide at this location and there are restrictions on construction next to streams, no other structures will be built in the floodplain. General Plan and Zoning Ordinance Conformance Sites 39, 44, and 45 are also in areas mapped as including the 100-year floodplain. However, these sites are proposed to be rezoned as PR (park and recreation) so no new housing or structures would be located in these areas.

As described in Section 4.8.1.2, Existing Conditions, in Chapter 4.8, Hydrology and Water Quality, under the subheading “Waterways,” the creeks that run through Cupertino pose little threat of flooding as a result of effort by the City and SCVWD to modify, restore and improve the flow channels and implement erosion control measures to reduce impacts from flooding.

Land Use Alternative A includes General Plan policies and strategies that, once adopted, would ensure potential impacts from flooding would not occur with the implementation of the potential future development. Within the Land Use/Community Design Element, Policy 7-5, Storm Drainage Infrastructure, would require the City to maintain storm drainage infrastructure to reduce flood hazards and meet the needs of 10-year storm events, with developers contributing as necessary to the creation of those systems. This policy would serve to prevent flooding both in general and a result of development on individual sites. Under this policy, the City would plan for potential infrastructure specifically designed to mitigate flood flows, including within the 100-year floodplain. As individual flood control or stormwater



**LAND USE ALTERNATIVE A**

system projects are proposed, such projects would undergo project-level environmental review that would evaluate and address potential adverse physical effects. Additionally, within the Health and Safety Element, Policy 6-35, Sea Level Rise Protection, would require the City to protect itself from sea level rise. Strategy 1 under this policy would direct the City to coordinate with other agencies to evaluate the potential effects of ongoing sea level rise in order to determine appropriate actions, and Strategy 2 would require the City to maintain up-to-date flood insurance maps to identify the effects of rising sea levels. This strategy would serve to prevent impacts of increased future flooding due to rising sea levels.

In addition, the City of Cupertino has adopted local standards for construction in floodplain areas,<sup>22</sup> and together with Santa Clara County, there are restrictions on construction within 50 feet of a stream, which includes most of the designated 100-year floodplains within the city.<sup>23</sup> If future development were to be constructed within the 100-year flood zone, it would require the placement of fill to elevate structures above the 100-year floodplain elevation. In order for the development to be considered outside of the floodplain and no longer subject to special flood hazard requirements, the applicant would have to submit an application to FEMA for a Letter of Map Revision – Fill (LOMR-F) after the fill has been placed. After FEMA has revised the FIRM to show that the future development is now outside of the SFHA, the City would no longer be required to apply the minimum NFIP floodplain management standards to structures built on the land and the mandatory flood insurance requirements would no longer apply. However, as part of its floodplain management strategy, to reduce possible loss of life and property in the event of a flood, the City would encourage compliance with as many of the standards as financially feasible.

Construction within SFHAs is governed by the City’s Municipal Code Chapter 16.52 (Prevention of Flood Damage), Section 16.52.040 (General Standards), which sets forth construction requirements for development that would minimize flood hazard risks, including anchoring and flood-proofing; limitations on use for structures below the base flood elevation; use of materials and utility equipment resistant to flood damage; the requirement that electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities be designed and/or located to prevent water from entering or accumulating within the components during flood conditions; and the requirement that all new and replacement water supply and sanitary sewage systems be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from systems into floodwaters.

Because Land Use Alternative A would not include the placement of housing within the 100-year floodplain, would include planning for management of flood flows, and would require any new construction to comply with General Plan policies, the City Municipal Code, and Santa Clara County water course protection requirements, which limit construction within 50 feet of a stream, the potential for flood hazards would be reduced to *less-than-significant* levels.

**Significance Without Mitigation:** Less than significant.

---

<sup>22</sup> City of Cupertino, Municipal Code Chapter 16.52, Prevention of Flood Damage.

<sup>23</sup> City of Cupertino, Municipal Code, Chapter 9.19, Water Resource Protection.

## LAND USE ALTERNATIVE A

---

**HYDRO-7      Implementation of Land Use Alternative A would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.**

---

According to mapping compiled by ABAG and Office of Emergency Services (OES),<sup>24</sup> as shown on Figure 4.8-5, in Chapter 4.8, Hydrology and Water Quality, of this Draft EIR, portions of Cupertino are within the Stevens Creek Reservoir inundation zone. Specific areas of planned development within the city that could be impacted with flooding in the unlikely event that the dam failed include the Homestead Special Area, North Vallco Park Special Area, Study Areas 1 (Cupertino Inn and Goodyear Tire), 3 (PG&E), 4 (Mirapath), and 5 (Cupertino Village), Housing Element Sites 10 (The Hamptons), 12 (Homestead Lanes and Adjacency), and 17 (Homestead Road – IntraHealth/Office/Tennis Courts), portions of Monta Vista Village Neighborhood and Vallco Park North Special Center; and Other Commercial Center Sites 3, 6, and 7.

Dam inundation zones are based on the highly unlikely scenario of a total catastrophic dam failure occurring in a very short period of time. Existing state and local regulations address the potential for flood hazards as a result of dam failure. The Stevens Creek Reservoir is under the jurisdiction of the California Department of Water Resources Division of Safety of Dams (DSOD), which conducts annual inspections and reviews all aspects of dam safety. The dam has been assessed for seismic stability and will withstand the maximum credible earthquake. The SCVWD is also planning to implement additional remedial measures to assure the continued safe operation of the dam. Dam owners are also required to maintain EAPs that include procedures for damage assessment and emergency warnings. In addition, the City of Cupertino in conjunction with Santa Clara County addresses the possibility of dam failure in the Local Hazard Mitigation Plan (LHMP), which also provides emergency response actions.

The probability of dam failure is extremely low and the City of Cupertino and Santa Clara County have never been impacted by a major dam failure. Furthermore, the General Plan includes policies and strategies, aimed at reducing impacts from dam failure. Policy 6-43, Emergency Response to Dam Failure, would require the City to ensure that Cupertino is prepared to respond to a potential dam failure. Strategy 1 would require the City to maintain a dam emergency and evacuation plan. Strategy 2 would require the City to continue to coordinate dam-related evacuation plans with the City of Sunnyvale to ensure that traffic management between the two cities facilitates life safety.

Policy 7-5, Storm Drainage Infrastructure, would require the City to maintain storm drainage infrastructure to reduce flood hazards and meet the needs of 10-year storm events, with developers contributing as necessary to the creation of those systems. This policy serves to prevent flooding both in general and a result of development on individual sites. Under this policy, the City would plan for potential infrastructure specifically designed to mitigate flood flows, including those that could threaten life or property. As individual flood control or stormwater system projects are proposed, such projects would undergo project-level environmental review that would evaluate and address potential adverse physical effects.

---

<sup>24</sup> Association of Bay Area Governments, 2003. Dam Inundation Hazard Map for Cupertino, Website [www.abag.ca.gov/cgi-bin/pickdamx.pl](http://www.abag.ca.gov/cgi-bin/pickdamx.pl) (accessed April 9, 2014).

## LAND USE ALTERNATIVE A

Policy 6-1, Regional Hazard Risk Reduction Planning, would require the City to coordinate with Santa Clara County and local agencies to implement the Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP). Strategies under this policy would require the City to monitor the program and evaluate its success, to ensure that mitigations from the LHMP are integrated into individual projects, and to support Santa Clara County in its efforts as lead agency for the LHMP. This policy would serve to ensure that the City acts to reduce risks from flooding that could threaten lives or property. Additionally, Policy 6-35, Sea Level Rise Protection, would direct the City to protect itself from sea level rise. Strategy 1 under this policy would require the City to coordinate with other agencies to evaluate the potential effects of ongoing sea level rise in order to determine appropriate actions, and Strategy 2 would direct the City to maintain up-to-date flood insurance maps to identify the effects of rising sea levels. This strategy serves to prevent impacts of increased future flooding due to rising sea levels

Therefore, given these policies and strategies and adherence to the Joint Stevens Creek Dam Failure Plan together with the very low probability of dam failure and that the dam has been assessed for seismic stability and will withstand the maximum credible earthquake, implementation of this Alternative would not expose people or structures to a significant risk of loss, injury, or death in the case of dam failure and impacts are considered to be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

### **HYDRO-8      Implementation of Land Use Alternative A would not have inundation by seiche, tsunami, or mudflow.**

---

Because the City of Cupertino is more than eight (8) miles south of San Francisco Bay and is more than 100 feet above mean sea level (msl), there is no potential for a tsunami to impact the Project Study Area.<sup>25</sup> There are no large bodies of water within the City of Cupertino that could generate seiches, but the City is located just north of Stevens Creek Reservoir. A seiche could theoretically occur in this reservoir as the result of an earthquake or other disturbance, but the flooding impact would be less than that of the dam inundation zone. Although limited portions of the southern tip of Cupertino are within areas that could result in landslides and debris flows, these areas are primarily open space or very low-density hillside homes. None of the Project Component locations are within ABAG mapped rainfall-induced landslide or earthquake-induced landslide zones. Therefore, impacts due to seiches, tsunamis, or mudflows would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<sup>25</sup> Association of Bay Area Governments (ABAG), 2014. *Interactive Tsunami Inundation Map*. Accessed at: <http://gis.abag.ca.gov/website/Tsunami/index.html> on April 5, 2014.

## LAND USE ALTERNATIVE A

---

**HYDRO-9      Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to water quality.**

---

This EIR takes into account growth projected by this Alternative within the Cupertino city boundary and SOI, in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the ABAG. The geographic context used for the cumulative assessment of water quality and hydrology impacts encompasses the six watersheds, which encompass the City of Cupertino. Cumulative impacts can occur when impacts that are significant or less than significant from a proposed project combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area.

As discussed previously, implementation of the Land Use Alternative A would require conformance with State and local policies that would reduce hydrology and water quality impacts to *less-than-significant* levels. When applicable, any additional new development within the city would be subject, on a project-by-project basis, to independent CEQA review as well as policies in the Cupertino General Plan, design guidelines, Zoning Ordinance, and other applicable City requirements that reduce impacts related to hydrology and water quality. More specifically, potential changes related to storm water quality, storm water flows, drainage, impervious surfaces, and flooding would be minimized via the implementation of storm water control measures, retention, infiltration, and LID measures, and review by the City's Public Works Department to integrate measures to reduce potential flooding impacts.

All cumulative projects would be subject to similar permit requirements and would be required to comply with City ordinances and General Plan policies, as well as numerous water quality regulations that control construction related and operational discharge of pollutants in storm water. The water quality regulations implemented by the San Francisco Bay RWQCB take a basin-wide approach and consider water quality impairment in a regional context. For example, the NPDES Construction Permit ties receiving water limitations and basin plan objectives to terms and conditions of the permit, and the MS4 Permit works with all municipalities to manage storm water systems to be collectively protective of water quality. For these reasons, impacts of this Alternative on hydrology and water quality are not cumulatively considerable and the cumulative impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

### 5.2.7.9 LAND USE AND PLANNING

---

**LU-1      Implementation of Land Use Alternative A would not physically divide an established community.**

---

Implementation of the Land Use Alternative A would result in a significant impact if it would lead to new development or physical features that would divide existing communities. The physical division of an established community typically refers to the construction of a physical feature (such as a wall, interstate highway, or railroad tracks) or the removal of a means of access (such as a local road or bridge) that would

## LAND USE ALTERNATIVE A

impair mobility within an existing community, or between a community and outlying areas. An example of a physical feature that would divide an existing community is an airport, roadway, or railroad track through an existing community that could constrain travel from one side of the community to another or impair travel to areas outside of the community.

As described in Section 4.9.1.2, Existing Conditions, in Chapter 4.9, Land Use and Planning, of this Draft EIR, the development proposed as part of Land Use Alternative A would be located on sites either developed and/or underutilized, and/or in close proximity to existing residential and residential-serving development, where future development is currently permitted. While future development under Land Use Alternative A could require some modifications to the roadway patterns (i.e. widening, restriping, vacating), major or large scale changes would occur and future development under Land Use B would generally retain the existing roadway patterns and Land Use Alternative A does not propose any new major roadways or other physical features through existing residential neighborhoods or other communities that would create new barriers in the Project Study Area. New development in currently developed areas would result from increased office, commercial, hotel and residential allocations without dividing any existing communities.

The designation of sites for office, commercial, hotel and higher density residential development would not physically divide any of the areas where Land Use Alternative A is identified, because the vicinity of the sites would all retain their predominant existing uses for office, commercial, hotel and residential use, and would not require any new roads or other features that would divide a community. In the case of Housing Element Sites that propose a land use change to accommodate residential land uses, these locations are not large enough in scale (i.e. highway, railway, airport) and are within the scale of the current built environment and would not divide an established community. Accordingly, impacts would be *less than significant*.

Furthermore, future development under Land Use Alternative A would be required to be consistent with the General Plan policies promote cohesive and compatible neighborhoods and prevent new development from dividing existing uses where different land uses abut one another.

Within the Land Use and Community Design Element Policy 2-1, Focus Development in Mixed-Use Special Areas, would require the City to, in the mixed-use Special Areas where office, commercial and residential uses are allowed, focus higher intensity development and increased building heights where appropriate in designated corridors, gateways, sub areas and nodes. Policy 2-2, Connections Between Special Areas, Employment Centers and the Community, would require the City to provide strong connections between the mixed-use Special Areas, employment centers and the surrounding community. Policy 2-5, Distinct Neighborhoods, would require the City to plan for neighborhoods that have distinctive edges, an identifiable center and safe pedestrian and bicycle access to surrounding uses. Policy 2-8, Neighborhood Compatibility, would require the City to not only minimize potential conflicts with residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, limitations, site design and other appropriate measures but also Create zoning requirements or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through measures such as: daylight planes for single-family development, minimum setback standards, landscape screening, acoustical analysis, location and orientation of service areas away from residential uses and limitations on hours of operation. Policy 4-2, Defined and Balanced Circulation System, would require the city to define the circulation system as a hierarchy of street widths

## LAND USE ALTERNATIVE A

from urban to rural areas. Balance the roadway system between automobile and pedestrian/bicycle needs. Policy 2-13, Urban Service Area Expansion, would require the City to work with the cities of Los Altos, San Jose and Sunnyvale, as appropriate, to create boundaries that define logical municipal service areas. Policy 2-15, Urban Building Forms, would require the City to concentrate urban building forms in the mixed-use Special Areas. Policy 2-18, Single-Family Residential Design, would require the City to preserve the character of residential neighborhoods by requiring new development to be compatible with the existing neighborhood. Policy 2-19, Compatibility of Lot Sizes, would require the City to ensure that zoning, subdivision and lot line adjustment requests related to lot size or lot design consider the need to preserve neighborhood lot patterns. Policy 2-30, Monta Vista Village Neighborhood would require the City to retain and enhance Monta Vista Village as a residential, commercial and industrial area, with adequate pedestrian and bicycle access. Under this policy, the commercial district should serve as a neighborhood commercial center for Monta Vista Village and its adjoining neighborhoods. Mixed-use with residential is encouraged. The industrial area should be retained to provide small-scale light industrial and service industrial opportunities, while remaining compatible with the surrounding residential and commercial uses. Policy 2-26 G, South Vallco Park Gateway, would require the City to retain and enhance South Vallco Park Gateway as a large-scale commercial area that is a regional commercial (including hotel), office and entertainment center with supporting residential development. Policy 2-24, Homestead Road Special Area, would require the City to create an integrated, mixed-use commercial and housing village along Homestead Road, consisting of three integrated areas. Each area will be master planned, with special attention to the interconnectivity of these areas. Policy 2-46, Big Box Development, would require the City to consider approving big box development if it is compatible with the surrounding area in terms of building mass and traffic, and is consistent with the City's economic development goals. Policy 2-47, Hillside Development Standards, would require the City to establish building and development standards for the hillsides that ensure hillside protection. Policy 2-50, Clustering Development in Subdivisions, would require the City to cluster lots in major subdivisions in the 5-20-acre slope density designation, and encourage clustering in minor subdivision in the 5-20-acre slope density designation. Policy 2-52, Views for Public Facilities, would require the City to design and layout public facilities, so they include views of the foothills or other nearby natural features, and plan hillside developments to minimize visual and other impacts on adjacent public open space. Policy 2-84, Park Walking Distance, would require the City to ensure that each household is within a half-mile walk of a neighborhood park, or community park with neighborhood facilities, and that the route is reasonably free of physical barriers, including streets with heavy traffic. Under this policy, wherever possible, the City shall provide pedestrian links between parks. Policy 2-63, Public and Quasi-Public Activities, would require the City to allow public and quasi-public activities in commercial or office land use categories with zoning and use permit review based on the following criteria: The proposed project must have similar building forms, population, traffic, noise and infrastructure impacts as the existing land use categories. Additionally, under this policy the proposed project must maintain a commercial interface in commercial designations by offering retail activities, creating a storefront appearance or other design or use options that are similar to commercial activities. Policy 2-35, New Drive-up Services, would require the City to permit new drive-up service facilities for commercial, industrial or institutional use only when adequate circulation, parking, noise control, architecture features, and landscaping are compatible with the visual character of the surrounding uses and residential areas are adequately buffered. Under this policy the City shall prohibit drive-up services in the Crossroads area and further evaluate any proposed drive-up services site for conformance with other goals and policies of the Plan. Policy 2-36, Late Evening Entertainment Activities, would require the City to discourage late-evening entertainment activities such as cocktail lounges,

## LAND USE ALTERNATIVE A

recreational facilities and theaters in the major mixed use corridors where they abut low-density residential properties. Under this policy such uses may be considered with conditional use permit review when the entrances and uses are located away from sensitive receptors/uses and appropriate mitigation measures such as adequate planting, policing, parking designated away from sensitive receptors are incorporated.

Within the Circulation Element, Policy 4-10, Roadway Plans that Complement the Needs of Adjacent Land Use, would require the City to design roadways based on efficient alignments, appropriate number and widths of traffic lanes, inclusion of medians, parking and bicycle lanes and the suitable width and location of sidewalks as needed to support the adjacent properties. In addition, design the local streets to satisfy the aesthetic requirements of the area served. In general, the aesthetics of a street will be improved if it can be narrower rather than wider, include significant landscaping with shade trees, and provide safe and convenient places for people to bicycle and walk. Details of design, such as provision of vertical curbs and minimum corner radii, are to be considered desirable. Design details should be developed in the City's road improvement standards. Policy 4-14, Limited Street Closures, would require the City to not close streets unless there is a demonstrated safety or over-whelming through traffic problem and there are no acceptable alternatives. Closures may shift traffic to other local streets, thus moving the problem from one neighborhood to another. Policy 4-16, Transportation Noise, Fumes and Hazards, would require the City to, in addition to limiting through traffic volume on local streets, protect the community from noise, fumes and hazards caused by the City's transportation system. The quarries on Stevens Canyon Road, Stevens Creek Boulevard and Foothill Boulevard are major sources of transportation noise.

Within the Health and Safety Element Policy 6-50, Freeway Design and Neighborhood Noise, would require the City to ensure that roads and development along Highway SR 85 and I-280 are designed and improved in a way that minimizes neighborhood noise. Policy 6-53, Traffic Calming Solutions to Street Noise, would require the City to evaluate solutions to discourage through traffic in neighborhoods through enhanced paving and modified street design.

Potential future development in all Zoning Districts would be subject to the City's discretionary review processes, including, as necessary, the issuance of Developmental Permits, and Architectural and Site Approval and Use Permits, in accordance with Section 19.168 of the Zoning Ordinance. This review would ensure that development allocation, architectural and site designs of, as well as the uses located within future development in the Project Study Area promote and are consistent with the goals, policies and strategies identified in the General Plan. The review process will consider the vicinity in which each project is proposed in and will review the intensity of the proposed development.

In addition, future development would also be required to comply with Design Standards in the Heart of the City Specific Plan, the Vallco Master Plan, and the Monta Vista Design Guidelines as described in Section 4.9.1.1, Regulatory Framework, of Chapter 4.9, Land Use and Planning, of this Draft EIR, and the General Plan policies set forth above, all of which would promote cohesive and compatible neighborhoods and prevent new development from dividing existing uses where different land uses abut one another. Therefore, the impacts from implementation of the project would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

## LAND USE ALTERNATIVE A

---

**LU-2                      Implementation of Land Use Alternative A would not conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.**

---

The City of Cupertino General Plan is the primary planning document for the City of Cupertino. The proposed amendments are intended to ensure consistency between the General Plan, Housing Element and Zoning Ordinance, and State law. Because the General Plan is the overriding planning document for the City, the impact would be *less than significant*.

For a discussion on this Alternative's consistency with Plan Bay Area as it relates to greenhouse gas emissions, see Section 5.2.7.6, Greenhouse Gas Emissions, above.

For a discussion on this Alternative's consistency with regional housing projections and Plan Bay Area, see Section 5.2.7.11, Population and Housing, below.

For a discussion on this Alternative's consistency with the 2002 Cupertino Pedestrian Transportation Plan, see Section 5.3.7.13, Transportation and Traffic, below.

As discussed above in Section 4.9.1.1, Regulatory Framework, of Chapter 4.9, Land Use and Planning, there are no airports or private airstrips within or in the immediate proximity to the city,<sup>26</sup> and the city is not located within any protected airspace zones defined by the Santa Clara County Airport Land Use Commission (ALUC)<sup>27</sup> and has no heliports listed by the Federal Aviation Administration (FAA);<sup>28</sup> thus, no conflicts with a Comprehensive Land Use Plan for an airport would occur.

Policy 2-22, Jobs/Housing Balance, would direct the City to work toward achieving a jobs-housing balance consistent with the Housing Element. Additionally, proposed Policy 5-2, Regional Growth and Transportation Coordination, would direct the City to coordinate with local and regional agencies regarding regional growth and transportation plans and would require the City to ensure that its local plans are consistent with the Regional Transportation Plan (RTPs) and Sustainable Communities Strategy. In addition, Policy 6-1, Regional Hazard Risk Reduction Planning, would require the City to coordinate with Santa Clara County and local agencies to implement the Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP). Strategies under this policy would require the City to monitor the program and evaluate its success, to ensure that mitigations from the LHMP are integrated into individual projects, and to support Santa Clara County in its efforts as lead agency for the LHMP. Together, these policies would serve to ensure that implementation of Land Use Alternative A is consistent with regional land use, transportation, and hazards mitigation plans.

**Significance Without Mitigation:** Less than significant.

---

<sup>26</sup> AirNav, <http://www.airnav.com/airports/us/CA>, accessed on August 27, 2013.

<sup>27</sup> Santa Clara County Airport Land-Use Commission, 2011. Comprehensive Land Use Plan, Santa Clara County, Norman Y. Mineta, San Jose International Airport.

<sup>28</sup> Federal Aviation Administration, 2011. Airport Facilities Data. [www.faa.gov/airports/airport\\_safety/airportdata\\_5010/](http://www.faa.gov/airports/airport_safety/airportdata_5010/), accessed August 13, 2013.



**LAND USE ALTERNATIVE A**

---

**LU-3                      Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would not result in less than significant cumulative impacts with respect to land use and planning.**

---

As discussed in Chapter 4, Environmental Evaluation, of this Draft EIR, this EIR takes into account growth projected by this Alternative within the Cupertino city boundary and SOI, in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the ABAG. The geographic context for the cumulative land use and planning effects occur from potential future development under the General Plan combined with effects of development on lands adjacent to the city within Los Altos and Sunnyvale to the north, Santa Clara and San Jose to the east, and Saratoga to the south, and the unincorporated areas of Santa Clara County to the west and south, and within the region.

The land use analyses find that Land Use Alternative A would not divide an established community or conflict with established plans, policies and regulations. The Land Use Alternative A also would not conflict with any land use plan, policies, or regulations, in or outside the City of Cupertino, adopted for the purpose of avoiding or mitigating an environmental effect. Future development that would be allowed under Land Use Alternative A would not create substantial land use impacts. Development is likely to continue to occur in surrounding cities and in the Santa Clara region as well. However, such development is taking place in already urbanized areas as in-fill development and would not require significant land use changes that would create land use conflicts, nor would they divide communities. Therefore, Land Use Alternative A would not result in a cumulatively considerable contribution to cumulative impacts related to land use changes and impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

**5.2.7.10      NOISE**

---

**NOISE-1                      Implementation of Land Use Alternative A would not result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.**

---

Standards for noise generation and exposure in the City of Cupertino are determined primarily through: the Land Use Noise Compatibility Guidelines (which would be continued under the noise portion of the existing Health and Safety Section, maintained as part of Land Use Alternative A); Chapter 10.48, Noise Control, of the Cupertino Municipal Code; as well as by the interior noise standards set by the Title 24 of the State Building Code. Aside from the guidelines for land use noise compatibility, the City of Cupertino has not adopted strict noise reception limits for particular uses, and times of day, and this regulatory approach would continue under Land Use Alternative A. Therefore, there are three subsequent criteria, based on applicable standards and regulations, which may be applied to determine impacts under this significance threshold. Each of these is analyzed in greater detail below.

## LAND USE ALTERNATIVE A

- **Development of new residential or other noise-sensitive land uses such that those new uses would experience an indoor  $L_{dn}$  exceeding 45 dBA.**

Multiple components of Land Use Alternative A would serve to prevent new residential dwellings, hotels, motels, dormitories, and school classrooms from experiencing interior noise levels in excess of 45 dBA  $L_{dn}$ . Prevention of excessive interior noise levels would be achieved both through adherence to the Land Use Noise Compatibility Standards included in the noise portion of Health and Safety Section of the current General Plan, as well as through the performance of acoustical analysis in noisy areas, which would help determine what, if any, noise attenuating features are necessary to achieve the 45 dBA  $L_{dn}$  interior noise standard. As individual projects are proposed under Land Use Alternative A, project applicants would be required to perform site-level acoustic analysis to demonstrate compliance.

Existing Policy 2-6 (Neighborhood Protection; proposed to be renumbered and renamed Policy 2-8: Neighborhood Compatibility), directs the City to “Protect residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments. with adequate buffering setbacks, landscaping, walls, activity limitations, site design and other appropriate measures.” Previous policies 6-64, 6-65, and 6-66 contain provisions that require or encourage construction and other techniques to reduce sound transmission to interior living spaces, consistent with the California Building Code. Policies 6-64 and 6-65 were deleted because they were already required by the Building and Municipal Codes. Proposed Policy 6-63, Exterior Sound Transmission Control for New Single-family Homes, would direct the City to incorporate State building code controls on interior sound transmission in the Municipal Code. Additionally Chapter 10.48, Noise Ordinance, and Title 19, Zoning Ordinance, of the Cupertino Municipal Code contain multiple provisions to limit the generation and reception of excessive noise. Such provisions include, but are not limited to restrictions on construction activity, strict limitations on noise generation at property lines, and performance standards for the permitting of commercial and industrial uses.

Under Land Use Alternative A, in areas where noise levels exceed those that are deemed normally acceptable for a particular land use, development projects would continue to be required to demonstrate—through acoustical studies—that interior noise environments would comply with the 45 dBA  $L_{dn}$  State standard.

Together, these policies and regulations would serve to ensure that land use and development decisions consider and seek to prevent potential noise impacts. Through implementation of these existing or new policies and requirements as part of Land Use Alternative A, the City would ensure compliance with local and State standards for interior noise, and the impact would be *less than significant*.

- **Development of any land use in an area that is characterized by an exterior  $L_{dn}$  which indicates that the establishment of that land use in the area would be “clearly unacceptable,” pursuant to the Land Use Noise Compatibility Guidelines continued under Land Use Alternative A.**

Through adherence to the Land Use Noise Compatibility Guidelines, the City of Cupertino would prohibit the development of particular land uses in areas where the ambient noise level would indicate those land uses would be clearly unacceptable. General Plan Policy 6-49, Land Use Decision Evaluation, would continue to ensure that City land use decisions adhere to the established compatibility guidelines.

## LAND USE ALTERNATIVE A

Through continued implementation of these requirements as part of Land Use Alternative A, the City would ensure compliance with local and State standards for land use compatibility, and the impact would be *less than significant*.

- **Development of a new land use that would result in adjacent properties experiencing short- or long-term ambient noise levels that exceed those regarded as compatible, or which exceed levels permitted under the Chapter 10.48 of the Cupertino Municipal Code.**

Under Land Use Alternative A, existing policies of the current General Plan and provisions of the Cupertino Municipal Code would continue to ensure that new land uses do not contribute to excessive noise at existing sensitive receptors. Under Land Use Alternative A, the following policies would remain applicable to future development: Policies 6-57, Commercial Delivery Areas, and 6-58, Delivery Hours, would continue to ensure that commercial deliveries and delivery areas are regulated to prevent noise impacts to adjacent sensitive land uses. Policy 6-59, Noise Control Techniques, would similarly serve to prevent noise impacts from industrial processes and equipment near homes. Additionally, Policy 2-36, Late-Evening Entertainment Activities, would discourage late night entertainment uses in areas where these uses would abut low-density residential areas, and would only allow the permitting of such uses near low-density residential when it could be demonstrated that adequate mitigations had been undertaken.

Additionally, the maintenance and continued enforcement of the Cupertino Municipal Code, including the Noise Ordinance and Zoning Code, would work in tandem with and reinforce the current or amended policies within the General Plan, and any impact arising from violation of applicable local standards would therefore be *less than significant*.

### Site-Specific Discussion

Project Components (Special Areas, Nodes/Gateways, Study Areas, and Housing Element Sites) are geographically large and include a diversity of noise environments. The variation in noise levels (from both land uses and roadways) within each of these areas would be greater than the variation among these areas (e.g. the range between highest and lowest ambient noise levels in different portions of the Bubb Road Special Area would be greater than the difference between the “average” noise levels in the Bubb Road Special Area and any other special center). For this reason, it is not feasible to discuss site-level noise impacts at the Special Area or Node/Gateway level in the absence of information about specific proposed development projects. Nevertheless, because many of the Study Areas and Housing Sites are located in areas with similar noise environments, it is possible to make generalized conclusions about potential noise impacts in these areas.

#### *Study Areas*

Study Areas may be loosely grouped into two non-exclusive categories: Study Areas along or near major arterials and Study Areas along or near major freeways. As shown in Figure 3-11, in Chapter 3, Project Description, of this Draft EIR, Study Areas 7 (Stevens Creek Office Center) and 2 (City Center) fall into the first category, and would experience noise environments dominated by noise along major arterials. Study

## LAND USE ALTERNATIVE A

Areas 1 (Cupertino Inn and Goodyear Tire), 3 (PG&E), 4 (Mirapath) and 5 (Cupertino Village) are in the second category where noise from nearby freeways is likely to dominate the noise environment. Study Area 6 (Vallco Shopping District) would fall into both of these categories, as there are portions of the Study Area that may be more dominated by freeway noise and portions that may be more dominated by noise from major arterials. All Study Areas have the potential to receive some amount of noise from both highways and major arterials. Because all of the Study Areas are at least partly located in close proximity to a major arterial or highway, it is likely that there are portions of all Study Area where development would require special noise-insulating features or construction techniques. Therefore, for individual sites located within all Study Areas, additional project-level acoustical analysis would be necessary to demonstrate conformance with applicable land use compatibility requirements and interior noise standards; per Sections 19.44.050, Site Development Regulations, and 19.116.030, General Regulations, of the Zoning Ordinance, as well as General Plan Policies 6-64, 6-65, and 6-66.

### *Housing Element Sites*

Similar to the Study Areas, the potential Housing Element Sites may be loosely grouped into two non-exclusive categories: sites along or near major arterials and sites along or near major freeways. As shown in Figure 3-20, in Chapter 3, Project Description, of this Draft EIR, the following Housing Element Sites fall into the former category, with major arterials being the likely predominant source of noise:

- Housing Element Site 1 (Shan Restaurant),
- Housing Element Site 2 (Arya/Scandinavian Design)
- Housing Element Site 3 (United Furniture/East of East Estates Drive)
- Housing Element Site 14 (Marina Plaza)

Housing sites 5 (Glenbrook Apartments), 6 (The Villages Apartments), and 7 (Carl Berg Property), fall into the latter category with freeways being the likely predominant source of noise.

Finally, the following Housing Element Sites are within both categories with portions of the sites potentially dominated by noise from either freeways or major arterials:

- Housing Element Site 4 (Barry Swenson)
- Housing Element Site 16 (Summerwinds & Granite Rock)
- Housing Element Site 18 (The Oaks Shopping Center)
- Housing Element Site 19 (Cypress Building Association & Hall Property)

Although the various Housing Element Sites may be affected in different ways or to different degrees by noise from major arterials and/or freeways, all Housing Element Sites overlap at least partially with the 70 dBA noise contour, even under existing conditions. Roadway noise models generally represent a conservative estimate of ambient noise levels; nevertheless, there is no housing site that could avoid the need for additional site-level measurements and analysis. At a minimum, project-level analysis would need to examine portions of housing sites nearest to major roadways to measure current, 24-hour ambient noise levels and determine appropriate site design and/or construction techniques for noise attenuation.

Despite this need for additional site-level analysis, development on the Housing Element Sites may avoid significant impacts by conforming with requirements for acoustic analysis under the General Plan, including

## LAND USE ALTERNATIVE A

the Land Use Compatibility Guidelines for Community Noise Environments, as well as by achieving subsequent compliance with interior and exterior noise standards through application of any necessary special construction or noise insulation techniques. Impacts would be *less than significant*.

### *General Plan and Zoning Ordinance Conformance Sites*

As described in Chapter 3, Project Description, of this Draft EIR, the proposed land use designation changes within the General Plan and Zoning Ordinance Conformance Sites are intended to ensure consistency between existing land uses and the General Plan land use designations and/or the Zoning Ordinance. The proposed Amendments do not result in increased development potential in these areas. As is currently the case, future developments would be required to undergo CEQA review in these areas. The General Plan and Zoning Ordinance Conformance Sites would not be subject to new development potential and would therefore neither create new sources of excessive noise, nor result in the development of sensitive land uses that could be exposed to excessive noise. Thus, there would be *no impact* with regards to noise at these locations.

## Summary

Through adherence to the requirements, policies, and strategies adopted or continued under the current or amended General Plan and Cupertino Municipal Code, the City of Cupertino would prevent the development of land uses in areas with inappropriately high ambient noise levels; would ensure that any development of noise-sensitive land uses include the study and adequate mitigation of noise impacts; and would prevent activities or new uses that generate excessive levels of noise at sensitive receptors. Altogether, this would ensure adherence to relevant noise exposure and generation standards, and would prevent noise-sensitive land uses from being exposed to noise exceeding the prescribed standards. Therefore the impact under this criterion would be *less than significant*.

### *Applicable Regulations*

- CCR, Title 24, Building Standards
- Title 21, Subchapter 6, of the CCR
- General Plan: Health and Safety Section, Land Use Section, Circulation Section, and Environmental Resources/Sustainability Section
- Cupertino Municipal Code:
  - Chapter 10.48: Community Noise Control
  - Title 19: Zoning Ordinance
  - Chapter 2.90: Design Review Committee
  - Title 5 Business Licenses and Regulations
  - Title 10: Public Peace, Safety and Morals
  - Title 11 Vehicles and Traffic
  - Title 14: Streets, Sidewalks and Landscaping

**Significance Without Mitigation:** Less than significant

## LAND USE ALTERNATIVE A

### NOISE-2      **Implementation of Land Use Alternative A would expose persons to or generate excessive ground-borne vibration or ground-borne noise levels.**

CEQA does not specify quantitative thresholds for what is considered “excessive” vibration or groundborne noise, nor does the City of Cupertino establish such thresholds. For Light Industrial and Industrial Park zones, the City of Cupertino Municipal Code does specify that “nonaudible” vibrations must not be perceptible without instrumentation, but the Code does not set a specific numeric threshold. Since perception of vibrations varies between individuals, it is necessary to establish a quantitative threshold that reflects levels of vibration typically capable of causing perception, annoyance, or damage. Therefore, based on criteria from the FTA, which are regarded as standard practice, a significant impact would occur if:

- Implementation of the Project would result in ongoing exceedance of the criteria for annoyance presented in Table 4.10-3, in Chapter 4.10, Noise, of this Draft EIR.
- Implementation of the Plan would result in vibration exceeding the criteria presented in Table 4.10-3 that could cause buildings architectural damage.

The following discusses potential vibration impacts generated by short-term construction and long-term operations that may occur under implementation of Land Use Alternative A.

### Short-Term Construction-Related Vibration Impacts

The effect on buildings in the vicinity of a construction site varies depending on soil type, ground strata, and receptor-building construction. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Vibration from construction activities rarely reaches the levels that can damage structures, but groundborne vibration and groundborne noise can reach perceptible and audible levels in buildings that are close to the construction site. Table 5.2-6 lists vibration levels for construction equipment.

**TABLE 5.2-6      GROUNDBORNE VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT**

Equipment	Approximate Velocity Level at 25 Feet (VdB)	Approximate RMS <sup>a</sup> Velocity at 25 Feet (inch/sec)
Pile Driver (Impact) Upper Range	112	1.518
Pile Driver (Impact) Lower Range	104	0.644
Pile Driver (Sonic) Upper Range	105	0.734
Pile Driver (Sonic) Lower Range	93	0.170
Large Bulldozer	87	0.089
Caisson Drilling	87	0.089
Jackhammer	79	0.035

**LAND USE ALTERNATIVE A**

Small Bulldozer	58	0.003
Loaded Trucks	86	0.076
FTA Criteria – Human Annoyance (Daytime)	78 to 90 <sup>b</sup>	—
FTA Criteria – Structural Damage	—	0.2 to 0.5 <sup>c</sup>

a. RMS velocity calculated from vibration level (VdB) using the reference of 1 micro-inch/second.

b. Depending on affected land use. For residential 78 VdB, for offices 84 VdB, workshops 90 VdB.

c. Depending on affected building structure, for timber and masonry buildings 0.2 in/sec, for reinforced-concrete, steel, or timber 0.5 in/sec.

Source: Federal Transit Administration, Transit Noise, and Vibration Impact Assessment, 2006.

As shown in Table 5.2-6, vibration generated by construction equipment has the potential to be substantial. Significant vibration impacts may occur from construction activities associated with new development under Land Use Alternative A. Implementation of Land Use Alternative A anticipates an increase in development intensity in certain areas, in the absence of information about specific development proposals.

Construction would be localized and would occur intermittently for varying periods of time. Because specific, project-level information is not available at this time, it is not possible to quantify the construction vibration impacts at specific sensitive receptors. Grading and demolition activity typically generate the highest vibration levels during construction. Except for pile driving, maximum vibration levels measured at a distance of 25 feet from an individual piece of typical construction equipment do not exceed the thresholds for human annoyance for industrial uses, nor the thresholds for architectural damage.

Methods to reduce vibration during construction would include the use of smaller equipment, use of well-maintained equipment, use of static rollers instead of vibratory rollers, and drilling of piles as opposed to pile driving. Methods to reduce human impacts of vibration from construction include limitations on construction hours and/or guidelines for the positioning of vibration-generating construction equipment.

Overall, vibration impacts related to construction would be short-term, temporary, and generally restricted to the areas in the immediate vicinity of active construction equipment. Construction would be localized and would occur intermittently for varying periods of time. Because specific, project-level information is not available at this time, it is not possible to quantify the construction vibration impacts at specific sensitive receptors.

These policies would thereby serve to ensure that construction activities do not result in sustained levels of vibration that could result in architectural damage or ongoing annoyance. Therefore, implementation of Land Use Alternative A would not result in levels of construction-related groundborne noise or vibration that would exceed the thresholds for annoyance or architectural damage, and the impact would therefore be *less than significant*.

**Long-Term Vibration Impacts**

Development under Land Use Alternative A could result in long-term, operations-related vibration impacts to sensitive receptors if sensitive land uses such as residential, educational facilities, hospitals, or places of worship were to be located in close proximity to industrial land uses that could have equipment with the

## LAND USE ALTERNATIVE A

potential to generate significant vibration levels. There are limited areas of Cupertino where residential or other sensitive land uses would interface to a certain degree with light industrial operations under the land use designations implemented as part of Land Use Alternative A. Some prominent examples of such areas include the Monta Vista Village Neighborhood and the Bubb Road and North De Anza Special Areas.

Despite the potential for vibration impacts from the juxtaposition of sensitive land uses and land uses with the potential to generate vibration, appropriate setbacks, buffers, use restrictions, and/or other measures can largely eliminate these impacts. As discussed above, vibration impacts are highly dependent on a variety of localized factors, including geology, soil conditions, and building construction techniques; however, in most cases vibration attenuates relatively rapidly with distance, making setbacks and buffering particularly effective approaches to avoid vibration impacts. Moreover, high levels of vibration are usually associated with heavy industrial uses. The light industrial uses of the sort that would continue to be permitted in Cupertino under Land Use Alternative A are very rarely associated with vibration that is sufficiently intense or sustained so as to cause human discomfort or architectural/structural damage.

Although there are no State or federal regulations to limit perception of vibration by sensitive receptors, Land Use Alternative A would continue or introduce an array of policies that would employ the previously mentioned strategies to prevent vibration impacts. Existing Policy 2-6 (Neighborhood Protection; proposed to be renumbered and renamed Policy 2-8: Neighborhood Compatibility) directs the City to “Protect residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments. with adequate buffering setbacks, landscaping, walls, activity limitations, site design and other appropriate measures.” Policy 6-61, Construction and Maintenance Activities, would require construction contractors to use the best available technology to minimize excessive vibration from construction equipment such as pile drivers, jack hammers, and vibratory rollers. Together, these policies would serve to ensure that land use and development decisions consider and seek to prevent potential vibration impacts.

Additional current or amended General Plan policies, as well as Municipal Code provisions, would also serve to reduce and prevent long-term, operations-related vibration impacts. The current or amended noise portion of the Health and Safety section of the General Plan offers general direction for the City to consider noise and vibration impacts during development decisions, and provides specific policies in respect to these considerations. Policy 6-49, Land Use Decision Evaluation, would require the City to “use the Land Use Compatibility for Community Noise Environments chart and the City Municipal Code to evaluate land use decisions.” Section 10.48.062, Nighttime deliveries and pickups, of the Municipal code, serves to regulate acceptable freight pickup and delivery times for commercial and industrial land uses. Although aimed at noise compatibility, these restrictions would also serve to reduce the intensity, frequency, and duration of potential vibration from such activities, thereby reducing or preventing perception of vibration at nearby receptors. Additionally, Chapter 19, Zoning, of the Municipal Code contains general restrictions on commercial and industrial uses. In the case of industrial uses, it is prohibited to generate vibration that is perceptible without instruments beyond the boundary of the industrial zone. In the case of commercial uses, permitting of the use is contingent upon that use not emitting excessive vibration. By ensuring general land use compatibility and by requiring, where necessary, approaches to reduce the generation or transmission of vibration, these policies and ordinances would serve to ensure sufficient attenuation of vibration to preclude impacts at sensitive receptors.



## LAND USE ALTERNATIVE A

These policies would ensure that buildout of land uses under Land Use Alternative A would not result in perception of excessive noise and vibration by sensitive receptors in new developments. These policies and actions would also serve to ensure that new uses developed under Land Use Alternative A would not result in the perception of excessive vibration by individuals living or working in areas of existing sensitive land uses. Through consideration of land use compatibility, project-level review, and requirements for mitigation of noise and vibration, the current or amended policies of the General Plan would prevent or reduce exposure to long-term, operations-related vibration. Therefore, implementation of Land Use Alternative A would not result in levels of long-term operation-related groundborne noise or vibration that would exceed the thresholds for annoyance or architectural damage, and the impact would be *less than significant*.

### *Applicable Regulations*

- CCR, Title 24, Building Standards
- General Plan: Health and Safety Section, Land Use Section, Circulation Section, and Environmental Resources/Sustainability Section
- Cupertino Municipal Code:
  - Chapter 10.48: Community Noise Control
  - Title 19: Zoning Ordinance

**Significance Without Mitigation:** Less than significant.

---

**NOISE-3                      Implementation of Land Use Alternative A would result in a substantial permanent increase in ambient noise levels in the Study Area vicinity above levels existing without the alternative.**

---

Implementation of Land Use Alternative A would have a significant impact if it results in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without Land Use Alternative A. The Municipal Code identifies volume levels and durations that constitute unacceptable noise increases during 2-hour periods; however, the City of Cupertino has not adopted a specific, quantitative threshold for what constitutes a significant permanent increase in ambient noise levels. The smallest increase in loudness perceptible by the human ear is 3 dBA and increases of 5 dBA or greater are easily noticed.<sup>29</sup> However, the implementation of Land Use Alternative A and changes in the ambient noise environment will occur over a period of more than 20 years. Therefore, in the absence of quantitative ambient noise level increase thresholds adopted by the City, a substantial increase in ambient noise levels would be defined as either: a 5 dBA increase, if after the increase the ambient noise level remains in the range of what would be “normally acceptable” at the land use where the noise is being received; or a 3 dBA increase, if after the increase the ambient noise level exceeds the range of what would be “normally acceptable” at the land use where the noise is being received.

---

<sup>29</sup> Bies, David and Hansen, Colin, 2009, *Engineering Noise Control: Theory and Practice, Fourth Edition*, New York: Spon Press.

## LAND USE ALTERNATIVE A

### Long-Term Operational Noise

A portion of the substantial permanent increases to ambient noise levels that could result from implementation of Land Use Alternative A would be attributable to ongoing operations on land uses developed under the plan. Residential, open space, and most passive recreational land uses (i.e. trails, rests areas, picnic areas) are generally not associated with substantial permanent increases in ambient noise. In the case of these land uses, very specific sources of noise, such as lawn equipment or social gatherings, would be the most likely source of excessive noise; addressing impacts from these noise sources would be handled on a complaint basis by Cupertino's noise ordinance. Noise sources associated with residential, open space, and passive recreational land uses are generally not sufficiently frequent or sustained so as to result in permanent substantial increases to ambient noise levels. Instead, substantial permanent increases in ambient noise levels would be most likely to result from development of commercial, industrial, mixed-use, and certain institutional or active recreational land uses (i.e. ball fields, skate-parks, dog parks).

The noise portion of the Health and Safety Section of the General Plan contains multiple policies that would serve to prevent or mitigate substantial permanent increase to ambient noise levels from long-term operations. All of the current or amended General Plan policies discussed under Impact NOISE-1 and Impact NOISE-2 would likewise serve to prevent substantial permanent increases to ambient noise levels. Key provisions of these previously discussed policies include, among others: limits on hours of operation, transitional land uses and/or open space buffers, sound walls, berms, and project level review to ensure compliance with indoor/outdoor noise standards for sensitive uses. Together, these policies would serve to ensure that the development of new land uses under Land Use Alternative A would not result in substantial permanent increases in the ambient noise level in the Project Study Area vicinity, and the impact in this regard would be *less than significant*.

### Transportation-Related Noise

As a result of implementation of Land Use Alternative A and ongoing regional growth, it is anticipated that there would be substantial permanent increases to the ambient noise levels throughout Cupertino, and that these increases would primarily result from increases to transportation-related noise, especially that of automobile traffic. Because Cupertino has only one railway with very limited freight service, does not host any airports or heliports, and is not located within two (2) miles of any airports or heliports, increases in ambient noise levels from rail and air traffic are not anticipated. Nevertheless, increases to ambient noise from car and rail traffic would result in substantial permanent increase in ambient noise levels.

Development of land uses under implementation of Land Use Alternative A, as well as development in adjacent communities, would result in increases in traffic that would cause substantial permanent increases in ambient noise levels in the Project Study Area vicinity. Table 5.2-7 shows major roadway segments in Cupertino with estimated increases in the ambient noise level at a distance of 100 feet from the roadway centerline.

**LAND USE ALTERNATIVE A**

**TABLE 5.2-7 INCREASES TO AMBIENT NOISE LEVELS ALONG MAJOR ROADWAY SEGMENTS – LAND USE ALTERNATIVE A**

Roadway	Segment	Ambient Noise Level at 100 feet from Roadway Centerline CNEL dBA		
		Existing Conditions	2040 Conditions	Increase (dBA)
Homestead Rd	From City Boundary to SR 85	65.0	66.2	1.2
	From SR 85 to N Stelling Rd	67.8	69.4	1.6
	From N Stelling Rd to N De Anza Blvd	69.6	70.1	0.5
	From N De Anza Blvd to N Blaney Ave	68.7	70.5	1.8
	From N Blaney Ave to N Wolfe Rd	68.9	70.8	1.9
	From N Wolfe Rd to N Tantau Ave	69.1	71.1	2.0
	From N Tantau Ave to City Boundary	68.9	71	2.1
Pruneridge Ave	From N Wolfe Rd to N Tantau Ave	63.1	64.5	1.4
	From N Tantau Ave to Lawrence Expwy	63.6	69.3	<b>5.7</b>
I-280	From City Boundary to Foothill Blvd	81.2	81.8	0.6
	From Foothill Blvd to SR 85	82.2	82.9	0.7
	From SR 85 to N Stelling Rd	81.8	82.1	0.3
	From N Stelling Rd to N De Anza Blvd	81.8	82	0.2
	From N De Anza Blvd to N Blaney Ave	81.8	81.9	0.1
	From N Blaney Ave to N Wolfe Rd	81.8	81.9	0.1
	From N Wolfe Rd to N Tantau Ave	81.9	82.2	0.3
	From N Tantau Ave to I-280	81.9	82.2	0.3
Stevens Creek Blvd	From I-280 to Lawrence Expwy	80.2	82.2	2.0
	From City Boundary to Foothill Blvd	60.0	61.9	1.9
	From Foothill Blvd to Bubb Rd	67.3	68.5	1.2
	From Bubb Rd to SR 85	70.1	71.4	1.3
	From SR 85 N Stelling Rd	70.4	71	0.6
Stevens Creek Blvd	From N Stelling Rd to N De Anza Blvd	69.2	71	1.8
	From N De Anza Blvd to N Blaney Ave	68.9	71.2	2.3
	From N Blaney Ave to N Wolfe Rd	68.8	71.5	2.7
	From N Wolfe Rd to N Tantau Ave	70.6	71.9	1.3
McClellan Rd	From S Tantau Ave to I-280	70.9	71.8	0.9
	From I-280 to Lawrence Expwy	70.6	72.5	1.9
	From Foothill Blvd/Stevens Canyon Rd to Bubb Rd	60.8	63.2	2.4
	From Bubb Rd to SR 85	63.3	64.4	1.1
	From SR 85 to S Stelling Rd	64.0	65	1.0
Bollinger Rd	From S Stelling Rd to S De Anza Blvd	64.6	65	0.4
	From S De Anza Blvd to S Blaney Ave	67.6	69.6	2.0
	From S Blaney Ave to Miller Ave	65.1	67.3	2.2
	From Miller Ave to S Tantau Ave	64.4	68	<b>3.6</b>
	From S Tantau Ave to Lawrence Expwy	68.9	71	2.1

## LAND USE ALTERNATIVE A

TABLE 5.2-7 INCREASES TO AMBIENT NOISE LEVELS ALONG MAJOR ROADWAY SEGMENTS – LAND USE ALTERNATIVE A

Roadway	Segment	Ambient Noise Level at 100 feet from Roadway Centerline CNEL dBA		
		Existing Conditions	2040 Conditions	Increase (dBA)
Rainbow Dr	From Bubb Rd to S Stelling Rd	58.9	61.5	2.6
	From S Stelling Rd to S De Anza Blvd	65.5	66	0.5
Prospect Rd	From S Stelling Rd to S De Anza Blvd	65.1	65.9	0.8
Foothill Blvd	From City Boundary to I-280	71.7	73.6	1.9
	From I-280 to Stevens Creek Blvd	70.6	70.8	0.2
	From McClellan Rd to Stevens Creek Blvd	65.2	66	0.8
Stevens Canyon Rd	From City Boundary to McClellan Rd	61.8	63.5	1.7
Bubb Rd	From Stevens Creek Blvd to McClellan Rd	67.6	69.1	1.5
	From Rainbow Dr to McClellan Rd	62.5	63.5	1.0
SR 85	From City Boundary to Homestead Rd	80.8	80.9	0.1
	From Homestead Rd to I-280	80.8	80.7	-0.1
	From I-280 to Stevens Creek Blvd	81.4	81.8	0.4
SR 85	From Stevens Creek Blvd to McClellan Rd	80.7	80.6	-0.1
	From McClellan Rd to S Stelling Rd	80.7	80.6	-0.1
	From S Stelling Rd to S De Anza Blvd	80.7	80.6	-0.1
Hollenbeck Ave (N. Stelling Rd)	From S De Anza Blvd to Prospect Rd	80.5	80.5	0.0
	From City Boundary to Homestead Rd	60.0	60.4	0.4
N Stelling Rd	From Homestead Rd to I-280	63.2	65.9	2.7
	From I-280 to Stevens Creek Blvd	63.1	65.9	2.8
S Stelling Rd	From Stevens Creek Blvd to McClellan Rd	61.7	68.9	<b>7.2</b>
	From McClellan Rd to SR 85	59.0	62.7	<b>3.7</b>
	From SR 85 to Rainbow Dr	58.8	62.1	<b>3.3</b>
N De Anza Blvd	From Rainbow Dr to Prospect Rd	59.7	61.4	1.7
	From City Boundary to Homestead Rd	73.1	73.6	0.5
	From Homestead Rd to I-280	74.5	74.5	0.0
S De Anza Blvd	From I-280 to Stevens Creek Blvd	72.9	73.9	1.0
	From Stevens Creek Blvd to McClellan Rd	71.9	73	1.1
	From McClellan Rd to Bollinger Rd	72.0	73.3	1.3
	From Bollinger Rd to SR 85	71.7	72.4	0.7
	From SR 85 to Rainbow Dr	72.2	72.9	0.7
N Blaney Ave	From Rainbow Dr to Prospect Rd	72.5	72.4	-0.1
	From Homestead Rd to I-280	60.8	63	2.2
	From I-280 to Stevens Creek Blvd	61.0	62.3	1.3
S Blaney Ave	From Stevens Creek Blvd to Bollinger Rd	55.7	56.3	0.6
	From Bollinger Rd to Prospect Rd	59.1	60.1	1.0
N Wolfe Rd	From City Boundary to Homestead Rd	67.6	70.6	<b>3.0</b>
	From Homestead Rd to Pruneridge Ave	69.7	71.4	1.7

**LAND USE ALTERNATIVE A**

**TABLE 5.2-7 INCREASES TO AMBIENT NOISE LEVELS ALONG MAJOR ROADWAY SEGMENTS – LAND USE ALTERNATIVE A**

Roadway	Segment	Ambient Noise Level at 100 feet from Roadway Centerline CNEL dBA		
		Existing Conditions	2040 Conditions	Increase (dBA)
	From Pruneridge Ave to I-280	70.2	72	1.8
	From I-280 to Stevens Creek Blvd	68.3	70.5	2.2
	From Stevens Creek Blvd to Bollinger Rd	65.5	68.9	<b>3.4</b>
Miller Ave	From Bollinger Rd to City Boundary	65.4	66.8	1.4
	From Homestead Rd to Pruneridge Ave	47.4	64.1	<b>16.7</b>
N Tantau Ave	From Pruneridge Ave to I-280	50.3	61.4	<b>11.1</b>
	From I-280 to Stevens Creek Blvd	61.2	64	2.8
S Tantau Ave	From Stevens Creek Blvd to Bollinger Rd	58.7	58.1	-0.6
	From Pruneridge Ave to Stevens Creek Blvd	75.4	77	1.6
Lawrence Expwy	From Stevens Creek Blvd to I-280	74.9	77	2.1
	From I-280 to Bollinger Rd	75.5	77.4	1.9

Bold numbers indicate increases in CNEL which would constitute substantial permanent increase in ambient noise level.  
Source: Hexagon Transportation Consultants, Inc., 2014; PlaceWorks, 2014

As discussed above, increases greater than 5.0 dBA would automatically constitute a substantial permanent increase to the ambient noise level, therefore an increase would be readily noticeable. Increases greater than 3.0 dBA would be considered substantial and permanent if the resulting CNEL would exceed that which is considered normally acceptable for the receiving land use. The ambient noise level increases shown in Table 5.2-7 and the future 2040 Noise Contours in Figure 5.2-1, demonstrate that there would be multiple major road segments that would experience substantial permanent increases in ambient noise levels, including at sensitive land uses.

The General Plan contains numerous policies to address excessive roadway noise at existing sensitive land uses, which would be continued under Land Use Alternative A. For instance, Policy 6-51, Stricter State Noise Laws, would direct the City to continue enforcement of existing street laws regarding vehicle noise, and to support enactment of stricter State standards. Policy 6-53, Traffic Calming Solutions to Street Noise, directs the City to explore traffic calming approaches for residential streets. Policies 6-54 through 6-56 direct the City to use a combination of restrictions and street improvements to reduce noise from trucks. Altogether, these policies would serve to reduce noise from vehicles at the source and to otherwise shield sensitive uses from excessive noise. Although these policies could in certain cases reduce or prevent significant increases in ambient noise at sensitive land uses under implementation of Land Use Alternative A, the measures described in these policies would not be universally feasible, and some of the most effective noise-attenuation measures, including sound walls and berms, would be infeasible or inappropriate in a majority of locations where sensitive land uses already exist. Factors which would render these mitigations infeasible include but are not limited to cost, aesthetic considerations, and negative impacts to pedestrian and bicycle connectivity. Therefore, even after the application of relevant, feasible regulations and General Plan policies, the impact to ambient noise levels would remain *significant*.

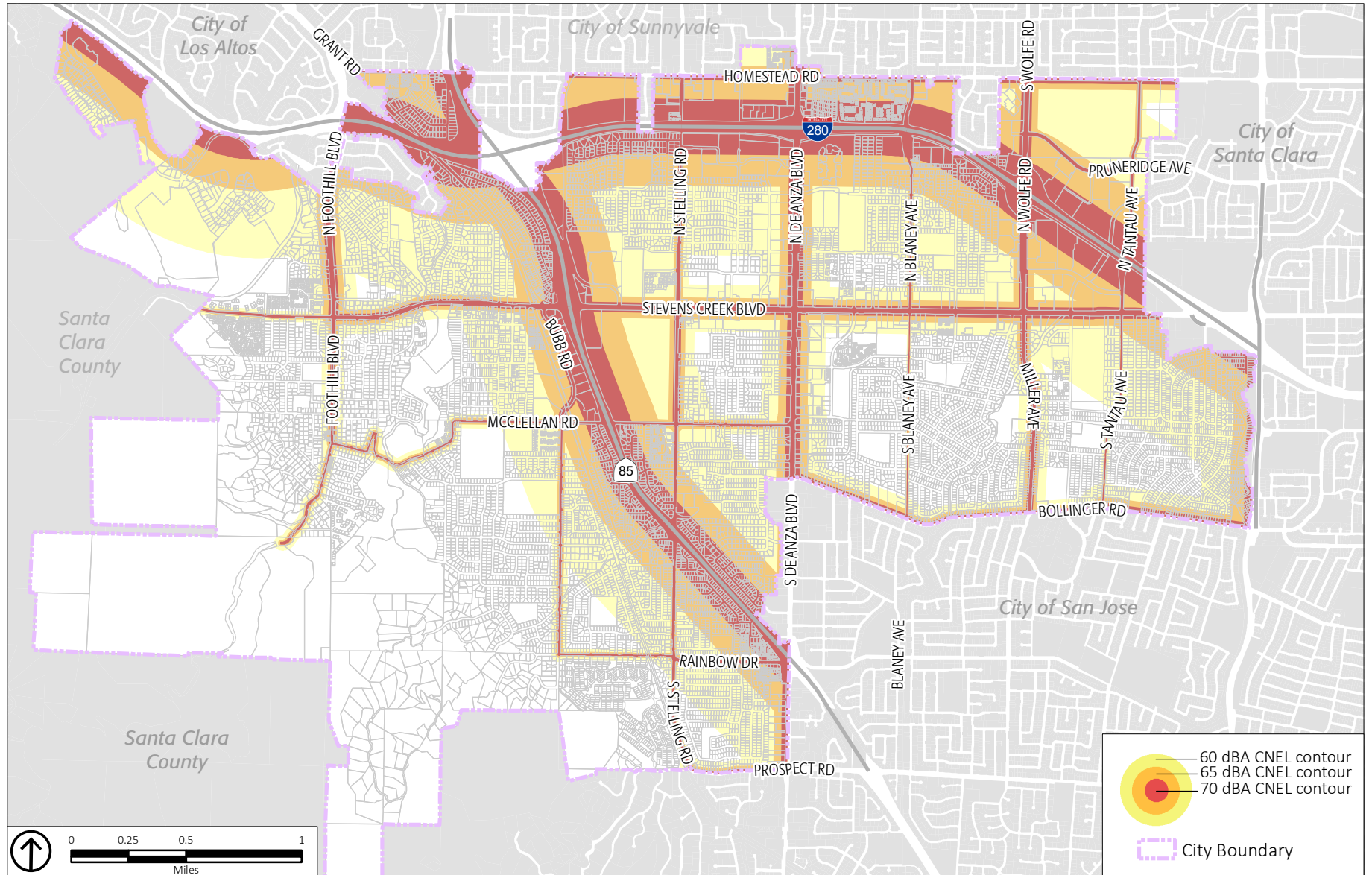


Figure 5.2-1  
2040 Noise Contours – Land Use Alternative A

### *Applicable Regulations*

- CCR, Title 24, Building Standards
- General Plan: Health and Safety Section, Land Use Section, Circulation Section, and Environmental Resources/Sustainability Section
- Cupertino Municipal Code:
  - Chapter 10.48: Community Noise Control
  - Title 19: Zoning Ordinance
  - Chapter 2.90: Design Review Committee
  - Title 5 Business Licenses and Regulations
  - Title 10: Public Peace, Safety and Morals
  - Title 11 Vehicles and Traffic
  - Title 14: Streets, Sidewalks and Landscaping

### **Mitigation Measures**

The following mitigation measures were considered, but as described below, were found to be infeasible.

#### *Technological Advances for Noise-Generating Vehicles and Machinery*

Most urban noise results from the use of machinery or vehicles, including manufacturing equipment, HVAC units, automobiles, motorcycles, trains, and aircraft, among others. The implementation of improved technologies for the prevention or muffling of noise from these sources could theoretically prevent substantial increases to ambient noise levels; however, this approach would be infeasible as much of this implementation is beyond the jurisdiction of the City.

Beyond currently-accepted State and industry standards and best practices, developing and/or requiring novel technological improvements for noise-generating vehicles and machinery would not be affordable, scientifically plausible, or within the City's jurisdiction. Therefore, this potential mitigation measure is regarded as infeasible.

#### *Universal Use of Noise-Attenuating Features*

The universal use of noise attenuating features, such as rubberized asphalt, soundwalls, berms, and improved building sound-insulation, could prevent transmission of excessive noise to the outdoor and indoor areas of sensitive land uses and/or could prevent projected increases in ambient noise levels; however, this approach would be infeasible.

Rubberized asphalt reduces tire-pavement noise and, when new, achieves a reduction of approximately 4 dBA when compared to normal pavement surfaces.<sup>30</sup> However, the noise reduction properties degrade over time, and the noise reduction would not be sufficient to reduce noise impacts in many areas of Cupertino. In

---

<sup>30</sup> Sacramento County, Department of Environmental Review and Assessment, 1999, *Report of the Status of Rubberized Asphalt Traffic Noise Reduction in Sacramento County*.

## LAND USE ALTERNATIVE A

many cases, aesthetic concerns, costs, physical constraints, or other issues would prevent the universal implementation of adequate noise-attenuating features. In addition to their expense, soundwalls often block views and are regarded as unsightly. Moreover, the construction of soundwalls can result in reduced pedestrian and vehicle connectivity, which would contravene other goals of the General Plan and have negative social, economic, and even environmental consequences. Although improved building construction and insulation beyond that which is required by California Title 24 and the current General Plan could further reduce indoor exposure to excessive noise, substantial outdoor increases to ambient noise levels would remain. Therefore, this potential mitigation measure is regarded as infeasible.

For this noise impact, there is no feasible mitigation for preventing substantial increases in ambient noise levels, since all conceivable mitigations would be economically impractical, scientifically unachievable, outside the City's jurisdiction, and/or inconsistent with City planning goals and objectives. Impacts would remain significant and unavoidable because no feasible mitigation measures are available to mitigate noise impacts to a less than significant level, resulting in a *significant and unavoidable* impact.

**Significance With Mitigation:** Significant and Unavoidable.

---

NOISE-4

**Implementation of Land Use Alternative A would result in a substantial temporary or periodic increase in ambient noise levels in the Project Study Area vicinity above levels existing without the future development.**

---

Implementation of Land Use Alternative A would have a significant impact if it results in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without Land Use Alternative A.

Noise from construction equipment and various construction-related activities is frequently a cause of temporary or periodic increases in ambient noise levels. Table 5.2-8, below, shows typical noise levels generated by commonly-used pieces of construction equipment. Although the current or amended policies of the General Plan and the provisions of the noise ordinance would serve to prevent or reduce noise generation from construction equipment, it is likely that in certain cases these and other available methods to reduce noise would be inadequate to prevent a significant impact.



**LAND USE ALTERNATIVE A**

**TABLE 5.2-8 CONSTRUCTION EQUIPMENT NOISE EMISSION LEVELS**

Construction Equipment	Typical Noise Level (dBA) at 50 Feet	Construction Equipment	Typical Noise Level (dBA) at 50 Feet
Air Compressor	81	Pile-Driver (Impact)	101
Backhoe	80	Pile-Driver (Sonic)	96
Ballast Equalizer	82	Pneumatic Tool	85
Ballast Tamper	83	Pump	76
Compactor	82	Rail Saw	90
Concrete Mixer	85	Rock Drill	98
Concrete Pump	71	Roller	74
Concrete Vibrator	76	Saw	76
Crane, Derrick	88	Scarifier	83
Crane, Mobile	83	Scraper	89
Dozer	85	Shovel	82
Generator	81	Spike Driver	77
Grader	85	Tie Cutter	84
Impact Wrench	85	Tie Handler	80
Jack Hammer	88	Tie Inserter	85
Loader	85	Truck	88
Paver	89		

Source: Federal Transit Administration, Transit Noise, and Vibration Impact Assessment, 2006.

By restricting hours of construction and directing the City to review project noise impacts as part of the planning and permitting processes, the current or amended policies of the General Plan would serve to reduce temporary or periodic increases to ambient noise. The Noise Portion of the Health and Safety Section of the General Plan directs the City to consider project-level noise impacts as part of the environmental evaluation and approval process for individual development proposals. Specifically, Policies 6-61 and 6-62 of the General Plan, respectively, direct the City to limit the hours for construction activities (with limited exceptions for urgent or emergency maintenance work) and to regulate construction and maintenance activities, such as through requirements for up-to-date construction equipment. Through continued implementation of these current or new policies, Land Use Alternative A would serve to minimize temporary or periodic impacts to ambient noise levels from construction activities.

## LAND USE ALTERNATIVE A

Section 10.48.053, Grading, Construction and Demolition, of the Cupertino Municipal Code, also serves to regulate noise from construction and related activities in Cupertino. Subsection A places an 87 dBA limit on noise levels from construction equipment at a distance of 25 feet, as well as an 80 dBA limit on noise levels at nearby properties. Additionally, Subsections C and D limit construction activities to weekdays, non-holidays, and daytime hours, with limited exceptions. The noise chapter thus limits construction activities to 7:00 a.m. to 8:00 p.m. on weekdays, and 9:00 a.m. to 6:00 p.m. on weekends. However, the ordinance allows exceptions under Sections 10.48.030 and 10.48.031, which allow construction outside of these hours, under certain conditions. However, these are used in very special circumstances such as emergencies or when are unavoidable as a result of necessary construction techniques. Subsection E places additional restrictions on the use of helicopters for construction purposes, including noticing requirements.

Although it is possible that certain construction activities may in some cases, lead to substantial temporary or periodic increases to ambient noise levels, the current and proposed policies and regulations included under Land Use Alternative A and the Municipal Code would serve to reduce these impacts. With appropriate noise reduction and shielding measures, temporary or periodic increases to the ambient noise level that could be substantially reduced. The policies of the General Plan and regulations of the Municipal Code, would thereby reduce the impacts from temporary or periodic increases to ambient noise levels, and the impact would be *less than significant*.

### *Applicable Regulations*

- CCR, Title 24, Building Standards
- General Plan: Health and Safety Section, Land Use Section, Circulation Section, and Environmental Resources/Sustainability Section
- Cupertino Municipal Code:
  - Chapter 10.48: Community Noise Control
  - Title 19: Zoning Ordinance

**Significance Without Mitigation:** Less than Significant.

---

**NOISE-5                      Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would result in significant cumulative impacts with respect to noise.**

---

The analysis of Land Use Alternative A, discussed above, addresses cumulative impacts in regard to noise, as well as groundborne noise and vibration. Although multiple simultaneous nearby noise sources may, in combination, result in higher overall noise levels, this effect is captured and accounted for by the ambient noise level metrics which form the basis of the Thresholds of Significance for noise analysis. Any measurement of sound or ambient noise, whether for the purpose of evaluating land use compatibility, establishing compliance with exterior and interior noise standards, or determining point-source violations of a noise ordinance, necessarily will incorporate noise from all other nearby perceptible sources.

Additionally, although noise attenuation is influenced by a variety of topographical, meteorological, and other factors, noise levels decrease relatively rapidly with distance, and vibration impacts decrease even

## LAND USE ALTERNATIVE A

more rapidly. Therefore, site-level cumulative noise or vibration impacts across city boundaries occur only infrequently. The City of Cupertino shares borders with other incorporated communities and similarly urbanized areas, which makes cross-border cumulative noise and vibration impacts possible. Nevertheless, given the General Plan policies and Municipal Code requirements discussed above, it is unlikely that operations-related noise would, in combination with noise sources from adjacent cities, result in cumulative noise impacts. Additionally, because any noise measurements taken in conjunction with General Plan policies or Municipal Code requirements would necessarily account for noises received from outside the boundaries of the City of Cupertino, the ongoing implementation of these policies and regulations under Land Use Alternative A would serve to prevent site-based cumulative noise impacts.

Similarly, the noise contours and traffic-related noise levels developed for Land Use Alternative A include and account for regional travel patterns as they affect traffic levels in Cupertino. Noise contours were based upon both existing and projected future traffic volumes that incorporate cumulative regional effects and trends. Existing noise contours were derived from traffic volumes based on counts of current traffic, and these traffic counts inherently include cumulative traffic, as generated by regional trips. In regard to future noise, projected noise contours were determined using projected 2040 traffic volumes; these data account for growth both within Cupertino under Land Use Alternative A, as well as anticipated regional growth. The future noise modeling which served as the foundation for the overall Project analysis was therefore based on future, cumulative conditions.

Impacts NOISE-3 and NOISE-4 therefore encompass and address cumulative noise impacts from implementation of Land Use Alternative A. As discussed under Impact NOISE-3, even after the application of pertinent policies and action of the General Plan Amendments, as well as all feasible mitigation measures considered but determined to be infeasible described above under Impact NOISE-3, these impacts would remain *significant and unavoidable*.

**Significance Without Mitigation:** Significant and unavoidable.

### 5.2.7.11 POPULATION AND HOUSING

---

<b>POP-1</b>	<b>Implementation of Land Use Alternative A would not induce substantial unexpected population growth, or growth for which inadequate planning has occurred, either directly or indirectly.</b>
--------------	---

---

Land Use Alternative A would result in a significant impact related to population growth if it would lead to substantial unplanned growth, either directly or indirectly. As described in Chapter 3, Project Description, of the Draft EIR, Land Use Alternative A is a broad, high-level plan and no specific projects are currently proposed and therefore, Land Use Alternative A would not result in direct growth; however, implementation of Land Use Alternative A would facilitate growth in the Project Study Area through 2040, and therefore would have indirect effects related to growth. Potential impacts stemming from the indirect inducement of unplanned population growth are discussed below in relation to both local and regional planning efforts.

## LAND USE ALTERNATIVE A

### Local Planning

The developable area of Cupertino is already largely built out and the Project Study Area is well served by utility and transportation infrastructure. Future housing development and redevelopment under Land Use Alternative A would be infill development and would be concentrated on the sites identified in Section 3.7.4, Housing Element Sites, of Chapter 3, Project Description, of this Draft EIR. The General Plan includes policies and strategies that, once adopted, would serve to accommodate future growth through 2040. Within the Land Use and Community Design Element, Policy 2-1, Focus Development in Mixed-Use Special Areas, would require the City to, in the mixed-use Special Areas where office, commercial and residential uses are allowed, focus higher intensity development and increased building heights where appropriate in designated corridors, gateways and nodes. Policy 2-17, Multi-Family Residential Design, would require the City to maintain a superior living environment for multi-family dwellings. Strategy 1, Relationship to Street, directs the City to relate building entrances to the street, utilizing porches or stoops. Strategy 2, Provision of Outdoor Areas, would require the City to provide outdoor areas, both passive and active, and generous landscaping to enhance the surroundings for multi-family residents. Allow public access to the common outdoor areas whenever possible. Policy 2-22, Jobs/Housing Balance, would require the City to strive for a more balanced ratio of jobs and housing units. Strategy 1, Housing and Mixed-Use, would require the City to strive to achieve a balanced jobs/housing ratio based on the policies and strategies contained in the Housing Element. Strategy 2, Housing Impact on Local Schools, recognizes that since the quality of Cupertino schools (elementary and high school) is a primary asset of the City, care shall be taken to ensure any new housing will not adversely impact these systems.

Within the Public Utilities, Infrastructure and Services Element, Policy 7-4, New Development Public Infrastructure Requirements, would require the City to require new development to provide adequate public facilities or pay its fair share of the cost for public facilities needed to provide services to accommodate growth without adversely impacting current service levels. Strategy 1, Design Capacity, would require the City to ensure that public facilities and infrastructure are designed and constructed to meet ultimate capacity needs to avoid the need for future upsizing. For facilities subject to incremental upsizing, initial design shall include adequate land area and any other elements not easily expanded in the future. Infrastructure and facility planning should discourage over-sizing of infrastructure which could contribute to growth beyond what was anticipated in the General Plan. Strategy 2, Utility Undergrounding, would require the City to require undergrounding of all new publicly owned utility lines. Encourage undergrounding of all privately owned utility lines in new developments. Work with electricity and telecommunications providers to underground existing overhead lines. Policy 5-2, Regional Growth and Transportation Coordination, would require the City to “coordinate with regional and local agencies to prepare updates to regional growth plans and strategies.” Strategy 1 under this policy would direct the City to maintain local plans and strategies that are consistent with regional transportation and housing plans. Policy 7-3, Sewer Tributary Lines, would require the City to recognize that new high discharge users in the Vallco, Stevens Creek Boulevard and Blaney Avenue areas will require private developers to pay for the upgrading of tributary lines. Strategy 1, Cost Estimates, would require the City to develop preliminary cost estimates for the upgrading of the sewer tributary lines to discuss with prospective developers.

Within the Housing Element, Policy 1, Provision of Adequate Capacity for New Construction Need, would require the City to designate sufficient land at appropriate densities to accommodate Cupertino’s Regional

## LAND USE ALTERNATIVE A

Housing Needs Allocation (RHNA) of 1,064 units for the 2014-2022 RHNA planning period. Policy 2, Housing Densities, would require the City to provide a full range of densities for ownership and rental housing. Policy 3, Mixed Use Development, would require the City to encourage mixed-use development near transportation facilities and employment centers. Policy 4, Housing Mitigation, would require the City to ensure that all new developments—including market-rate residential developments—help mitigate project-related impact on affordable housing needs. Policy 5, Range of Housing Types, would require the City to encourage the development of diverse housing stock that provides a range of housing types (including smaller, moderate cost housing) and affordability levels. Emphasize the provision of housing for lower- and moderate-income households and also households with wage earners who provide essential public services (e.g. school district employees, municipal and public safety employees, etc.). Policy 6, Development of Affordable Housing and Housing for Persons with Special Needs, would require the City to maintain and/or adopt appropriate land use regulations and other development tools to encourage the development of affordable housing. Make every reasonable effort to disperse units throughout the community but not at the expense of undermining the fundamental goal of providing affordable units. Policy 7, Housing Rehabilitation, would require the City to pursue and/or provide funding for the acquisition/rehabilitation of housing that is affordable to very low-, low-, and moderate-income households. Actively support and assist non-profit and for-profit developers in producing affordable units. Policy 8, Maintenance and Repair, would require the City to assist lower-income homeowners and rental property owners in maintaining and repairing their housing units. Policy 9, Conservation of Housing Stock, would require the City to preserve the existing inventory of affordable housing units that are at risk of converting to market-rate housing. Policy 10, Energy and Water Conservation, would require the City to encourage energy and water conservation in all existing and new residential development. Policy 11, Lower Income and Special Needs Households, would require the City to support organizations that provide services to lower income households and special need households in the City, such as the homeless, elderly, disabled and single parent households. Policy 12, Housing Discrimination, would require the City to work to eliminate on a citywide basis all unlawful discrimination in housing with respect to age, race, sex, sexual orientation, marital or familial status, ethnic background, medical condition, or other arbitrary factors, so that all persons can obtain decent housing.

The City currently has the capacity to accommodate 1,895 housing units. Implementation of these General Plan policies would ensure that local planning is adequate to accommodate future growth in Cupertino.

### Regional Planning

As described above, ABAG and MTC have responsibility for regional planning initiatives in the nine county Bay Area which includes Cupertino. ABAG and MTC have developed regional growth forecasts for the Bay Area as a whole and for constituent jurisdictions. Table 5.2-9 below shows population, housing, and job growth projections for Cupertino that are included in the regional forecasts. This Alternative would be considered to induce substantial growth if the estimated buildout resulting from future development that is permitted under this Alternative would exceed these regional growth projections for Cupertino. Land Use Alternative A's 2040 buildout estimates are shown in Table 5.2-1.

## LAND USE ALTERNATIVE A

TABLE 5.2-9 LAND USE ALTERNATIVE A ESTIMATED POPULATION, HOUSEHOLD, AND EMPLOYMENT

	Land Use Alternative A	2013	2040	Growth Rate Percent
Population	5,571	58,302	63,873	10%
Households	1,895	21,399	23,294	15%
Jobs	5,206 <sup>c</sup>	27,387	32,593	19%

a. Percent are rounded to the nearest whole number.

b. Population is calculated by 3,316 units times 2.94 persons per household, which is the ABAG 2040 estimated generation rate.

c. Jobs are calculated applying the City's generation rates as follows; 1,040,231 square feet of office allocation divided by 300 square feet equals 3,467 jobs; 701,431 square feet of commercial allocation divided by 450 square feet equals 1,559 jobs; and 600 hotel rooms at .3 jobs per room equals 180 jobs for a total of 5,206 jobs.

Source: Association of Bay Area Governments, *Plan Bay Area, Projections 2013*, Subregional Study Area Table, Santa Clara County and the City of Cupertino, 2014.

As shown in Table 5.2-9, implementation of the Land Use Alternative A would result in a total of 1,895 new households in the city for a total of 23,294 households for the buildout horizon year 2040. Assuming the new dwelling units permitted under this Alternative would have the average 2.94 persons per household size as applied in ABAG Projections 2013, population in the city could increase by 5,571 residents for a total of 68,873 residents by 2040. By comparison, ABAG anticipates 3,861 new households and 12,961 new residents in Cupertino, for a total of 24,180 households and 71,700 residents by 2040.<sup>31</sup> While Land Use Alternative A would result in 2,827 fewer residents and 1,966 fewer units, the rate of growth under this Alternative and estimated by ABAG would be the less for population growth (i.e. 10 percent compared to 22 percent) and household growth (15 compared to 19 percent). Consequently, the additional housing units resulting from implementation of this Alternative would not substantially exceed regional projections.<sup>32</sup>

With respect to jobs, ABAG projects an increase of 7,040 jobs for a total of 33,360 jobs in 2040. As shown in Table 5.2-9, when applying the City's job generation rates for office, commercial and hotel development,<sup>33</sup> buildout of this Alternative could result in as many as 5,206 additional jobs for a total of 32,593 jobs in 2040, which would be within the regional job projections (19 percent compared to 27 percent).

The General Plan includes policies and strategies, which are consistent with goals and objectives identified in the Plan Bay Area, would ensure potential development under Land Use Alternative A, would not induce substantial unexpected population growth, or growth for which inadequate planning has occurred, either directly or indirectly. Within the Land Use/Community Design Element, Policy 2-2, Connections Between Special Areas, Employment Centers and the Community, would require the City to provide strong connections between the mixed-use Special Areas, employment centers and the surrounding community. Policy 2-15, Urban Building Forms, would require the City to concentrate urban building forms in the

<sup>31</sup> Association of Bay Area Governments, *Plan Bay Area, Projections 2013*, Subregional Study Area Table, Santa Clara County.

<sup>32</sup> 4,421 households minus 3,861 households equals 560 households. 12,998 residents minus 12,961 residents equals 37 residents.

<sup>33</sup> Office (300 square feet per job); Commercial (450 square feet per job); Hotel (.3 jobs per room).

**LAND USE ALTERNATIVE A**

mixed-use Special Areas. Policy 2-24, Homestead Special Area, would require the City to create an integrated, mixed-use commercial and housing village within the Homestead Special Area, consisting of three integrated areas. Each area will be master planned, with special attention to the interconnectivity of these areas. Additionally, this corridor will continue to be a predominantly mixed-use area with residential uses and a series of commercial centers. Homestead Road provides new pedestrian crossings at the major intersections. Policy 2-24.B, Stelling Gateway, would require the City to Maintain and enhance the Stelling Gateway as a medium density, mixed-use commercial and housing district that will provide community identity and activity along Homestead Road. Policy 2-25, North Vallco Park Special Area, would require the City to retain the North Vallco Park Special Area as an employment area of predominately office and light industrial activities, with neighborhood commercial uses and ancillary uses including hotels and retail uses. Additionally, this policy would require the City to maintain the existing residential uses. Policy 2-25.A, North Vallco Gateway, would require the City to maintain and enhance the North Vallco Gateway with uses that support major office developments within the City including hotels and commercial uses. Existing residential development would also be maintained. Policy 2-26, Heart of the City Special Area, would require the City to create a positive and memorable image along Stevens Creek Boulevard of mixed-use development; enhanced activity gateways and nodes; and safe and efficient circulation and access for all modes of transportation. Policy 2-26.B, Oaks Gateway, would require the City to create an active, mixed-use shopping and residential gateway at one of the primary entrances to Cupertino. Policy 2-26.D, Crossroads Area, would require the City to create an active, pedestrian-oriented shopping district along Stevens Creek Boulevard, between De Anza Boulevard and Stelling Road, where commercial and roadway design encourage pedestrian activity. Policy 2-26.E, City Center Node, would require the City to maintain and enhance City Center Node as a moderate-scale, medium density, mixed use district that will provide community identity and activity and will support retail uses in the Crossroads Area. Policy 2-26.G, South Vallco Park Gateway, would require the City to retain and enhance South Vallco Park Gateway as a large-scale commercial area that is a regional commercial (including hotel), office and entertainment center with supporting residential development. Policy 2-27, North De Anza Special Area, would require the City to maintain and enhance the North De Anza Special Area as a regional employment center with supporting commercial and residential land uses. Policy 2-28, South De Anza Special Area, would require the City to maintain and enhance the South De Anza Special Area as a mixed-use corridor.

Growth under the Land Use Alternative A would come incrementally over a period of approximately 26 years and would be guided by a policy framework in Land Use Alternative A that is generally consistent with many of the principal goals and objectives established in regional planning initiatives for the Bay Area. As discussed above, one of the key concepts of the Plan Bay Area is the idea of focusing future growth into transit-oriented, infill development opportunity areas within existing communities that are expected to host the majority of future development. The PDAs (i.e. transit-oriented, infill development opportunity areas within existing communities that are expected to host the majority of future development) in Cupertino are located along Stevens Creek Boulevard between SR 85 and the City of Santa Clara and along De Anza Boulevard between Stevens Creek Boulevard and the City of Sunnyvale.

As shown in Figure 4.11-1 in Chapter 4.11, Population and Housing, of this Draft EIR, the PDAs coincide with the Heart of the City, Homestead, South De Anza, and North De Anza Major Mixed-Use Special Areas, Study Area 1 (Cupertino Inn and Goodyear Tire), Study Area 2 (City Center), Study Area 6 (Vallco Shopping

## LAND USE ALTERNATIVE A

District), Study Area 7 (Stevens Creek Office Center), as well as potential the following Housing Element Sites:

- Housing Element Site 1 (Shan Restaurant)
- Housing Element Site 2 (Arya/Scandinavian Design)
- Housing Element Site 3 (United Furniture/East of East Estates Drive)
- Housing Element Site 4 (Barry Swenson)
- Housing Element Site 5 (Glenbrook Apartments)
- Housing Element Site 13 (Loree Shopping Center)
- Housing Element Site 14 (Marina Plaza)
- Housing Element Site 18 (The Oaks Shopping Center)
- Housing Element Site 19 (Cypress Building Association & Hall Property)

Therefore, growth anticipated under this Alternative would not exceed regional growth projections for Cupertino and this additional growth would be consistent with the regional planning objectives established for the Bay Area. Further, this additional growth would come incrementally over a period of approximately 26 years and a policy framework is in place to ensure adequate planning occurs to accommodate it. As a result, impacts to population growth associated with potential future development under this Alternative would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>POP-2</b>	<b>Implementation of Land Use Alternative A would not displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere.</b>
--------------	--

---

As previously described, implementation of Land Use Alternative A would include General Plan Zoning designation and development standard amendments the following Housing Element Sites:

- **Housing Element Site 16 (Summerwinds and Granite Rock).** The permitted density would increase from 15 du/ac to 25 du/ac and the Zoning designation would be changed from Planned Development with General Commercial and Residential (P(CG, Res 5-15)) to (P(CG, Res)).
- **Housing Element Site 18 (The Oaks Shopping Center).** The Zoning designation would change from P(CG) to Planned Development with General Commercial, Residential, and Professional Office (P(CG, Res, OP)) to allow for future mixed-use development including residential uses.

There are no existing residential units at these two Housing Element Sites; thus, the proposed Zoning designation and development standard amendments on the remaining Housing Element Sites would not result in the displacement of housing necessitating the construction of replacement housing elsewhere. Implementation of the Land Use Alternative A would result in a net increase of housing units under Land Use Alternative A. Therefore, construction of replacement housing elsewhere would not be necessary and the impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.



**LAND USE ALTERNATIVE A**

---

**POP-3**                    **Implementation of Land Use Alternative A would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.**

---

As described under Impact POP-2 above, potential future development potential Housing Elements Site Housing Element Site 16 (Summerwinds and Granite Rock) and 18 (The Oaks Shopping Center) would not involve the demolition and replacement of existing housing units, which could result in the temporary displacement of some residents and the construction of replacement housing elsewhere would not be warranted; thus, the impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**POP-4**                    **Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to population and housing.**

---

This EIR takes into account growth projected by Land Use Alternative A within the Cupertino city boundary and SOI, in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by ABAG. Impacts from cumulative growth are considered in the context of their consistency with regional planning efforts. As described above, Land Use Alternative A would not induce a substantial amount of growth or require the construction of replacement housing elsewhere. Cumulative growth would be consistent with regional planning efforts. Thus, when considered along with Land Use Alternative A, which, as described in the above sections, would not exceed regional growth projections, cumulative growth would not displace substantial numbers of people or housing or exceed planned levels of growth and cumulative impacts, would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

## **5.2.7.12 PUBLIC SERVICES AND RECREATION**

### **Fire Protection Services**

---

**PS-1**                    **Implementation of Land Use Alternative A would not result in the provision of or need for new or physically altered fire protection facilities, the construction or operation of which could cause significant environmental impacts.**

---

Future development permitted under this Alternative would result in 5,571 additional residents and up to 5206 new jobs, which would result in an increase in the number of would require fire protection, and emergency medical services. Subsequently, the expansion or construction of new or physically altered fire protection facilities, which could result in significant environmental impacts, could be required. However, development would occur incrementally throughout the 26-year buildout horizon, therefore, not resulting in potential impacts to fire protection services in the immediate future or all at one time. Further, under this

## LAND USE ALTERNATIVE A

Alternative, commercial space and residential development allocation would not be replenished; therefore, this Alternative would not result in additional would require service beyond what has currently been accounted for with respect to potential future commercial and residential development.

Additionally, compliance with Subsections 105.1.4 (Construction permit fees) and 105.1.5 (Operational permit fees) under Section 16.40.065, Permits, of the Municipal Code, as described in Section 4.12.1.1, Environmental Setting, in Chapter 4.12, Public Services and Recreation, in this Draft EIR, would require future development to undergo plan review and approval by the Santa Clara County Fire District (SCCFD) to ensure that future projects comply with State, and local fire codes, as well as ensure adequate safety features are incorporated into building design to minimize risk of fire.

The General Plan includes policies and strategies that, once adopted, would ensure adequate fire protection services are available for the residents of Cupertino. Within the Health and Safety Element, Policy 6-4, Wild Fire Prevention Efforts, would require the City to coordinate wild fire prevention efforts with adjacent jurisdictions. Policy 6-8, Early Project Review, would require the City to involve the Fire Department in the early design stage of all projects requiring public review to assure Fire Department input and modifications as needed. Policy 6-9, Commercial and Industrial Fire Protection Guidelines, would require the City to coordinate with the Fire Department to develop new guidelines for fire protection for commercial and industrial land uses. Policy 6-11, Multi-Story Buildings Fire Risks, would require the City to recognize that multi-story buildings of any land use type increase risks of fire, and to ensure that adequate fire protection is built into the design and require on-site fire suppression materials and equipment to ensure the safety of the community. Policy 6-12, Smoke Detectors, would require the City to require smoke detectors in all new residential units and in all residential units at the time of sale or rental, in conformance with State law, and to continue to use the Cupertino Scene to publicize fire hazards correction methods. Strategy 1, Code Amendment, would require the City to adopt an ordinance to incorporate the smoke detector requirement in Chapter 16.04 of the Cupertino Municipal Code. Policy 6-13, Roadway Design, would require the City to involve the Fire Department in the design and review of public roadways for review and comments, and to attempt to ensure that roadways have frequent median breaks for timely access to properties. Policy 6-15, Hillside Access Routes, would require the City to require new hillside development to have frequent grade breaks in access routes to ensure a timely response from fire personnel. Policy 6-16, Hillside Road Upgrades, would require the City to require new hillside development to upgrade existing access roads to meet Fire Code and City standards. Policy 6-20, Growth Cooperation, would require the City to encourage cooperation between water utility companies and the Fire Department in order to keep water systems in pace with growth and firefighting service needs. Policy 6-21, Fire Fighting Upgrades Needs, would require the City to encourage water providers to consider Fire Department firefighting needs when upgrading public water systems. Future development would also be required to comply with the City's Fire Code per Chapter 16.40 (Fire Code), including compliance with the permit processes, emergency access, hazardous material handling, and fire protection systems, including automatic sprinkler systems, fire extinguishers, and fire alarms. Further, future development would be required to comply with the City-adopted 2010 California Fire Code (CFC) and 2009 International Fire Code. Consequently, compliance with the State and local regulations, in conjunction with compliance with the above listed General Plan policies, would ensure that potential impacts under this Alternative remain *less than significant*.

**Significance Without Mitigation:** Less than significant.

**LAND USE ALTERNATIVE A**

---

**PS-2                      Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to fire protection service.**

---

Implementation of Land Use Alternative A would facilitate new development, including residential, mixed-use, and commercial, within Cupertino, which could result in the provision of or need for new or physically altered fire protection facilities, the construction or operation of which could cause a significant environmental impact, in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecasted by the ABAG. However, under this Alternative, commercial space and residential development allocation would not be replenished.

Cumulative impacts are considered in the context of the growth from development under this Alternative within the city combined with the estimated growth in the service area of the SCCFD, which includes the cities of Campbell, Los Altos, Monte Sereno, Saratoga, and towns of Los Altos Hills and Los Gatos. A significant cumulative environmental impact would result if this cumulative growth would exceed the ability of SCCFD to adequately serve their service area, thereby requiring construction of new facilities or modification of existing facilities.

Implementation of Land Use Alternative A is unlikely to create a need for new or physically altered facilities in order for the SCCFD to provide fire protection services to its service area because compliance with State and local laws, as described in Section 4.12.1.1, Environmental Setting, in Chapter 4.12, Public Services and Recreation, of this Draft EIR, as well as the General Plan policies listed above in impact discussion PS-1, would ensure that fire protection services are adequate as future development is proposed as a result of implementation of Land Use Alternative A. Therefore, the cumulative impact on the provision of fire services would likewise be *less than significant*.

**Significance Without Mitigation:** Less than significant.

### Police Protection Services

---

**PS-3                      Implementation of Land Use Alternative A would not result in the provision of or need for new or physically altered police protection facilities, the construction or operation of which could cause significant environmental impacts.**

---

Similar to Impact PS-1, future development permitted under this Alternative would result in 5,571 additional residents and up to 5206 new jobs, which would result in an increase in the number of would require police protection. Subsequently, the expansion or construction of new or physically altered fire protection facilities, which could result in significant environmental impacts, could be required. However, development would occur incrementally throughout the 26-year buildout horizon, therefore, not resulting in potential impacts to fire protection services in the immediate future or all at one time. Further, under this Alternative, commercial space and residential development allocation would not be replenished; therefore,

## LAND USE ALTERNATIVE A

this Alternative would not result in additional would require service beyond what has currently been accounted for with respect to potential future commercial and residential development.

However, the West Valley Patrol Division has confirmed that future development under the General Plan would not result in the need for expansion or addition of facilities.<sup>34</sup> Moreover, growth proposed under Land Use Alternative A would occur incrementally over the 26-year horizon of the General Plan.

Additionally, if future expansion of the police station were necessary, the project would be subject to the provisions of CEQA, which would require that all potentially significant impacts be mitigated to a less-than-significant level, when feasible.

Further, the Sheriff's Office has confirmed that while the standard service contract is based upon a set number of hours for deputies and reserve deputies, buildout under the General Plan throughout the 26-year horizon under Land Use Alternative A would not substantially result in an increase in the number of contracted hours as a result of potential increase in would require police protection services.<sup>35</sup> Hence, the same would be true for future development under Alternative A.

The General Plan includes policies and strategies that, once adopted, would ensure adequate police protection services are available for the residents of Cupertino. Within the Health and Safety Element, Policy 6-22, Neighborhood Awareness Programs, would require the City to continue to support the Neighborhood Watch Program and others similar programs intended to help neighborhoods prevent crime through social interaction. Policy 6-24, Crime Prevention in Building Design, would require the City to consider the relationship between building design and crime prevention in reviewing all developments. Policy 6-25, Fiscal Impacts, would require the City to recognize fiscal impacts to the County Sheriff and City of Cupertino when approving various land use mixes. Policy 6-26, Pre-hearing Review, would require the City to continue to request County Sheriff review and comment on development applications for security and public safety measures.

Based on confirmation by the Sheriff's Office, along with compliance with the General Plan policies listed above, a *less-than-significant* impact would occur with respect to the need for new or physically altered police protection facilities.

**Significance Without Mitigation:** Less than significant.

---

<sup>34</sup> Personal communications between Ricky Caperton (PlaceWorks) and Captain Ken Binder, Division Commander, West Valley Patrol, April 11, 2014.

<sup>35</sup> Personal communications between Ricky Caperton (PlaceWorks) and Captain Ken Binder, Division Commander, West Valley Patrol, April 11, 2014.

**LAND USE ALTERNATIVE A**

---

**PS-4                      Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to police protection service.**

---

This EIR takes into account growth projected by Land Use Alternative A within the Cupertino city boundary and Sphere of Influence (SOI), in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). Cumulative impacts are considered in the context of the growth from development under Land Use Alternative A within the city, combined with the estimated growth in the service areas of the Santa Clara County Sheriff’s Department, including the cities of Los Altos Hills, Saratoga, and unincorporated areas of Santa Clara County. A significant cumulative environmental impact would result if this cumulative growth would exceed the ability of Sheriff’s Department to adequately serve the vicinity, thereby requiring construction of new facilities or modification of existing facilities.

Since police protection services in Cupertino are provided through a MOU between the City of Cupertino and the Santa Clara County Sheriff’s Office, changes and growth anticipated under Land Use Alternative A would not have any cumulative impact beyond Cupertino’s SOI. Moreover, the Sheriff’s Office has confirmed that in conjunction with the growth anticipated under Land Use Alternative A and subsequently, this Alternative, new or physically altered facilities would not be needed.<sup>36</sup> Further, it is unlikely that implementation of the Land Use Alternative A would significantly increase the degree or incidence of need for mutual aid from neighboring agencies because anticipated growth under the General Plan would occur incrementally throughout the 26-year buildout horizon. Additionally, compliance with the existing General Plan policies listed under Impact PS-3 would require the City to recognize fiscal impacts to the County Sheriff and City of Cupertino when approving various land use mixes and to continue to request County Sheriff review and comment on development applications for security and public safety measures. Therefore, implementation of Land Use Alternative A would have a *less-than-significant* cumulative effect with respect to police protection services.

**Significance Without Mitigation:** Less than significant.

## School Services

---

**PS-5                      Implementation of Land Use Alternative A would not result in the provision of or need for new or physically altered school facilities, the construction or operation of which could cause significant environmental impacts.**

---

This section reviews the need for existing school facilities to accommodate any increases in public school enrollment due to Land Use Alternative A. However, the California State Legislature, under Senate Bill 50 (SB 50), has determined that payment of school impact fees shall be deemed to provide full and complete

---

<sup>36</sup> Personal communications between Ricky Caperton (PlaceWorks) and Captain Ken Binder, Division Commander, West Valley Patrol, April 11, 2014.

## LAND USE ALTERNATIVE A

school facilities mitigation. All new developments proposed pursuant to the adoption of Land Use Alternative A will be required to pay the school impact fees adopted by each school district, and this requirement is considered to fully mitigate the impacts of the Land Use Alternative A on school facilities.

### *Cupertino Union School District*

The Land Use Alternative A would generate approximately 1,895 housing units in Cupertino; thus the CUSD would experience additional students in elementary schools and middle school. With student enrollment already exceeding CUSD's capacity, the additional students would exacerbate the CUSD's capacity. In order to accommodate new students, the CUSD needs to either expand existing facilities or construct new schools. However, Cupertino does not have sufficient locations for new school facilities to accommodate the increased enrollment expected. However, the CUSD would receive approximately \$9.1 million in development impact fees from Land Use Alternative A, which would mitigate the impacts from Land Use Alternative A per SB 50. The impact to the CUSD would be *less than significant*.

### *Fremont Unified High School District*

With the estimated increase new housing units to Cupertino, the FUHSD would experience increase students by 2040. Although current student enrollment almost equals to its capacity, the additional students would increase the capacity deficit for the FUHSD. However, the FUHSD has been modernizing its facilities with additional classroom and cafeterias to continuously address the capacity deficit issue, and additional development impact fee of \$6 million would ameliorate the capacity problem. The impact to the FUHSD would be *less than significant*.

### *Santa Clara Unified School District*

With new housing units with Land Use Alternative A, the expected growth in student enrollment for the SCUSD would increase. Although increase enrollment would add stress to the school in the SCUSD, development impact fees for Land Use Alternative A would mitigate the impact to the SCUSD facilities; therefore, the impacts to the SCUSD would be *less than significant*.

Furthermore, the General Plan includes policies and strategies that, once adopted, would preserve and support Cupertino's excellent public education system by partnering with local school districts and De Anza College to improve school facilities and infrastructure. Policy 2-7, Neighborhood Street Planning, would require the City to develop pedestrian-friendly street environments in each neighborhood that help create neighborhood identity, improve safety, increase opportunities for social interaction and connections to shopping, schools, recreation and other destinations. Supporting Strategy 2, Public Facilities, would require the City to evaluate existing and planned public facilities, such as schools and parks, to improve pedestrian access. Strategy 2, Public Facilities, would require the City to evaluate existing and planned public facilities, such as schools and parks, to improve pedestrian access. Policy 2-22, Jobs/Housing Balance, would require the City to strive for a more balanced ratio of jobs and housing units. Supporting Strategy 1, Housing and Mixed-Use, would require the City to strive to achieve a balanced jobs/housing ratio based on the policies and strategies contained in the Housing Element. Strategy 2, Housing Impact on Local Schools, recognizes that the quality of Cupertino schools (elementary and high school) is a primary asset of the City and directs the City to ensure that any new housing pays the statutorily mandated impact fees to mitigate any adverse

**LAND USE ALTERNATIVE A**

impact to these systems. Policy 2-61, Planning for Schools, would require the City to recognize the financial impact of increased development on the school districts' ability to provide staff and facilities. Work with the districts to assure that the continued excellence of school services can be provided prior to granting approval for new development. Policy 2-93, School Playing Fields, would require the City to preserve school playing fields for school and community recreational uses. Strategy 1, School Expansion, would require the City to encourage schools to meet their expansion needs by building upward instead of outward into recreation fields. Strategy 2, School Parking Lots, would require the City to encourage schools to seek alternate parking or transportation solutions, rather than building new parking lots that infringe on playing fields.

Therefore, with the mandatory payment of developer impact fees pursuant to SB 50 together with implementation of the General Plan policies and strategies that, once adopted, would support the schools within Cupertino, impacts to the CUSD, FUHSD and SCUSD would be less than significant.

**Significance Without Mitigation:** Less than significant.

---

**PS-6 Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would not result in less than significant cumulative impacts with respect to schools.**

---

Regional growth resulting from past, present, and reasonably foreseeable projects would result in increased demand for additional school facilities within all three school districts serving the City of Cupertino. Almost all of the schools in Cupertino experiences capacity deficits, and additional student enrollment would exacerbate the current capacity issue. Similar to development in Cupertino, the schools are expected to receive development impact fees from other development outside of Cupertino, which would mitigate the current and future capacity issues, which would help expand their facilities to accommodate future students. Therefore, Land Use Alternative A would have a *less-than-significant* impact on school facilities.

**Significance Without Mitigation:** Less than significant.

## Libraries

---

**PS-7 Implementation of Land Use Alternative A would not result in the provision of or need for new or physically altered library facilities, the construction or operation of which could cause significant environmental impacts.**

---

Implementation of Land Use Alternative A could potentially add approximately 5,571 new residents to Cupertino by 2040, which would increase the demand for library services and facilities in Cupertino. Although Land Use Alternative A would result in an increase in employees throughout Cupertino as well, only residents within Santa Clara County can apply for a library card; therefore, the following analysis

## LAND USE ALTERNATIVE A

considers expected population increases, and not employment generation as a result of implementation of Land Use Alternative A.<sup>37</sup> Therefore, expected increases in employees in the city need not be further considered.

While an overall increase in residents is expected, growth under Land Use Alternative A would occur incrementally throughout the 26-year horizon; therefore, potential impacts resulting from increased demand for library services would not occur in the immediate future. It was confirmed that the existing 75 employees, as well as existing library facilities, would be sufficient to accommodate increased demand for library services, and no expansions would be required.<sup>38</sup> Additionally, the General Plan policies listed below would ensure that the City maintains an adequate level of library services to serve the residents of the city. Moreover, the Santa Clara County Library Strategic Plan (2008) also aims to ensure adequate library facilities are provided to sufficiently meet the demands of the City through the identification of goals and objectives, such as increasing the library's technology and increasing access to the library's physical space.

The General Plan includes policies and strategies that, once adopted, would ensure adequate library services are available for the residents of Cupertino. Within the Land Use/Community Design Element Policy 2-58, Library Service Level, would require the City to recognize that if the community desires a higher level of library service, cooperation between the County of Santa Clara and City of Cupertino in expanding library services and facilities is required. Policy 2-59, Library Planning, would require the City to integrate and coordinate any public library facility planning into all applicable General Plan policies, such as transportation, pedestrian and bike trails. Policy 2-60, Improving Library Service, would require the City to encourage the library to continue to incorporate new technology to enhance service levels within the library system. Additionally, under this policy the City is required to encourage the continued evolution of library collections and services to meet the needs of Cupertino residents of all ages, its richly diverse population and its local businesses.

The only facility deficiency identified by library staff is a lack of parking; however, communication with library staff has indicated that there is the potential for an expansion of public meeting space and the parking lot currently under consideration.<sup>39</sup>

In summary, the library has adequate capacity to accommodate the growth over the 26-year horizon of Land Use Alternative A and the expansion of existing library facilities or the construction of new facilities would not be required; therefore, impacts related to the provision of new or physically altered library facilities would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<sup>37</sup> Santa Clara County Library District, Santa Clara County Library District website, <http://www.sclcl.org/about/joining/eligibility>, accessed April 8, 2014.

<sup>38</sup> Personal communications between Ricky Caperton (PlaceWorks) and Derek Wolfgram, Deputy County Librarian for Community Libraries, April 4, 2014.

<sup>39</sup> Personal communications between Ricky Caperton (PlaceWorks) and Derek Wolfgram, Deputy County Librarian for Community Libraries, April 4, 2014.



**LAND USE ALTERNATIVE A**

---

**PS-8                      Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to libraries.**

---

This EIR takes into account growth projected by Land Use Alternative A within the Cupertino city boundary and Sphere of Influence (SOI), in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). Cumulative impacts are considered in the context of the growth from development under Land Use Alternative A within the city combined with the estimated growth in the service areas of the SCCLD, which includes all unincorporated portions of Santa Clara County in addition to the incorporated portions of Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Milpitas, Monte Sereno, Morgan Hill, and Saratoga.<sup>40</sup> A significant cumulative environmental impact would result if this cumulative growth would exceed the ability of SCCLD to adequately serve the service area, thereby requiring construction of new facilities or modification of existing facilities.

Under this Alternative, there would be an increase to population as a result of future development allowed under Land Use Alternative A; however, the Santa Clara County Library Strategic Plan (2008), described in more detail in Section 4.12.5.1, Environmental Setting, of Chapter 4.12, Public Services and Recreation, of this Draft EIR, accounts for the entire SCCLD service area and provides a basis for analyzing the most efficient allocation of funds both for the district as a whole as well as among the different libraries in the SCCLD service area. This would not only allow for adequate funding to satisfy demand at the Cupertino library, but also, it would ensure that surrounding libraries are adequate to fulfill demand which in turn would reduce the demand at the Cupertino library by reducing deficiencies at surrounding facilities. As a result, implementation of Land Use Alternative A would result in a *less-than-significant* cumulative impact associated with libraries.

**Significance Without Mitigation:** Less than significant.

## **Parks and Recreation**

---

**PS-9                      Implementation of Land Use Alternative A would not increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur, or be accelerated.**

---

The City of Cupertino has an adopted parkland dedication standard of three acres of parkland for every 1,000 residents. Under Land Use Alternative A, the City would retain this standard. As shown in Table 4.12-7, in Chapter 4.12, Public Services and Recreation, there is a total of approximately 156 acres of parkland in Cupertino, or approximately 2.7 acres per 1,000 residents, based on an existing population of

---

<sup>40</sup> Santa Clara Library District, Santa Clara Library District website, <http://www.sccl.org/about/joining/eligibility>, accessed April 8, 2014.

## LAND USE ALTERNATIVE A

58,302. Therefore, the City does not currently meet its adopted standard established under Policy 2-83, Park Acreage, in the General Plan. The adoption of Land Use Alternative A could bring as many as 5,571 new residents to the city by 2040; therefore, increasing use of existing parkland, which could accelerate the physical deterioration of existing facilities. In order to comply with the proposed City standard of parkland, buildout of Land Use Alternative A would be required to provide approximately 16.7 acres.<sup>41</sup> Although the City does not currently meet its adopted standard of providing three acres of parkland per 1,000 residents future development under Land Use Alternative A, future development under Land Use Alternative A would be required to meet the proposed standard. Therefore, while the addition of 5,571 new residents would require up to 16.7 acres of additional parkland, future development under Land Use Alternative A would comply with Municipal Code regulations. Chapter 14.05, Park Maintenance Fee, would require developers to pay impact fees to maintain existing parks and recreation facilities and Chapter 18.24, Dedications and Reservations, would require residential developments to dedicate parklands or pay in-lieu fees to accommodate and offset their fair share of impacts to parklands. Further, future development would also be required to comply with applicable General Plan policies that, once adopted, would ensure adequate neighborhood, regional park, or other recreational facilities are available for the residents of Cupertino. Within the Land Use/Community Design Element, Policy 2-83, Park Acreage, would require the City to require the provision of parkland equal to a minimum of three acres for each 1,000 residents. Policy 2-84, Park Walking Distance, would require the City to ensure that each household is within a half-mile walk of a neighborhood park, or community park with neighborhood facilities, and that the route is reasonably free of physical barriers, including streets with heavy traffic. Additionally, under this policy wherever possible, the City must provide pedestrian links between parks.

Overall, Land Use Alternative A would result in development allocation increases throughout the city that would increase population, and subsequently the demand to parks and recreation facilities throughout the city. However, because buildout would occur incrementally throughout the 26-year horizon, and future development would be subject to comply with the Municipal Code Chapters 14.05 and 18.24, and the General Plan policies listed above that would ensure that future development provide their fair-share of parks to help meet the City's target of three acres per 1,000 residents, impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**PS-10                      Implementation of Land Use Alternative A would not include or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.**

---

As discussed above in impact discussion PS-9, the City currently does not meet its adopted standard of providing three acres of parkland per 1,000 residents, and because Land Use Alternative A at buildout would add 5,571 residents to the City of Cupertino over the next 26 years, an increase in demand for existing

---

<sup>41</sup> Acreage was calculated by multiplying the projected number of persons by the required acreage percentage. For example, 3 acres of City park per 1,000 persons is equivalent to .003 and  $.003 \times 5,571 = 16.7$ .

**LAND USE ALTERNATIVE A**

parklands and recreation facilities would occur. This change in population would increase the need for park areas, and the provision of such park areas could have adverse physical effects on the environment. Because future development would be required to comply General Plan Policies 2-74, Heritage Trees, and 2-75, Public Arts, as described in impact discussion PS-9 above, as well as other regulations described in Section 4.12.5.1, Environmental Setting, future development as a result of implementation of Land Use Alternative A could require or result in the construction or expansion of recreational facilities that could have an adverse physical effect on the environment. Similarly, Policies 2-78, Future Use of Blackberry Farm, 2-78.A, Master Planning Efforts for Parks, and 2-79, Recreational Opportunities for All Users Including Special Needs, would direct the City to conduct citywide planning for parks and to improve park access for underserved populations. Together these policies would also contribute to the potential creation of new parks that could have adverse physical effects. Additionally, Strategy 5, Flexibility in Standards, under Policy 2-82, Open Space and Trail Linkages, could result in the creation of new trails or open space areas in new developments under Land Use Alternative A, and the creation of such facilities could likewise have adverse physical effects on the environment.

However, as future parks are proposed, they would be subject to project-level environmental review to identify potential impacts and mitigation measure to ensure that potential impacts would be reduced to a less-than-significant level with regards to the future construction or expansion of recreational facilities as a result of implementation of Land Use Alternative A; therefore, potential impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**PS-11                    Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to parks and recreational facilities.**

---

This EIR takes into account growth projected by Land Use Alternative A within the Cupertino city boundary and Sphere of Influence (SOI), in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). The geographic scope for this discussion includes park and recreation facilities within the city boundary, as well as Santa Clara County, and the Midpeninsula Regional Open Space District. As described above, the City would require subdivision development to fund park improvements and dedicate land through compliance with Municipal Code Chapter 14.05, Park Maintenance Fee, and Chapter 18.24, Dedications and Reservations, which would help to ensure the provision of adequate parklands in compliance with the City standard of providing three acres per 1,000 residents.

Implementation of Land Use Alternative A would allow for development to occur, which would cumulatively increase the demand for park and recreational services in the city; however, compliance with the City's Municipal Code, along with the policies listed above in impact discussion PS-9, would ensure that adequate parklands and recreational facilities are provided through in-lieu fees, maintenance fees, or parkland dedication in order to meet the City standards, which would mitigate potential impacts that future development would have on park and recreation services in the city.

## LAND USE ALTERNATIVE A

Further, potential future impacts to Santa Clara Parks, as well as the Midpeninsula Regional Open Space District, would be mitigated through the contribution of property taxes to ensure facilities at these locations are adequately maintained and sufficient to accommodate growth associated with implementation of Land Use Alternative A.

Overall, this Alternative would not contribute to any potential cumulative impacts to park and cumulative impacts to park and recreational services would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

### 5.2.7.13 TRANSPORTATION AND TRAFFIC

---

<b>TRAF-1</b>	<b>Implementation of Land Use Alternative A would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.</b>
---------------	--

---

This impact discussion focuses on vehicular transportation. Impacts related to other modes of transportation are discussed under Impact TRAF-5 below.

#### Intersection Levels of Service

This section describes the traffic conditions that would result with the addition of the trips generated by the buildout projections included under Land Use Alternative A on the local roadway network, compared to traffic conditions with the 2040 No Project scenario. The roadway network is assumed to be the same as under the 2040 No Project scenario.

The results of the level of service analysis under the Land Use Alternative A scenario compared to the 2040 No Project scenario are presented in Table 5.2-10. The results show that, of the 41 study intersections, 34 intersections would operate at an acceptable level of service under Alternative A, and seven (7) intersections would operate at an unacceptable level of service during the AM peak hour, the PM peak hour, or both peak hours.

**LAND USE ALTERNATIVE A**

**TABLE 5.2-10 LAND USE ALTERNATIVE A INTERSECTION LEVELS OF SERVICE TABLE**

Study Inter-section	Intersection	LOS Standard	Peak Hour	No Project		Land Use Alternative A			
				Avg. Delay	LOS	Avg. Delay	LOS	Change in Crit. V/C	Change in Crit. Delay
1	SR 85 SB Ramps and Stevens Creek Boulevard <sup>a</sup>	D	AM	29.2	C	29.6	C	0.028	1.4
			PM	29.1	C	28.8	C	-0.005	-0.6
2	SR 85 NB Ramps and Stevens Creek Boulevard <sup>a</sup>	D	AM	51.1	D-	51.3	D-	0.000	-0.4
			PM	20.9	C+	20.5	C+	0.012	-0.1
3	Stelling Road and Stevens Creek Boulevard <sup>a</sup>	E+	AM	46.2	D	46.1	D	-0.001	-2.1
			PM	52.9	D-	52.1	D-	0.003	-0.4
4	Sunnyvale-Saratoga Road and Fremont Avenue <sup>b</sup>	E	AM	42.8	D	43.1	D	0.014	0.5
			PM	52.5	D-	54.0	D-	0.014	2.6
5	Sunnyvale-Saratoga Road/De Anza Boulevard and Homestead Road <sup>a</sup>	D	AM	51.2	D-	<b>56.0</b>	<b>E+</b>	0.039	10.2
			PM	<b>66.1</b>	<b>E</b>	<b>83.3</b>	<b>F</b>	0.099	38.5
6	De Anza Boulevard and I-280 NB Ramp <sup>a</sup>	D	AM	46.4	D	53.7	D-	0.070	29.5
			PM	<b>71.7</b>	<b>E</b>	<b>90.5</b>	<b>F</b>	0.069	30.5
7	De Anza Boulevard and I-280 SB Ramp <sup>a</sup>	D	AM	47.0	D	54.3	D-	0.081	30.9
			PM	35.3	D+	42.9	D	0.094	38.2
8	De Anza Boulevard and Stevens Creek Boulevard <sup>a</sup>	E+	AM	45.8	D	46.0	D	0.007	0.5
			PM	<b>76.2</b>	<b>E-</b>	<b>78.7</b>	<b>E-</b>	0.025	9.5
9	De Anza Boulevard and McClellan Road/Pacifica Drive	D	AM	33.0	C-	32.8	C-	0.006	-0.4
			PM	<b>70.7</b>	<b>E</b>	<b>70.2</b>	<b>E</b>	0.002	-0.1
10	De Anza Boulevard and Bollinger Road <sup>a</sup>	E+	AM	44.0	D	44.9	D	0.012	1.3
			PM	25.1	C	25.2	C	0.007	0.3
11	De Anza Boulevard and SR 85 NB Ramp <sup>a</sup>	D	AM	32.9	C-	32.8	C-	-0.001	-0.1
			PM	16.4	B	16.9	B	0.016	0.9
12	De Anza Boulevard and SR 85 SB Ramp <sup>a</sup>	D	AM	23.9	C	24.1	C	0.014	0.4
			PM	22.2	C+	22.3	C+	0.015	0.4
13	Blaney Avenue and Homestead Road	D	AM	34.9	C-	34.6	C-	-0.002	-0.4
			PM	16.4	B	14.0	B	-0.035	-2.3
14	Wolfe Road and El Camino Real (SR 82) <sup>b</sup>	E	AM	47.6	D	47.6	D	0.000	0.0
			PM	51.8	D-	51.8	D-	0.001	0.0
15	Wolfe Road and Fremont Avenue <sup>c</sup>	E	AM	45.8	D	46.1	D	0.005	0.2
			PM	51.8	D-	53.0	D-	0.010	1.0
16	Wolfe Road and Homestead Road	D	AM	36.3	D+	36.5	D+	0.004	0.3
			PM	51.9	D-	53.3	D-	0.009	2.2
17	Wolfe Road and Pruneridge Avenue	D	AM	17.0	B	14.7	B	-0.020	-2.5
			PM	26.9	C	28.4	C	0.004	2.3
18	Wolfe Road and I-280 NB	D	AM	<b>88.3</b>	<b>F</b>	<b>94.9</b>	<b>F</b>	0.021	9.2

## LAND USE ALTERNATIVE A

TABLE 5.2-10 LAND USE ALTERNATIVE A INTERSECTION LEVELS OF SERVICE TABLE

Study Intersection	Intersection	LOS Standard	No Project		Land Use Alternative A				
			Peak Hour	Avg. Delay	LOS	Avg. Delay	LOS	Change in Crit. V/C	Change in Crit. Delay
19	Wolfe Road and I-280 SB Ramp <sup>a</sup>	D	PM	36.5	D+	36.8	D+	-0.003	-1.4
			AM	38.9	D+	42.6	D	0.018	6.4
			PM	24.7	C	22.3	C+	-0.018	-4.5
20	Wolfe Road and Vallco Pkwy	D	AM	26.4	C	26.4	C	0.005	0.2
			PM	51.2	D-	50.1	D	-0.006	-2.2
21	Wolfe Road/Miller Avenue and Stevens Creek Boulevard <sup>a</sup>	D	AM	46.5	D	46.1	D	-0.002	-0.4
			PM	<b>72.2</b>	<b>E</b>	<b>65.6</b>	<b>E</b>	-0.039	-11.7
22	Miller Avenue and Bollinger Road <sup>g</sup>	D	AM	42.0	D	42.1	D	0.006	0.4
			PM	44.2	D	46.3	D	0.020	3.5
23	Finch Avenue and Stevens Creek Boulevard	D	AM	26.6	C	25.4	C	0.003	-1.0
			PM	41.8	D	38.6	D+	-0.055	-4.3
24	North Tantau Avenue/Quail Avenue and Homestead Road	D	AM	49.6	D	50.6	D	0.006	0.9
			PM	43.6	D	44.5	D	0.015	1.7
25	North Tantau Avenue and Pruneridge Avenue	D	AM	29.2	C	29.2	C	0.012	0.6
			PM	16.6	B	16.6	B	-0.004	-0.2
26	North Tantau Avenue and Vallco Pkwy	D	AM	29.2	C	29.2	C	0.008	0.0
			PM	34.6	C-	34.7	C-	0.004	0.3
27	Tantau Avenue and Stevens Creek Boulevard	D	AM	47.4	D	48.5	D	0.017	1.5
			PM	<b>56.8</b>	<b>E+</b>	<b>57.0</b>	<b>E+</b>	0.003	0.5
28	Lawrence Expressway and Homestead Road <sup>d</sup>	E	AM	59.0	E+	59.5	E+	0.003	0.9
			PM	58.0	E+	59.0	E+	0.004	1.4
29	I-280 SB Ramp and Stevens Creek Boulevard <sup>e</sup>	E	AM	34.8	C-	35.0	C-	0.002	0.2
			PM	<b>84.9</b>	<b>F</b>	<b>84.9</b>	<b>F</b>	-0.002	-0.5
30	Agilent Tech Driveway and Stevens Creek Boulevard <sup>f</sup>	D	AM	52.9	D-	54.1	D-	0.003	1.4
			PM	29.8	C	29.5	C	-0.007	-0.4
31	Lawrence Expressway SB Ramp and Stevens Creek Boulevard <sup>d</sup>	E	AM	72.8	E	74.9	E	0.006	2.8
			PM	29.9	C	29.8	C	-0.006	-0.2
32	Lawrence Expressway NB Ramp and Stevens Creek Boulevard <sup>d</sup>	E	AM	53.9	D-	53.2	D-	-0.004	-0.8
			PM	30.1	C	30.1	C	-0.005	-0.1
33	Lawrence Expressway and Calvert Drive/I-280 SB Ramp <sup>d</sup>	E	AM	48.6	D	49.0	D	0.001	0.4
			PM	50.6	D	51.2	D-	0.003	0.9
34	Lawrence Expressway and Bollinger Road/Moorpark Avenue <sup>d</sup>	E	AM	60.5	E	60.7	E	0.001	0.3
			PM	46.0	D	45.9	D	-0.001	0.0
35	De Anza Boulevard and Rainbow Drive (south)	D	AM	20.2	C+	19.6	B-	0.006	-0.6
			PM	19.2	B-	18.3	B-	-0.003	-1.0

**LAND USE ALTERNATIVE A**

**TABLE 5.2-10 LAND USE ALTERNATIVE A INTERSECTION LEVELS OF SERVICE TABLE**

Study Inter-section	Intersection	LOS Standard	Peak Hour	No Project		Land Use Alternative A			
				Avg. Delay	LOS	Avg. Delay	LOS	Change in Crit. V/C	Change in Crit. Delay
36	Bubb Road/Peninsula Boulevard and Stevens Creek Boulevard	D	AM	31.0	C	30.3	C	0.002	-0.5
			PM	31.1	C	31.0	C	-0.017	-0.3
37	North Stelling Road/Hollenbeck Avenue and Homestead Road	D	AM	38.5	D+	38.1	D+	-0.009	-0.3
			PM	43.6	D	42.2	D	-0.047	-3.2
38	Blaney Avenue and Stevens Creek Boulevard	D	AM	34.1	C-	32.9	C-	-0.018	-1.5
			PM	40.0	D	34.9	C-	-0.049	-4.8
39	Foothill Boulevard and Stevens Creek Boulevard	D	AM	48.7	D	40.2	D	-0.093	-11.6
			PM	25.2	C	25.2	C	-0.003	0.0
40	Stelling Road and McClellan Road	D	AM	32.1	C-	31.7	C	-0.024	-0.9
			PM	35.6	D+	34.5	C-	-0.025	-2.2
41	Wolfe Road and Apple Campus Access <sup>h</sup>	D	AM	18.9	B-	19.5	B-	0.014	1.1
			PM	36.8	D+	37.8	D+	0.016	1.6

Notes: Notes: NB = northbound; SB = southbound; EB = eastbound; WB = westbound. **Bold and underlined** indicates a substandard level of service **Bold, underlined, and shaded in gray** indicates a significant project impact

- a. This is a CMP intersection within the City of Cupertino. Cupertino applies its own standard of LOS D to CMP intersections.
- b. This is a CMP intersection within the City of Sunnyvale. The CMP’s standard of LOS E applies.
- c. The City of Sunnyvale is the controlling jurisdiction for the intersection.
- d. This is a CMP Intersection on a County Expressway. The CMP and County’s standard of LOS E applies.
- e. This is a CMP intersection within the City of Santa Clara. The CMP’s standard of LOS applies.
- f. The City of Santa Clara is the controlling jurisdiction for the intersection.
- g. The City of San Jose is the controlling jurisdiction for the intersection.
- h. This is a future intersection.

As shown in Table 5.2-10, all of the seven (7) intersections that would operate at an unacceptable level of service for at least one peak hour under Alternative A were also predicted to operate at an unacceptable level of service under the No Project scenario. The intersections that would operate at an unacceptable level of service are bolded and underlined in the table. All other study intersections would continue to operate at acceptable levels of service under the Land Use Alternative A conditions. The level-of-service calculation sheets are included in Appendix G, Transportation and Traffic Data, of this Draft EIR.

Based on applying the significance criteria for traffic impacts discussed in Section 4.13.5, Thresholds of Significance, in Chapter 4.13, Transportation and Traffic, of this Draft EIR, there would be a significant impact at four (4) of the study intersections under Land Use Alternative A during one or both peak hours, as highlighted in Table 5.2-10.

As shown in Table 5.2-10, the following three intersections would operate at an unacceptable level under both No Project and Land Use Alternative A conditions, but Land Use Alternative A would not have a significant impact on their operations:

- De Anza Boulevard and McClellan Road/Pacifica Drive (#9): LOS E – PM Peak Hour
- Wolfe Road/Miller Avenue and Stevens Creek Boulevard (#21): LOS E – PM Peak Hour
- Stevens Creek Boulevard and I-280 SB Ramps/Calvert Drive (#29): LOS F – PM Peak Hour

## LAND USE ALTERNATIVE A

As shown in Table 5.2-10, Land Use Alternative A would result in *significant* impacts during at least one of the peak hours. The following four (4) intersections would experience a significant impact under Land Use Alternative A traffic conditions:

- Sunnyvale-Saratoga Road/De Anza Boulevard and Homestead Road (#5): LOS E+ and E – AM and PM Peak Hours, respectively
- De Anza Boulevard and I-280 Northbound Ramp (#6): LOS F – PM Peak Hour
- De Anza Boulevard and Stevens Creek Boulevard (#8): LOS F – PM Peak Hour
- Wolfe Road and I-280 Northbound Ramp (#18): LOS F – AM Peak Hour

## Mitigation Measures

**Mitigation Measure TRAF-1:** The City of Cupertino shall commit to preparing and implementing a Traffic Mitigation Fee Program to guarantee funding for roadway and infrastructure improvements that are necessary to mitigate impacts from future projects based on the then current City standards. As part of the preparation of the Traffic Mitigation Fee Program, the City shall also commit to preparing a "nexus" study that will serve as the basis for requiring development impact fees under AB 1600 legislation, as codified by California Code Government Section 66000 et seq., to support implementation of the proposed Project. The established procedures under AB 1600 require that a "reasonable relationship" or nexus exist between the traffic improvements and facilities required to mitigate the traffic impacts of new development pursuant to the proposed Project. The following examples of traffic improvements and facilities would reduce impacts to acceptable level of service standards and these, among other improvements, could be included in the development impact fees nexus study:

- **Sunnyvale-Saratoga Road/De Anza Boulevard and Homestead Road (#5):** Widen De Anza Boulevard to four lanes in each direction or the installation of triple left-turn lanes.
- **De Anza Boulevard and I-280 Northbound Ramp (#6):** Restriping of De Anza Boulevard in the southbound direction to provide room for right turn vehicles to be separated from through traffic may be required. The bike lane would be maintained, and right turns would occur from the bike lane. The right turns would continue to be controlled by the signal and would need to yield to pedestrians. Painting a bike box at the front of the lane to provide space for bikes wait at red lights may enhance the bicycle experience.
- **De Anza Boulevard and Stevens Creek Boulevard (#8):** Restripe westbound Stevens Creek Boulevard to provide room for right turn vehicles to be separated from through vehicles may be required. The right turn vehicles will share the bike lane and will still be controlled by the traffic signal. Paint a bike box at the front of the lane to provide bikes a place to wait at red lights. The pedestrian crossings will not be affected may enhance the bicycling experience.
- **Wolfe Road and I-280 Northbound Ramp (#18):** An additional northbound through lane for a total of three through-movement lanes may be required. This will require widening the Wolfe Road overcrossing. The lane needs to be extended north of the interchange so that there are a continuous three lanes northbound. Right-of-way acquisition may be required. In addition to widening the overcrossing, the City may wish to pursue a redesign of the interchange to go from a



## LAND USE ALTERNATIVE A

partial cloverleaf design to a diamond design. This could help with heavy volumes in the right lane, which contributes to the level-of-service deficiency.

The fees shall be assessed when there is new construction, an increase in square footage in an existing building, or the conversion of existing square footage to a more intensive use. The fees collected shall be applied toward circulation improvements and right-of-way acquisition. The fees shall be calculated by multiplying the proposed square footage, dwelling unit, or hotel room by the appropriate rate. Traffic mitigation fees shall be included with any other applicable fees payable at the time the building permit is issued. The City shall use the traffic mitigation fees to fund construction (or to recoup fees advanced to fund construction) of the transportation improvements identified above, among other things that at the time of potential future development may be warranted to mitigate traffic impacts.

While implementation of Mitigation Measure TRAF-1 would secure a funding mechanism for future roadway and infrastructure improvements that are necessary to mitigate impacts from future projects based on then current standards, impacts would remain *significant and unavoidable*, because the City cannot guarantee improvements at these intersections at this time. This is in part because the nexus study has yet to be prepared and because some of the impacted intersections are under the jurisdictions of the Cities of Sunnyvale and Santa Clara and Caltrans. Specifically, the following intersections are outside the jurisdiction of Cupertino:

- De Anza Boulevard and I-280 Northbound Ramp (#6)
- Wolfe Road and I-280 Northbound Ramp (#18)

However, the City of Cupertino will continue to cooperate with these jurisdictions to identify improvements that would reduce or minimize the impacts to intersections and roadways as a result of implementation of future development projects in Cupertino.

**Significance with Mitigation:** Significant and Unavoidable.

### Roadway Segments Average Daily Traffic Volumes

In order to better characterize conditions on Cupertino's arterials and major collectors, 33 roadway segments were selected for evaluation under 2040 conditions. Figure 4.13-1 in Section 4.13.1, Study Intersections and Roadway Segments, of Chapter 4.13, Transportation and Traffic, of this Draft EIR, showed each roadway segment number, and Figure 4.13-6 in Section 4.13.4, Existing Conditions and Environmental Setting, graphically illustrated the existing traffic volumes on these roadway segments, rounded to the nearest thousand. Table 5.2-11 presents the existing 24-hour traffic volume data (Average Daily Traffic, or ADT) for each roadway segment, as well as ADT under No Project conditions, and under Land Use Alternative A conditions.

## LAND USE ALTERNATIVE A

TABLE 5.2-11 AVERAGE DAILY TRAFFIC ON SELECTED ROADWAY SEGMENTS UNDER LAND USE ALTERNATIVE A

Segment #	Location	Existing ADT	2040 Forecast Volume	
			No Project	Land Use Alternative A
1	Foothill Blvd north of Stevens Creek Blvd	20,878	24,183	24,264
2	Stevens Creek Blvd east of Crescent Rd	29,371	34,689	34,447
3	Bubb Rd south of Stevens Creek Blvd	13,339	16,436	16,834
4	Stevens Creek Blvd west of Stelling Rd	30,587	30,404	30,848
5	Stelling Rd south of Stevens Creek Blvd	14,710	29,485	30,050
6	Stelling Rd north of Stevens Creek Blvd	17,493	23,644	24,309
7	Stevens Creek Blvd east of Stelling Rd	28,730	39,569	40,978
8	Homestead Rd east of Ontario Dr	18,357	20,246	25,050
9	De Anza Blvd south of Bollinger Rd	36,756	46,073	46,265
10	De Anza Blvd south of Stevens Creek Blvd	43,216	52,030	51,614
11	De Anza Blvd north of Stevens Creek Blvd	42,455	53,221	51,930
12	De Anza Blvd south of Homestead Rd	52,676	53,666	53,927
13	Sunnyvale-Saratoga Rd north of Homestead Rd	42,246	47,833	46,686
14	Bollinger Rd east of De Anza Blvd	15,877	20,202	20,220
15	Stevens Creek Blvd east of De Anza Blvd	30,779	41,803	41,124
16	Homestead Rd east of De Anza Blvd	24,876	35,070	36,719
17	Blaney Ave north of Stevens Creek Blvd	6,294	8,677	8,453
18	Stevens Creek Blvd east of Blaney Ave	30,348	42,549	42,128
19	Homestead Rd east of Blaney Ave	22,895	32,807	34,109
20	Miller Ave south of Stevens Creek Blvd	17,379	26,621	24,705
21	Wolfe Rd north of Vallco Pkwy	34,200	45,606	45,176
22	Wolfe Rd south of Homestead Rd	31,751	41,655	43,188
23	Wolfe Rd north of Homestead Rd	18,825	31,744	32,469
24	Vallco Parkway east of Wolfe Rd	2,917	3,947	3,932
25	Homestead Rd east of Wolfe Rd	10,481	21,456	21,927
26	Tantau Ave north of Vallco Pkwy	6,839	9,708	9,692
27	Stevens Creek Blvd east of Tantau Ave	27,515	32,208	32,976
28	Bollinger Rd east of Johnson Ave	11,164	23,374	23,417
29	Lawrence Expy north of Bollinger Rd	23,577	42,606	45,623
30	Lawrence Expy south of Pruneridge Ave	69,249	87,142	88,571
31	Stevens Creek Blvd west of Tantau Ave	25,476	34,543	35,542
32	Wolfe Rd south of I-280 NB Ramps (over 280)	36,190	44,547	44,345
33	Homestead Rd west of Stelling Rd	16,990	22,541	23,524

Source: Tube counts conducted on Wed, Sept. 18, 2013. Hexagon Transportation Consultants, Inc.

**LAND USE ALTERNATIVE A**

Cupertino does not have level of service analysis methodologies, standards, or thresholds of significance for roadway segments. Therefore, the ADT projections for the future scenarios are presented for informational purposes. Any project impacts to traffic operations are fully captured by the intersection analysis.

**Freeway Levels of Service**

Ten (10) freeway segments were selected for analysis under 2040 conditions. As described in Section 4.13.5, Thresholds of Significance, of Chapter 4.13, Transportation and Traffic, of this Draft EIR, the addition of traffic causes a traffic impact on a CMP freeway segment when:

- The level of service of the freeway segment is LOS F under existing conditions, and
- The number of new trips added by the project is more than one percent of the freeway capacity.

Table 5.2-12 presents the daily capacity of both the mixed-flow lanes and the High Occupancy Vehicle (HOV) lanes on each of the study freeway segments. Since daily LOS is not available for freeway segments, the lowest of the two peak-hour LOS levels, as reported in VTA's 2012 CMP Monitoring Study, is also shown.

Table 5.2-12 shows the number of additional trips that would be generated under the proposed Land Use Alternative A conditions in comparison with the number of trips projected under the 2040 No Alternative conditions in both the mixed-flow lanes and the High Occupancy Vehicle (HOV) lane on each of the study freeway segments. Table 5.2-12 also indicates the percentage of capacity that the projected number of additional trips represents. If there is a percentage increase greater than one (1) percent and the existing LOS is shown as F, then there would be a significant impact. None of the HOV lane segments would be significantly impacted under this Alternative; however, the following two mixed-lane freeway segments would be result in a *significant* impact:

- SR 85 Southbound between I-280 and Stevens Creek Boulevard
- I-280 Westbound between Saratoga Avenue and Lawrence Expressway

**Mitigation Measures**

Even with implementation of Mitigation Measure TRAF-1, which includes preparing and implementing a Traffic Mitigation Fee Program to guarantee funding for roadway and infrastructure improvements that are necessary to mitigate impacts from future projects based on the then current City standards, the impacts would be *significant and unavoidable*.

**Significance Without Mitigation:** Significant and unavoidable.

**LAND USE ALTERNATIVE A**

**TABLE 5.2-12 DAILY FREEWAY SEGMENT IMPACT ANALYSIS UNDER LAND USE ALTERNATIVE A**

Fwy	Segment	Direction	Mixed-Flow Lane							HOV Lane						
			# of Lanes	Daily Capacity (vehicle)	Existing LOS <sup>a</sup>	Project Trips	% Capacity	Impact?	# of Lanes	Capacity (vph)	Daily Capacity (vehicle)	Existing LOS <sup>a</sup>	Project Trips	% Capacity	Impact?	
SR 85	Saratoga Ave to De Anza Blvd	NB	2	44,000	E	283	0.6%	No	1	1,650	16,500	E	9	0.1%	No	
SR 85	De Anza Blvd to Stevens Creek Blvd	NB	2	44,000	F	116	0.3%	No	1	1,650	16,500	E	14	0.1%	No	
SR 85	Stevens Creek Blvd to I-280	NB	2	44,000	C	313	0.7%	No	1	1,650	16,500	D	30	0.2%	No	
SR 85	I-280 to W. Homestead Rd	NB	2	44,000	F	-106	-0.2%	No	1	1,650	16,500	F	56	0.3%	No	
SR 85	W. Homestead Rd to I-280	SB	2	44,000	C	-1,684	-3.8%	No	1	1,650	16,500	A	-14	-0.1%	No	
SR 85	I-280 to Stevens Creek Blvd	SB	3	69,000	F	1,051	1.5%	<b>Yes</b>	1	1,650	16,500	D	5	0.0%	No	
SR 85	Stevens Creek Blvd to De Anza Blvd	SB	2	44,000	F	-386	-0.9%	No	1	1,650	16,500	D	-97	-0.6%	No	
SR 85	De Anza Blvd to Saratoga Ave	SB	2	44,000	F	-411	-0.9%	No	1	1,650	16,500	C	-102	-0.6%	No	
I-280	Magdalena Ave to Foothill Expwy	EB	3	69,000	D	-794	-1.2%	No	1	1,650	16,500	A	26	0.2%	No	
I-280	Foothill Expwy to SR 85	EB	3	69,000	D	14	0.0%	No	1	1,650	16,500	C	39	0.2%	No	
I-280	SR 85 to De Anza Blvd	EB	3	69,000	E	277	0.4%	No	1	1,650	16,500	C	-12	-0.1%	No	
I-280	De Anza Blvd to Wolfe Rd	EB	3	69,000	E	624	0.9%	No	1	1,650	16,500	D	60	0.4%	No	
I-280	Wolfe Rd to Lawrence Expwy	EB	3	69,000	D	250	0.4%	No	1	1,650	16,500	C	68	0.4%	No	
I-280	Lawrence Expwy to Saratoga Ave	EB	3	69,000	F	284	0.4%	No	1	1,650	16,500	D	34	0.2%	No	
I-280	Saratoga Ave to Lawrence Expwy	WB	3	69,000	F	778	1.1%	<b>Yes</b>	1	1,650	16,500	E	2	0.0%	No	
I-280	Lawrence Expwy to Wolfe Rd	WB	3	69,000	F	-712	-1.0%	No	1	1,650	16,500	E	13	0.1%	No	
I-280	Wolfe Rd to De Anza Blvd	WB	3	69,000	F	297	0.4%	No	1	1,650	16,500	F	22	0.1%	No	
I-280	De Anza Blvd to SR 85	WB	3	69,000	F	48	0.1%	No	1	1,650	16,500	F	-39	-0.2%	No	
I-280	SR 85 to Foothill Expwy	WB	3	69,000	F	-1,028	-1.5%	No	1	1,650	16,500	F	-196	-1.2%	No	
I-280	Foothill Expwy to Magdalena Ave	WB	3	69,000	D	98	0.1%	No	1	1,650	16,500	D	13	0.1%	No	

Note: **Bold Yes** indicates a significant project impact.

Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2012.

## Vehicle Miles Traveled with Land Use Alternative A

As described above under Section 4.13.2.1, Regulatory Setting, of Chapter 4.13, Traffic and Transportation, the VTA countywide travel demand model is used to help evaluate cumulative transportation impacts of local land use decisions on the CMP system. Therefore, the daily (24-hour) VMT were tabulated with Land Use Alternative A using the Santa Clara VTA countywide travel demand model with refined land use estimates for the City of Cupertino. The VMT estimates in the VTA model are sensitive to changes in land use. Generally, land uses that reflect a more balanced jobs-housing ratio in the VTA model result in lower per capita VMT.

The total daily VMT and the VMT per capita are presented in Table 5.2-13. As shown in the table, VMT per capita is forecast to increase to 11 miles per service population per day in 2040 with this Alternative, compared to 10.5 miles per service population per day in 2013 under existing conditions. As discussed in the Air Quality discussion above, daily VMT in the Project Study Area would increase at a greater rate (18.5 percent) between 2013 and 2040 than would the service population of the Project Study Area (12.6 percent). A slight increase such as this could be indicative of increased development of both households and jobs, with potentially higher rates of increases in jobs (than households) in a relatively jobs-rich area, providing opportunities for increases in average trip lengths.

**TABLE 5.2-13 VMT PER CAPITA**

	2000-2020 General Plan	Land Use Alternative A
Daily VMT	997,145	1,063,199
Household Units	23,294	23,294
Total Population	63,873	63,873
Total Jobs	30,848	32,593
VMT Per Capita	<b>10.5</b>	<b>11.0</b>

Source: Association of Bay Area Government (ABAG) Projections 2013; Hexagon Transportation Consultants. 2014.

The VMT by trip orientation is presented in Table 5.2-14. As shown in the table for Land Use Alternative A, much of the VMT is oriented to internal-external trip making. However, there is not an overwhelming imbalance of internal-external trip making over external-internal trip making for Land Use Alternative A compared to the current General Plan or compared to the Project.

## LAND USE ALTERNATIVE A

TABLE 5.2-14 VMT BY TRIP ORIENTATION

Trip Orientation	2000-2020 General Plan	2000-2020 General Plan VMT Proportions	Land Use Alternative A	Project VMT Proportions
Total Cupertino VMT <sup>a</sup>	997,145	100%	1,063,199	100%
Internal-External VMT <sup>b</sup>	540,670	54%	567,863	53%
External-Internal VMT <sup>c</sup>	413,479	42%	446,573	42%
Internal-External VMT <sup>d</sup>	997,145	100%	1,063,199	100%

Notes: Estimate of 2030 VMT is based on the current Comprehensive Plan and on preliminary land use projections.

a. Trips with one trip end outside Cupertino were counted as one trip-end, whereas trips with both ends in Cupertino were counted as two trip-ends.

b. "Internal-External" VMT refers to VMT generated by trips associated with a home base in Cupertino and a work or non-work destination outside Cupertino.

c. "External-Internal" VMT refers to VMT generated by trips associated with a home base outside Cupertino and a work or non-work destination in Cupertino.

d. "Internal-Internal" VMT refers to VMT generated by trips associated with a home base in Cupertino and a work or non-work destination in Cupertino.

Source: Hexagon Transportation Consultants. 2014.

As discussed in Section 4.13.2.1, Regulatory Setting, of Chapter 4.13, Transportation and Traffic, SB 743 requires impacts to transportation network performance to be viewed through a filter that promotes the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. Some alternative metrics were identified in SB 743 including VMT, which can help identify how projects (land development and infrastructure) influence accessibility (i.e. access to places and people) and even emissions, but they do not provide information about how the transportation network performs or functions with respect to efficiency or user experience. Accessibility is an important planning objective in many communities, including Cupertino, but so is travel time or delay experienced by users. SB 743 does not prevent a city or county from continuing to analyze delay or LOS as part of other plans (i.e. the general plan), studies, or on-going network monitoring, but once the new CEQA Guidelines are implemented, which is estimated to be following the certification and adoption by the Secretary for Resources of the final draft of changes to CEQA Guidelines by OPR on July 1, 2014, these metrics may no longer constitute the sole basis for CEQA impacts.

While Cupertino does not currently have VMT analysis methodologies, standards, or thresholds of significance, this analysis has been provided for informational purposes only. However, because future growth under the proposed Project would come incrementally over approximately 26 years and would be guided by a policy framework that is generally consistent with many of the principal goals and objectives established in regional planning initiatives for the Bay Area, this additional growth would be consistent with the regional planning objectives established for the Bay Area, which concentrates new development within infill sites and within PDAs.

**LAND USE ALTERNATIVE A**

---

**TRAF-2**            **Implementation of Land Use Alternative A would conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.**

---

**CMP Impacts**

Of the 41 study intersections included in this EIR document, 21 are included in Santa Clara County’s Congestion Management Program (CMP). Impact TRAF-1, which presents the results of the impact analysis under 2040 No Project Conditions and the Land Use Alternative A on all of the study intersections, includes the 21 CMP intersections. Land Use Alternative A resulted in significant impacts to five (5) CMP intersections. The following four CMP intersections experienced a *significant* impact during at least one of the peak hours:

- Saratoga-Sunnyvale Road/De Anza Boulevard and Homestead Road (#5): LOS E+ – AM and PM peak hours
- De Anza Boulevard and I-280 Northbound Ramps (#6): LOS F – PM peak hour
- De Anza Boulevard and Stevens Creek Boulevard (#8): LOS E – PM peak hour
- Wolfe Road and I-280 Northbound Ramp (#18): LOS F – AM peak hour

Of the above four intersections, two of them would fall below VTA’s CMP standard, which is LOS E. The two CMP intersections that are within Cupertino’s jurisdiction and would operate at LOS E (Saratoga-Sunnyvale Road/De Anza Boulevard and Homestead Road [#5] and De Anza Boulevard and Stevens Creek Boulevard [#8]) do not actually fall below the CMP standard, but only below the City of Cupertino’s standard of LOS D.

**Mitigation Measures**

Mitigation for these impacts is described above in the Impact TRAF-1, and as discussed, even with implementation of Mitigation Measures TRAF-1, which includes preparing and implementing a Traffic Mitigation Fee Program to guarantee funding for roadway and infrastructure improvements that are necessary to mitigate impacts from future projects based on the then current City standards, the impacts to these CMP intersections would be *significant and unavoidable*.

**Significance With Mitigation:** Significant and unavoidable.

---

**TRAF-3**            **Implementation of Land Use Alternative A would not substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersection) or incompatible uses (e.g. farm equipment).**

---

Since Land Use Alternative A represents a program-level planning effort, it does not directly address project-level design features or building specifications; however, the General Plan includes policies and strategies that, once adopted, would reduce potential hazards due to roadway design or incompatible uses.

## LAND USE ALTERNATIVE A

Policy 4-10, Roadway Plans that Complement the Needs of Adjacent Land Use, would require that roadway plans complement the needs of adjacent land uses; under this policy, the City would be required to adopt road improvement standards for rural, semi-rural, urban, and suburban roads. Policy 4-10 would require the City to survey intersections to ensure their operation is efficient and promotes the safety of pedestrians and bicyclists. Policy 6-13, Roadway Design, would require the City to involve the Fire Department in the design of public roadways. Policy 6-16, Hillside Road Upgrades, would “require new hillside development to upgrade existing access roads to meet Fire Code and City standards.” Policy 4-11, Curb Cuts, would direct developments to minimize the number of resulting curb cuts, thereby reducing potential for vehicle conflicts. Policy 4-12, Street Improvement Planning, would require streetscape planning to be “an integral part of a project to ensure an enhanced streetscape and the safe movement of people and vehicles,” and Policy 4-13, Safe Parking Lots, would “require parking lots that are safe for pedestrians.” Policy 6-56, Road Improvements to Reduce Truck Impacts, directs the City to consider road improvements to reduce the impact from trucks. Finally, Strategy 3, Community Protection, of Policy 4-16, Transportation Noise, Fumes and Hazards, would require protecting the community from the effects of the transportation system, by enforcing laws related to dangerous and abusive driving, among other requirements.

Future development under the Land Use Alternative A would increase in both residential and commercial land uses. As these land uses develop, construction and modifications of new and existing roadways would be necessary to support the growth. As with current practice, the improvements would be designed and reviewed in accordance to the City of Cupertino Standard Details, which are promulgated and administered by the City Engineering Department. Additionally, incompatible uses would be discouraged by the General Plan. Therefore, the impact of Land Use Alternative A would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>TRAF-4</b>	<b>Implementation of Land Use Alternative A would not result in inadequate emergency access.</b>
---------------	--

---

Because Land Use Alternative A is a program-level planning effort, it does not directly address project-level design features or building specifications; however, the General Plan includes policies that, once adopted, would ensure efficient circulation and adequate access are provided in the city, which would help facilitate emergency response. Policy 6-8, Early Project Review, directs the City to “involve the Fire Department in early design stages of projects requiring public review.” Policy 6-9, Commercial and Industrial Fire Protection Guidelines, would require the City to coordinate with the Fire Department to develop new guidelines for fire protection for commercial and industrial land uses. Policy 6-10, Fire Prevention and Emergency Preparedness, would require the City to promote fire prevention and emergency preparedness through city-initiated public education programs, through the government television channel, the Internet and the Cupertino Scene. Policy 6-13, Roadway Design, would require the City to involve the Fire Department in the design of public roadways and directs the City to ensure that frequent median breaks are used to provide “timely access.” Additionally, Policy 6-14, Dead-End Street Access, allows the use of private roadways during emergency responses in hillside subdivisions where dead-end streets impair access. Policy 6-15, Hillside Access Routes, directs the city to require new hillside development to have frequent grade breaks in access routes to ensure a timely response from fire personnel. Policy 6-16, Hillside Road



**LAND USE ALTERNATIVE A**

Upgrades, directs the city to require new hillside development to upgrade existing access roads to meet Fire Code and City standards. Finally, Policy 6-17, Private Residential Electronic Security Gates, discourages the use of private residential electronic security gates to help ensure timely emergency access to these areas. Any new streets or developments that would result from implementation of Land Use Alternative A would be subject to City engineering standards and the General Plan policies described above.

Ongoing implementation of the General Plan policies and the City’s engineering standards would ensure that adequate emergency access is provided in Cupertino. Therefore, impacts associated with the implementation of Land Use Alternative A would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**TRAF-5      Implementation of Land Use Alternative A would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.**

---

Both the Valley Transportation Plan 2040, enacted by the Valley Transportation Authority, and Plan Bay Area: Strategies for a Sustainable Region, the 2040 Regional Transportation Plan enacted by the MTC in 2013, contain strategies designed to support alternative modes of transportation, including walking, bicycling, and public transit. Additionally, the City of Cupertino’s Pedestrian Transportation Guidelines and Cupertino Bicycle Transportation Plan identify and prioritize improvements to enhance the pedestrian and bicycle environment.

Additionally, the General Plan includes policies and strategies that, once adopted, would ensure adequate public transit, bicycle, and pedestrian facilities are available to the residents of Cupertino. Within the Land Use/Community Design Element, Policy 2-26, Heart of the City Special Area, and supporting strategies, require the City to create a positive and memorable image along Stevens Creek Boulevard of mixed-use development; enhanced activity gateways and nodes; and safe and efficient circulation and access for all modes of transportation. Within the Circulation Element, Policy 4-3, Reduced Reliance on the Use of Single-Occupant Vehicles, would require the City to promote the use of alternative forms of transportation instead of single-occupancy vehicles (SOVs) by encouraging attractive alternatives. Supportive strategies under this policy encourage new developments to include facilities supportive of walking, biking, and transit use, as well as providing street space for bus turnouts, bike lanes, or other alternative transportation infrastructure. Policy 4-4, Improve Pedestrian and Bicycle Circulation Throughout Cupertino, expressly directs the City to expand city-wide pedestrian and bicycle circulation in order to provide improved recreation, mobility and safety. Policy 4-5, Pedestrian Access, would require the City to create pedestrian access between new subdivisions and school sites, and to review existing neighborhood circulation plans to improve safety and access for pedestrians and bicyclists to school sites, including completing accessible network of sidewalks and paths. Policy 4-6, Regional Trail Development, would require the City to continue to plan and provide for a comprehensive system of trails and pathways consistent with regional systems, including the Bay Trail, Stevens Creek Corridor and Ridge Trail, and with the policies contained in the Land Use and Community Design Element. The General Alignment of the Bay Trail, as shown in the Association of Bay Area Governments’ Bay Trail planning document, is incorporated in the General Plan by reference. Policy 4-7, Increased Use of Public Transit, would require the City to support and encourage the increased

## LAND USE ALTERNATIVE A

use of public transit. Policy 4-9, Traffic Service and Pedestrians Needs, would require the City to balance the needs of pedestrians with desired traffic service, and, where necessary and appropriate, allow a lowered LOS standard to better accommodate pedestrians on major streets and at specific intersections. Policy 4-12, Street Improvement Planning, would require the City to plan street improvements such as curb cuts, sidewalks, bus stop turnouts, bus shelters, light poles, benches and trash containers as an integral part of a project to ensure an enhanced streetscape and the safe movement of people and vehicles with the least possible disruption to the streetscape. Policy 4-13, Safe Parking Lots, directs the City to require parking lots that are safe for pedestrians. Policy 4-15, School Traffic Impacts on Neighborhoods, would require the City to minimize the impact of school drop-off, pick-up and parking on neighborhoods.

Implementation of Land Use Alternative A would therefore support and would not conflict with plans, programs and policies regarding bicycle or pedestrian facilities, or decrease the performance and safety of such facilities. Therefore, related impacts from implementation of Land Use Alternative A would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>TRAF-6</b>	<b>Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would result in additional cumulatively considerable impacts.</b>
---------------	--

---

The analysis of this Alternative, above, addresses cumulative impacts to the transportation network in the city and its surroundings; accordingly, cumulative impacts would be the same as Land Use Alternative A's impacts, which is *significant and unavoidable*.

**Significance With Mitigation:** Significant and unavoidable.

### 5.2.7.14 UTILITIES

---

<b>UTIL-1</b>	<b>Implementation of Land Use Alternative A would have sufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements are needed.</b>
---------------	---

---

The Project Study Area is within the water utility service area of California Water Service Company (Cal Water) and San Jose Water Company (SJWC). As discussed in Chapter 4.14, Utilities and Service Systems, the City undertook a Water Supply Evaluation (WSE) in May 2014 to assess the adequacy of the water supply for the proposed Project. (The WSE is included as Appendix H, Utilities and Service Systems Data, of this Draft EIR.)

Land Use Alternative A is within the water utility service area of Cal Water and SJWC. Table 5.2-15 shows the development at buildout (2040) for Land Use Alternative A by water utility service area. The following discussion describes the impacts of Land Use Alternative A by Cal Water and SJWC service area.

**LAND USE ALTERNATIVE A**

**TABLE 5.2-15 PROPOSED DEVELOPMENT IN CAL WATER AND SJWC SERVICE AREAS**

Land Use Alternative A	Cal Water	SJWC (+ Cupertino Water)	Total
Residential	1,273 units	622 units	1,895 units
Office	945,000 sf	95,231 sf	1,040,231 sf
Commercial	630,000 sf	71,413 sf	701,413 sf
Hotel	600 rooms	–	600 rooms

Notes: sf = square feet.

Source: Table 2 of Water Supply Evaluation (Yarne & Associates), May 15, 2014; prepared with input from the City of Cupertino.

**Cal Water**

The 2010 Cal Water LAS District UWMP did not account for the 18.9 percent population increase between 2000 and 2010 based on US Census data, therefore, the Cal Water LAS District demand was revised in the WSE due to an increase in population projected for the next 26 years. However, stronger water conservation targets were used in the WSE than were used in the 2010 UWMP in terms of average water usage per capita are projected - 159 gpcd for 2020 rather than 193 gpcd as indicated in the 2010 UWMP. This is due to Cal Water data showing that per capital water usage has declined in the past five years. For the period from 2009 to 2013, it averaged 136 gpcd. Even using conservative assumptions results in the 2040 projected LAS District total demand of 15,302 acre feet per year (afy) compared to the 2008 actual 15,490 afy.

For Land Use Alternative A, it is assumed that projected water demand would be added to the LAS District and Apple Campus 2 demands. Also, it is assumed that development would occur at a relatively constant rate over Land Use Alternative A’s 26-year horizon period. The WSE includes detailed calculations of water demand from Land Use Alternative A, based on the land uses shown in Table 5.2-13. The WSE determined the water demand at buildout (2040) for Land Use Alternative A in the Cal Water LAS District would be 807 afy. Therefore, the five-year increase for Land Use Alternative A Project demand is 161 afy.<sup>42</sup>

Table 5.2-16 presents the combined projected water demand for the Cal Water LAS District, Apple Campus 2 development and Land Use Alternative A.

<sup>42</sup> 807 afy divided by 5 years = 161.4 afy.

## LAND USE ALTERNATIVE A

TABLE 5.2-16 PROJECTED WATER DEMAND CAL WATER LAS DISTRICT + LAND USE ALTERNATIVE A (AFY)

	2008 (Actual)	2012 (Actual)	2015	2020	2025	2030	2035	2040
LAS District	15,490	12,779	13,641	12,651	13,200	13,749	14,298	14,847
Land Use Alternative A	0	0	0	161	322	482	644	807
<b>Total</b>	<b>15,490</b>	<b>12,779</b>	<b>13,641</b>	<b>12,812</b>	<b>13,522</b>	<b>14,231</b>	<b>14,942</b>	<b>15,654</b>

Note: afy = acre feet per year.

Source: Table 9 (Cal Water) of Water Supply Evaluation (Yarner & Associates), May 20, 2014. Note: The value for Total Demand in 2015 presented in WSE Table 9 is 14,065 afy. However, this value appears to be in error; the assumed correct value (13,641 afy) is presented in the table above.

In normal hydrologic years, non-contract water<sup>43</sup> is expected to be available. Cal Water also expects increases in approved SCVWD deliveries will eventually reduce availability of non-contract water. According to the SCVWD, LAS District projected water scheduled delivery amounts will be available through at least 2035.<sup>44</sup>

As previously indicated, the LAS District has historically pumped only a fraction of its total annualized groundwater well capacity, leaving the balance in groundwater storage. Because of this banking practice, there is an adequate supply of stored groundwater in the aquifers supplying LAS District wells.

### *Normal Hydrologic Year*

Total groundwater supplied is the quantity necessary to make up the difference between LAS District demand and SCVWD supplies – both scheduled and non-contract deliveries. Therefore, total supply equals projected demand for any given year. A normal hydrologic year supply is considered the same as the SB X7 7 target water demand projections. Table 5.2-17 shows that groundwater will be reliable throughout the 26-year planning horizon of Land Use Alternative B and that no supply deficiencies are expected during a normal hydrologic year.<sup>45</sup>

### *Single Dry Year*

In single dry years Cal Water can expect a reduction in non-contract water and may possibly see a reduction in firm scheduled deliveries. If any reduction in scheduled deliveries were to occur, the needed supply could be made up by pumping stored groundwater.<sup>46</sup>

<sup>43</sup> Cal Water has a contract with SCVWD until 2035 to purchase treated surface water and convey it to the LAS District. The SCVWD “contract” water is delivered through four connections within its transmission system. “Non-contract” water is water not included in the contracted water.

<sup>44</sup> California Water Service Company. 2010. 2010 Urban Water Management Plan, Los Altos-Suburban District. June 2011.

<sup>45</sup> California Water Service Company. 2010. 2010 Urban Water Management Plan, Los Altos-Suburban District. June 2011.

<sup>46</sup> California Water Service Company. 2010. 2010 Urban Water Management Plan, Los Altos-Suburban District. June 2011.

**LAND USE ALTERNATIVE A**

**TABLE 5.2-17 DEMAND AND SUPPLY COMPARISON – NORMAL HYDROLOGIC YEAR: CAL WATER LAS DISTRICT + LAND USE ALTERNATIVE A (AFY)**

	2015	2020	2025	2030	2035	2040
Total Demand	13,641	12,812	13,522	14,231	14,942	15,654
SCVWD Supply	10,200	9,700	10,200	11,200	12,120	13,000
LAS Groundwater	3,441	3,378	3,855	3,831	3,888	3,984
Total Supply	13,641	13,078	14,055	15,031	16,008	16,984
<b>Difference</b>	<b>0</b>	<b>266</b>	<b>533</b>	<b>800</b>	<b>1,066</b>	<b>1,330</b>

Source: Table 14 (Cal Water) of Water Supply Evaluation (Yarne & Associates), May 20, 2014; Demand is modified to reflect Land Use Alternative A; Supply is as presented in WSE (i.e. original values in Table 14 of WSE). Note: The supply surplus (Difference) shown in the table is theoretical. Total groundwater actually supplied would be the quantity necessary to make up the difference between LAS District demand and SCVWD supplies – both scheduled and Non-Contract deliveries. Hence, in practice, total supply always equals projected demand for any given year.

During a single dry year it is unlikely that SCVWD would request a reduction in its retailer’s (i.e. CalWater’s and SJWC’s) water demand. SCVWD maintains carryover storage in its reservoirs, locally stored groundwater reserves, and has access of up to 50,000 afy of drought supplies stored as groundwater in the Semitropic Groundwater Bank.<sup>47</sup> According to SCVWD’s 2010 UWMP there will be a 5 percent shortfall in treated water contract deliveries in 2020 and 2025. After this time it is expected that projects resulting from their Water Master Plan will create sufficient additional supplies so that contract deliveries can be met during single dry years. It is assumed that groundwater will provide the necessary supply to meet dry year demands if purchased water reductions are required.

Table 5.2-18 shows that increased groundwater pumping would be able to supply the difference in order to meet 2020 and 2025 demand. Because no reduction in SCVWD supplies are anticipated, the groundwater supply would remain the same. Therefore, the combination of pumped groundwater and purchased water will be sufficient to meet projected single-dry year demands.

*Multiple Dry Years*

SCVWD gives highest priority to delivery of Contract water to urban water retailers and indicates it can deliver 100 percent of its contracted supply obligations even during multiple dry year periods. However, during such periods, SCVWD will reduce or eliminate deliveries of Non-Contract water. If drought conditions warrant, SCVWD will reduce or eliminate surface water recharging to aquifers within its service area. If further reductions are necessary, deliveries to agricultural customers will be reduced or eliminated. Deliveries to SCVWD urban water retailers are the last to be affected by drought conditions.

<sup>47</sup> SCVWD.2013.Board Agenda Memo; Budget Adjustment for 2012 Water Banking Operations; January 22, 2013.  
[http://cf.valleywater.org/About\\_Us/Board\\_of\\_directors/Board\\_meetings/\\_2013\\_Published\\_Meetings/MG49261/AS49274/AI49995/DO50113/DO\\_50113.pdf](http://cf.valleywater.org/About_Us/Board_of_directors/Board_meetings/_2013_Published_Meetings/MG49261/AS49274/AI49995/DO50113/DO_50113.pdf).

## LAND USE ALTERNATIVE A

**TABLE 5.2-18 DEMAND AND SUPPLY COMPARISON - ONE DRY YEAR: CAL WATER LAS DISTRICT + LAND USE ALTERNATIVE A (AFY)**

	2015	2020	2025	2030	2035	2040
Total Demand	13,641	12,812	13,522	14,231	14,942	15,654
SCVWD Supply	10,200	9,700	10,200	11,200	12,120	13,000
LAS Groundwater	3,441	3,378	3,855	3,831	3,888	3,984
Total Supply	113,641	13,078	14,055	15,031	16,008	16,984
<b>Difference</b>	<b>0</b>	<b>266</b>	<b>533</b>	<b>800</b>	<b>1,066</b>	<b>1,330</b>

Note: afy = acre feet per year.

Source: Table 15 (Cal Water) of Water Supply Evaluation (Yarne & Associates), May 20, 2014; Demand is modified to reflect Land Use Alternative A; Supply is as presented in WSE (i.e. original values in Table 15 of WSE). Note: The supply surplus (Difference) shown in the table is theoretical. Total groundwater actually supplied is the quantity necessary to make up the difference between LAS District demand and SCVWD supplies – both scheduled and Non-Contract deliveries. Hence, in practice, total supply always equals projected demand for any given year.

Based on SCVWD supplies and policies, Cal Water expects that 100 percent of Contract water will be delivered to the LAS District during a multiple dry year period. Cal Water also plans on pumping its LAS District groundwater supplies so that there will be no reduction in total supply available to meet water demands.

In the following multiple dry year period analysis, normal supply of Contract Water is expected to be available, but Non-Contract deliveries are not. This assumes that reservoir carryover storage in SWP, CVP, and local systems is average prior to the drought. At the beginning of a prolonged drought period, it is also assumed that there are adequate supplies of groundwater stored in the aquifers pumped.

Cal Water also assumes that in future multiple dry year periods, SCVWD would initially ask for voluntary reductions in supply requested by 10 percent. The magnitude of reductions requested could increase depending on the degree and duration of the drought. SCVWD considers its groundwater and imported supplies as one source and does not distinguish between water sources when asking for demand reductions from its retailers. As a result, retail agencies would be asked to reduce total demand, not just imported water use. Cal Water expects that its LAS District customers would be able to achieve these requested reductions in water use. In the LAS District, total annual water use per customer is expected to be lower than in previous dry year periods due to the greater investment in water conservation programs that would be implemented in coming years. As seen in the more recent drought from 2007-2009, the response by Cal Water customers in reducing water use would likely occur faster than in past droughts due to improved water conservation plans and better communications on the need to reduce water use.

Table 5.2-19 compares demand to supply for a 4 year multiple dry year period. For the first three years, the analysis conservatively assumes that demand would remain unchanged from a normal hydrologic year and that in the fourth year demand would decrease by 10 percent as does the delivery of SCVWD “contract” water. In all cases, the supply is projected to meet 100 percent of demand. It is noted that even if demand did not decrease by 10 percent in year 4 and SCVWD supply did, the increased groundwater supplied in 2040 would be 1,565 acre feet for a total of 3,963 acre feet, which can be pumped by the LAS District by increasing well operation times.

**LAND USE ALTERNATIVE A**

**TABLE 5.2-19 DEMAND AND SUPPLY COMPARISON - MULTIPLE DRY YEAR PERIOD (4 YEARS): CAL WATER LAS DISTRICT + LAND USE ALTERNATIVE A (AFY)**

	2015	2020	2025	2030	2035	2040
Total Demand: Years 1 - 3	13,641	12,812	13,522	14,231	14,942	15,654
SCVWD Supply	10,200	9,700	10,200	11,200	12,120	3,000
LAS Groundwater	3,441	3,378	3,855	3,831	3,888	3,984
Total Supply	13,641	13,078	14,055	15,031	16,008	16,984
<b>Difference</b>	<b>0</b>	<b>266</b>	<b>533</b>	<b>800</b>	<b>1,066</b>	<b>1,330</b>
Total Demand: Year 4	12,277	11,530	12,170	12,808	13,448	14,089
SCVWD Supply	9,180	8,730	9,180	10,080	10,908	11,700
LAS Groundwater	3,097	2,800	2,990	2,728	2,540	2,389
<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Note: afy = acre feet per year.

Source: Table 16 (Cal Water) of Water Supply Evaluation (Yarne & Associates), May 20, 2014. Demand years 1-3 is modified to reflect Land Use Alternative B; Supply years 1 – 3 as presented in WSE (i.e., original values in WSE table 16); Demand year 4 is modified to reflect Land Use Alternative B, and reduced 10% [per WSE assumptions]; SCVWD Supply year 4 is reduced 10% [per WSE assumptions]; LAS Groundwater supply year 4 is adjusted so that total supply matches demand [per assumptions in WSE]. Note: The supply surplus (Difference) shown in the table for years 1 – 3 is theoretical. Total groundwater actually supplied is the quantity necessary to make up the difference between LAS District demand and SCVWD supplies – both scheduled and Non-Contract deliveries. Hence, in practice, total supply always equals projected demand for any given year.

As summarized in the WSE, based on the items listed below, it can be reasonably concluded for the next 26 years of operation (2014 – 2040), the LAS District will have adequate water supplies to meet projected demands associated with Land Use Alternative A under the most conservative assumptions regarding potable water use for normal hydrologic, single dry year and multiple dry year conditions:<sup>48</sup>

- Adequacy of existing and planned supplies from SCVWD and LAS District groundwater.
- Plans to maintain existing wells and construct new ones to increase well production capacity.
- Plans to continue to purchase SCVWD Non-Contract water whenever it is made available and thereby increase basin groundwater storage for use during drought periods.
- In-place, ongoing and planned expanded water conservation programs and best management practices for reducing demand during normal hydrologic years, single dry year and multiple dry years in compliance with SB X7 7, CPUC and MOU requirements.
- Cal Water’s historic proven success in obtaining increased reductions in water use during multiple dry years by implementing its demand reduction program.
- Over 80 years of experience in continuously providing an adequate supply to meet demands during normal, single and multiple dry years in the LAS District.

<sup>48</sup>California Water Service Company. 2010. 2010 Urban Water Management Plan, Los Altos-Suburban District. June 2011.

## LAND USE ALTERNATIVE A

In summary, buildout of Land Use Alternative A would not result in insufficient water supplies from Cal Water under normal year conditions. In addition, during single dry year and multiple dry years, with the proposed and existing water conservation regulations and measures in place, buildout of Land Use Alternative A also would not result in a significant impact on water supply from Cal Water.

### San Jose Water Company

Table 5.2-20 shows the actual amount of water supplied to SJWC’s system from each source in 2010 and projections until 2035. Projected surface water is based on a long term average at SJWC. Groundwater and SCVWD Treated Water projections include SJWC’s plan to acquire additional water needed for development projects by installing production wells within the distribution system, by purchasing additional treated water from SCVWD and recycled water from the South Bay Water Recycling Program. The overall long-term strategy for groundwater as discussed in the 2003 SCVWD Integrated Water Resource Planning Study (IWRP) is to maximize the amount of water available in the groundwater basins to protect against drought and emergencies. SCVWD attempts to maximize use of treated local and imported water when available.

**TABLE 5.2-20 CURRENT AND PROJECTED SJWC WATER SUPPLY – INCLUDING CONSERVATION (AFY)**

	2010	2015	2020	2025	2030	2035
SCVWD Treated Water	64,783	72,636	74,344	76,086	77,864	79,677
SJWC Groundwater	51,107	57,187	58,340	59,516	60,716	61,940
SJWC Surface Water	15,968	12,080	12,080	12,080	12,080	12,080
<b>Total Demand</b>	<b>131,858</b>	<b>141,903</b>	<b>144,764</b>	<b>147,682</b>	<b>150,660</b>	<b>153,697</b>
Recycled Water	1,208	2,556	4,980	5,234	5,501	5,782
Additional Conservation	4,886	5,106	5,300	5,438	5,579	5,579
<b>Total with Conservation</b>	<b>137,952</b>	<b>149,565</b>	<b>155,044</b>	<b>158,354</b>	<b>161,740</b>	<b>165,058</b>

Note: afy = acre feet per year.

Source: Table 6 (SJWC) of Water Supply Evaluation (Yarne & Associates), May 15, 2014.

As previously noted, conservation is treated by SJWC as an additional source of water that offsets potable water demand. SJWC projects an increase in conservation through 2035 to over 5,500 afy conserved due to implementation of a more intensified conservation program. Conservation savings are anticipated resulting from increased use of ultra-low flush toilets, high efficiency toilets, low flow showerheads, water efficient appliances, individual conservation, and reduction in landscape irrigation requirements.

The SCVWD will continue to work with SJWC and other local water retailers to refine future projections of both treated water and groundwater use to ensure planning efforts are consistent. Groundwater from the Basin is a substantial source of water for SJWC’s entire service area. In the past five years, groundwater has been the source for approximately one third of SJWC’s total supply.



**LAND USE ALTERNATIVE A**

The City of Cupertino, as discussed previously, has leased the operation and maintenance of its water system to SJWC. Based on information from SJWC, approximately 98 percent of water supply for the City’s water system is purchased from SCVWD. SJWC periodically operates two city wells with a nominal pumping rate of 500 gpm each for a combined production of 1,000 gpm. For the 17 years that SJWC has been operating the Cupertino system, increases in demand have been met by increased purchases from SCVWD and are factored into the demand projections made by SJWC in Table 4.14-4. Therefore, the water supply analysis provided for SJWC also applies to the City of Cupertino system.

SJWC has multiple sources of water which provide a high degree of supply reliability. For added reliability, SJWC incorporates diesel fueled generators which will operate wells and pumps in the event of power outages. Because SCVWD supplies nearly 90 percent of SJWC’s annual water supply, SJWC depends on SCVWD’s supply reliability measures.

SJWC has an established well replacement program. The program identifies and replaces two wells per year based on numerous criteria, including a well’s production and observed water quality problems. The replacement of older wells and optimization of existing wells will allow SJWC to maintain its groundwater supply reliability. SCVWD’s policy is to achieve 95 percent reliability of supply during significant water shortages that occur during multiyear droughts. To accomplish this, SJWC can use less groundwater in certain areas or zones to achieve the overall balance which best meets SCVWD’s and SJWC’s operational goals.

*Normal, Single-Dry, and Multiple Dry Hydrologic Years*

Table 5.2-21 presents 2035 projected supply and demand during normal, single-dry, and multiple-dry years. These numbers were generated by multiplying the current and 2035 demands by the percentages of normal water supply SJWC experienced during the 1977 single year and the 1987-1992 multi-year droughts.

**TABLE 5.2-21 SJWC 2035 SUPPLY AND DEMAND -- NORMAL, SINGLE-DRY, AND MULTIPLE-DRY YEARS (ACRE FEET)**

2035 Supply and Demand	Normal Water Year	Single-Dry Water Year	Multiple-Dry Water Years				
			Year 1	Year 2	Year 3	Year 4	Year 5
Supply Total	153,697	109,279	152,929	149,701	123,572	121,882	110,816
Demand Total	153,697	109,279	152,929	149,701	123,572	121,882	110,816
<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Source: Table 15 (SJWC) of Water Supply Evaluation (Yarne & Associates), May 15, 2014.

If during a drought the SJWC should experience a shortage of supply, it will activate its current Water Shortage Contingency Plan. As noted in the WSE (May 20, 2014) prepared for the City, “*although there appears to be shortages during droughts, in reality voluntary and involuntary water conservation greatly reduces demand.*” The SJWC foresees meeting all future demands.

SJWC has multiple sources of water which provide a high degree of supply reliability. For added reliability, SJWC incorporates diesel fueled generators which will operate wells and pumps in the event of power outages. SJWC also has an established well replacement program. The program identifies and replaces two

## LAND USE ALTERNATIVE A

wells per year based on numerous criteria, including a well's production and observed water quality problems. The replacement of older wells and optimization of existing wells will allow SJWC to maintain its groundwater supply reliability.

The WSE includes detailed calculations of water demand from Land Use Alternative A, based on the land use in the SJWC (plus Cupertino Water) service area. As reported in the WSE, total projected water demand at build out of Land Use Alternative A for the SJWC and leased Cupertino Water service areas is estimated to be 165 afy without taking into account requirements for water conservation measures to be incorporated into new development. If these measures are accounted for, Land Use Alternative A water demand in the SJWC service area is 140 afy.

As previously noted, the total projected increase in the SJWC demand between 2015 and 2040 (25 years) for a normal hydrologic year is 14,831afy.<sup>49</sup> The Land Use Alternative A demand at buildout represents less than 1 percent of this total SJWC demand.

Since the SJWC 2010 UWMP projected increased demand is based on general growth in its service area, it is reasonable to assume that Land Use Alternative A demand is accounted for in the overall demand forecast as it constitutes a small percentage.

SJWC currently owns rights to receive water from the following sources: 1) groundwater - from the Santa Clara Valley Sub-basin; 2) imported surface water - from the SCVWD; and 3) local surface water - from Los Gatos Creek and Local Watershed.

Based on the foregoing reasons, there is sufficient SJWC water available to supply the demand projected for Land Use Alternative A for all existing demand and other projected increases in water demand for the next 26 years for normal, one dry year and multiple dry year periods.

In summary, buildout of Land Use Alternative A would not result in insufficient SJWC water supplies under normal year conditions. In addition, during single dry year and multiple dry years, with the proposed and existing water conservation regulations and measures in place, buildout of Land Use Alternative A would not result in a significant impact on SJWC water supply.

## Combined Water Supply

In conclusion, compliance with General Plan policies and strategies, applicable regulations, which are listed below, would further reduce potential impacts on water supplies for both retailers (SJWC and Cal Water). Future development within the Project Study Area would include the latest technology in water efficient plumbing fixtures and irrigation systems, as specified in the 2010 California Plumbing Code and the Cal Water's and SJWC's water efficiency measures relevant to new residential and commercial development.

---

<sup>49</sup> 156,734 afy minus 141,903 afy equals 14,831 afy; see Table 4.14-4 .

**LAND USE ALTERNATIVE A**

The General Plan includes policies and strategies that, once adopted, would ensure adequate water supplies are available for the residents of Cupertino. Within the Land Use/Community Design Element, Policy 2-76, Stevens Creek Park, would require the Santa Clara County Parks program to pursue the goal of connecting upper and lower Stevens Creek Parks. The County parks budget should pursue acquisition to the extent possible and emphasize passive park development in keeping with the pristine nature of the hillsides, and work to retain the watershed and storage basin properties of Stevens Creek. Policy 2-77, Continuous Open Space, would require the City to actively pursue inter-agency cooperation including with the SCVWD, which can help Cupertino carry out its open space policies by continuing to cooperate with local government to fund access and restoration projects. For example, SCVWD helped Cupertino prepare its natural flood plain policy for Stevens Creek between Stevens Creek Boulevard and the Stevens Creek reservoir, which has implications for ground water recharge and water quality. Policy 2-88, Park Design, would require the City to design parks to utilize the natural features and topography of the site and to keep long-term maintenance costs low. Strategy 1, Native Plants, would require the City to maximize the use of native plants and minimize water use. Strategy 2, Creek Enhancement, would require the City to, where possible, open and restore covered creeks and riparian habitat. Strategy 3, Demonstration Gardens, would require the City to consider the creation of demonstration gardens in some parks where feasible as a method of educating the public on sustainable landscaping design and techniques. Within the Environmental Resources/Sustainability Element, Policy 5-1, Principles of Sustainability, would require the City to incorporate the principles of sustainability into Cupertino's planning and development system in order to improve the environment, reduce greenhouse gas emission and meet the needs of the present community without compromising the needs of future generations. Policy 5-29, Coordination of Local Conservation Policies with Region-wide Conservation Policies, directs the City to continue coordination with regional water districts regarding water conservation efforts, including compliance with drought plans. Additionally, Policy 6-19, Water Conservation and Demand Reduction Measures, would direct the City to proactively reduce water use, consistent with State goals. Strategies 1 through 3 under this policy would, respectively, direct the City to develop and Urban Water Management Plan (UWMP), comply with the State's 20x20x20 Water Conservation Plan, and increase the use of recycled water where feasible. This coordination and compliance with regional and State conservation programs and requirements would serve to reduce water use and demand overall and especially during drought years, which would serve to ensure adequate water supplies under implementation of Land Use Alternative A. Buildout of Land Use Alternative A would not result in insufficient water supplies from either SJWC or Cal Water under normal, single-dry, or multiple dry years, and new or expanded entitlements would not be needed. Impacts from the implementation of Land Use Alternative A would be *less than significant*.

*Applicable Regulations*

- The Water Conservation Act of 2009 (Senate Bill SB X7 7)
- 2010 California Plumbing Code that would require water conserving fixtures
- Cupertino's Landscaping Ordinance - Municipal Code Chapter 14.15
- Cupertino's Water Conservation Ordinance - Municipal Code Chapter 15.32
- SJWC's, Cal Water's and SCVWD's water supply and demand management strategies and water shortage contingency plan identified in the UWMPs
- City of Cupertino General Plan

**Significance Without Mitigation:** Less than significant.

## LAND USE ALTERNATIVE A

---

**UTIL-2      Implementation of Land Use Alternative A would not require or result in the construction of new water facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.**

---

As discussed in Impact UTIL-1 above, the water demand associated with Land Use Alternative A would be served with available and planned water supplies provided by Cal Water and SJWC.

The General Plan includes policies and strategies that, once adopted, would ensure adequate water supplies are available for the residents of Cupertino. Within the Environmental Resources Element, Policy 5-26, Recycled Water, would direct the City to explore opportunities for the use of recycled water, including the potential expansion of an existing recycled water line from Sunnyvale to the Homestead Road area. This development of this facility could cause significant environmental effects. Policy 7-4, New Development Public Infrastructure Requirements, would require new development to provide or pay for adequate public facilities to accommodate growth; this policy could therefore result in the construction of new water facilities or the expansion of existing facilities to serve new development. Although creation of new infrastructure or facilities associated with these policies could create significant environmental effects, compliance with applicable regulations, as discussed below, as well as project-level environmental review would serve to evaluate and mitigate potential adverse physical effects.

In addition, future development under Land Use Alternative A would be located within already-developed urban areas and therefore, would connect to an existing water distribution system. Future development would be required to pay fees as outlined in Section 4.14.1.1, Environmental Setting, in Chapter 4.14, Utilities and Service Systems, of this Draft EIR, allocated to service, system maintenance and capital upgrades.

In summary, in accordance with the General Plan policies listed above and under Impact UTIL-1, and applicable regulations below, buildout of Land Use Alternative A would not result in water demands that would require the construction of new water treatment facilities or the expansion of existing facilities. As a result, impacts would be *less than significant*.

### *Applicable Regulations*

- The Water Conservation Act of 2009 (Senate Bill SB X7 7)
- 2010 California Plumbing Code that would require water conserving fixtures
- Cupertino's Landscaping Ordinance - Municipal Code Chapter 14.15
- Cupertino's Water Conservation Ordinance - Municipal Code Chapter 15.32
- SJWC's, Cal Water's and SCVWD's water supply and demand management strategies and water shortage contingency plan identified in the UWMPs

**Significance Without Mitigation:** Less than significant.

**LAND USE ALTERNATIVE A**

---

**UTIL-3      Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would not result in less than significant cumulative impacts with respect to water supply.**

---

This section analyzes potential impacts to water supply that could occur from Land Use Alternative A in combination with other reasonably foreseeable projects in the surrounding area. The geographic scope of this cumulative analysis is taken as the Cal Water and SJWC service areas. While Land Use Alternative A would contribute to an increased cumulative demand for water supply, the increased demand would not exceed the long-term supply under normal circumstances, as discussed above. Additionally, Cal Water, SJWC and SCVWD UWMPs determine that the water supply will be sufficient to accommodate future demand in the Cal Water and SJWC service areas through 2035, and by extension through 2040, under normal circumstances. In the multiple dry years, with Cal Water, SJWC and SCVWD drought contingency plans in place, any shortages would be managed through demand reductions and other measures such as increased groundwater pumping. In addition, with SB X7 7 and the State, county, and local water conservation ordinances in place, each jurisdiction would be required to conserve its water use through establishing water efficiency measures. In addition, the General Plan includes policies and strategies that, once adopted, would ensure adequate water supplies are available for the residents of Cupertino. Policy 5-29, Coordination of Local Conservation Policies with Region-wide Conservation Policies, directs the City to continue coordination with regional water districts regarding water conservation efforts, including compliance with drought plans. This coordination and compliance would serve to reduce water use and demand overall and especially during drought years. Additionally, Policy 6-19, Water Conservation and Demand Reduction Measures, would direct the City to proactively reduce water use, consistent with State goals. Strategies 1 through 3 under this policy would, respectively, direct the City to develop and Urban Water Management Plan (UWMP), comply with the State's 20x20x20 Water Conservation Plan, and increase the use of recycled water where feasible. In addition, pursuant to SB 610 and SB 221, WSAs would be prepared for large development projects prior to approval of each project to ensure adequate water supply for new development.

Overall, cumulative water demands would neither exceed planned levels of supply nor require building new water treatment facilities or expanding existing facilities beyond what is currently planned. In addition, future development would be required to pay development fees (i.e. construction taxes), which would offset the costs of system maintenance and capital upgrades to support the new development in the Cal Water and SJWC service areas. Therefore, the cumulative impact would be less than significant.

**Significance Without Mitigation:** Less than significant

## LAND USE ALTERNATIVE A

### Wastewater

---

**UTIL-4      Implementation of Land Use Alternative A would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.**

---

#### *San Jose/Santa Clara Water Pollution Control Plant*

The Cupertino Sanitary District (CSD) sewer collection system directs wastewater to the San Jose/Santa Clara Water Pollution Control Plant (SJ/SCWPCP), a joint powers authority. The San Francisco RWQCB established wastewater treatment requirements for the SJ/SCWPCP in an NPDES Permit (Order No. R2-2009-0038), adopted April 8, 2009 and effective June 1, 2009.<sup>50</sup> The NPDES Order sets out a framework for compliance and enforcement applicable to operation of the SJ/SCWPCP and its effluent, as well as those contributing influent to the SJ/SCWPCP. This NPDES Order currently allows dry weather discharges of up to 167 million gallons per day (mgd) with full tertiary treatment, and wet weather discharges of up to 271 mgd with full tertiary treatment.

As the dischargers named in the NPDES Permit, the City of San Jose and the City of Santa Clara implement and enforce pretreatment programs for effluent discharged into Artesian Slough, tributary to Coyote Creek and South San Francisco Bay. The dischargers conduct programs to educate residents, professionals, and business owners about the proper use of their sewer and drainage systems in order to help preserve their own facilities and to help protect the environment.

The CSD is one of six additional satellite collection systems that discharge into the SJ/SCWPCP. Each satellite collection system is responsible for an ongoing program of maintenance and capital improvements for sewer lines and pump stations within its respective jurisdiction in order to ensure adequate capacity and reliability of the collection system. The responsibilities include managing overflows, controlling Infiltration and Inflow (I&I) and implementing collection system maintenance.

The SJ/SCWPCP, serving as the Discharger, and has an approved pretreatment program, which include approved local limits, as required by prior permits. The previous permit required the Discharger to evaluate its local limits –such as those established by the CSD –to ensure compliance with updated effluent limits. These local limits are approved as part of the pretreatment program required by this permit. The SJ/SCWPCP is required to monitor the permitted discharges in order to evaluate compliance with permit conditions.

With continued compliance with applicable regulations listed below, projected wastewater generated from potential future development under Land Use Alternative A would not exceed the wastewater treatment requirements or capacity of the SJ/SCWPCP. Therefore, the wastewater treatment requirements of the San

---

<sup>50</sup> San Francisco RWQCB NPDES Permit (Order No. R2-2009-0038) for SJ/SCWPCP.  
[http://www.waterboards.ca.gov/rwqcb2/board\\_info/agendas/2009/april/SJSC\\_FinalOrder%20-%2004-09.pdf](http://www.waterboards.ca.gov/rwqcb2/board_info/agendas/2009/april/SJSC_FinalOrder%20-%2004-09.pdf)

**LAND USE ALTERNATIVE A**

Francisco RWQCB would not be exceeded due to buildout of Land Use Alternative A, resulting in a *less-than-significant* impact.

*City of Sunnyvale Water Pollution Control Plant*

The Sunnyvale sewer collection system, which serves a small area of the Project Component locations along Stevens Creek Boulevard, directs wastewater to the Sunnyvale Water Pollution Control Plant (SWPCP). The San Francisco RWQCB established wastewater treatment requirements for the SWPCP in an NPDES Permit (Order No. R2-2009-0061), adopted August 12, 2009 and effective October 1, 2009. Discharge Prohibition III.C of the permit states the average dry weather effluent flow shall not exceed 29.5 mgd. Exceeding the SWPCP's average dry weather flow design capacity (29.5 mgd) may result in lowering the reliability of achieving compliance with water quality requirements. The prohibition against exceeding design capacity is meant to ensure effective wastewater treatment by limiting flows to the SWPCP's design treatment capability.

Treated wastewater from the SWPCP flows into Moffett Channel, which is a tributary to the Guadalupe Slough and the South San Francisco Bay. The SWPCP has an average dry weather flow design capacity of 29.5 mgd and a 40 mgd peak wet weather flow capacity. The average dry weather flow discharged to Moffett Channel during the months of June, July, August, and September in 2006-2008 was 9.4 mgd. The average flow discharged to Moffett Channel was 11.8 mgd during 2006 - 2008, the average wet weather flow (October-May) discharged to Moffett Channel was 13.1 mgd during 2006 - 2008, and the maximum daily effluent flow rate was 35 mgd during 2006 -2008<sup>51</sup>.

All public entities that own or operate sanitary sewer systems greater than one mile in length – including the CSD and the SJ/SCWPCP – that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California are required to comply with the terms of State Water Resources Control Board (SWRCB) Order. No. 2006-0003-DWQ, as amended by Order No. WQ 2008-0002-EXEC. These public entities are considered “enrollees” of the statewide permit, as amended. One purpose of the statewide SWRCB permit is to prevent sewer system overflows (SSOs). Major causes of SSOs include: grease blockages, root blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, excessive storm or ground water inflow/infiltration, debris blockages, sanitary sewer system age and construction material failures, lack of proper operation and maintenance, insufficient capacity and contractor-caused damages. Many SSOs are preventable with adequate and appropriate facilities, source control measures and operation and maintenance of the sanitary sewer system. To facilitate proper management of sanitary sewer systems, each Enrollee must develop and implement a system-specific Sewer System Management Plan (SSMP).

With continued compliance with applicable regulations listed below, projected wastewater generated from potential future development under Land Use Alternative A would not exceed the wastewater treatment requirements or capacity of the SWPCP. Therefore, the wastewater treatment requirements of the San

---

<sup>51</sup> San Francisco RWQCB NPDES Permit (Order No. R2-2009-0061 )for City of Sunnyvale WPCP.  
[http://www.waterboards.ca.gov/rwqcb2/board\\_decisions/adopted\\_orders/2009/R2-2009-0061.pdf](http://www.waterboards.ca.gov/rwqcb2/board_decisions/adopted_orders/2009/R2-2009-0061.pdf)

## LAND USE ALTERNATIVE A

Francisco RWQCB would not be exceeded due to buildout of Land Use Alternative A, resulting in a *less-than-significant* impact.

### *Applicable Regulations*

- San Francisco RWQCB NPDES Permit (Order No. R2-2009-0038) for SJ/SCWPCP
- San Francisco RWQCB NPDES Permit (Order No. R2-2009-0061) for SWPCP
- SWRCB Order No. 2006-0003-DWQ for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems
- SWRCB Order No. WQ 2008-0002-EXEC revising SWRCB Order No. 2006-0003-DWQ
- Chapter 15.20 of the City's Municipal Code establishing standards for individual onsite sewage disposal systems consistent with RWQCB standards.
- Cupertino Sanitary District Operations Code
- Cupertino Sanitary District Sewer System Management Plan

**Significance Without Mitigation:** Less than significant.

---

**UTIL-5      Implementation of Land Use Alternative A would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.**

---

Buildout of Land Use Alternative A would have a significant impact if it would result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would have a significant effect on the environment. As discussed above in Impact UTIL-4 above and Impact UTIL-6 below, future demands from Land Use Alternative A would not exceed the design or permitted capacity of the wastewater treatment plants serving the Project Study Area (i.e. SJ/SCWPCP and SWPCP). The potential impacts to the collection system would be addressed through applicable General Plan policies and measures as identified in Impact UTIL-6 below. In addition, the CSD's requirement for new projects to prepare a hydraulic model and, if necessary, improve collection system capacity would ensure that demands from individual projects in the Project Study Area would not significantly impact the wastewater collection service. The General Plan includes policies and strategies that, once adopted, would ensure adequate wastewater collection and treatment facilities are available for the residents of Cupertino. Policy 5-26, Recycled Water, would direct the City to continue to explore opportunities for the use of recycled water, including the potential expansion of an existing recycled water line from Sunnyvale to the Homestead Road area. Policy 5-22, Storm Drainage Management and Conformance with Watershed-Based Planning, would direct the City to encourage development projects to follow watershed-based planning and zoning by examining the project in the context of the entire watershed area. Strategy 1, Storm Drainage Master Plan, would direct the City to develop and maintain a Storm Drainage Master Plan, which would result in the creation of new wastewater treatment facilities or conveyance systems. Additionally, Policy 7-4, New Development Public Infrastructure Requirements, would require new development to provide or pay for adequate public facilities to accommodate growth; this policy could therefore result in the construction of new wastewater facilities or the expansion of existing facilities to serve new development. The development of treatment facilities or conveyance systems associated with recycled water, wastewater, and/or improved



## LAND USE ALTERNATIVE A

stormwater systems could cause significant environmental effects; however, compliance with applicable regulations, as discussed below, and project-level environmental review would serve to evaluate and mitigate potential adverse physical effects. As a result, the impact would be *less than significant*.

### *Applicable Regulations*

- San Francisco RWQCB NPDES Permit (Order No. R2-2009-0038) for SJ/SCWPCP
- San Francisco RWQCB NPDES Permit (Order No. R2-2009-0061) for SWPCP
- SWRCB Order No. 2006-0003-DWQ for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems
- SWRCB Order No. WQ 2008-0002-EXEC revising SWRCB Order No. 2006-0003-DWQ
- Chapter 15.20 of the City's Municipal Code establishing standards for individual onsite sewage disposal systems consistent with RWQCB standards.
- Cupertino Sanitary District Operations Code
- Cupertino Sanitary District Sewer System Management Plan

**Significance Without Mitigation:** Less than significant.

---

**UTIL-6      Implementation of Land Use Alternative A would result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.**

---

Buildout of Land Use Alternative A would have a significant impact if future projected demand exceeds the wastewater service capacity of the SJ/SCWPCP or SWPCP, or the CSD or City of Sunnyvale collection systems.

### *Collection Systems*

#### Cupertino Sanitary District

Specific capacity deficiencies for specific sewer lines were identified in the current Cupertino General Plan update, including sewer lines serving the City Center, and lines on Stelling Road and Foothill Boulevard. City Center is the general area at the southeast quadrant of the intersection of De Anza Blvd and Stevens Creek Blvd. Trunk lines serving the City Center identified as flowing either at or above capacity include those in Stevens Creek Boulevard between Randy Lane and Wolfe Road, and those in Wolfe Road south of I-280 and between Pruneridge Avenue and I-280. An additional trunk line, consisting of 10-inch to 18-inch sewer lines located in Randy Lane, Wheaton Drive, Denison Avenue and Norwich Avenue, was also identified as operating at or above capacity in a 2000 flow study performed as part of the City Center development. Capacity improvements have been made to the lines on Wolfe Road. The other lines identified as providing insufficient capacity for existing flows have not been upgraded to date. New developments that substantially increase wastewater capacity, including projects potentially associated with Land Use Alternative A buildout, could result in wastewater flows that exceed the collection system capacity. To address this possibility, the CSD would require developers of substantial projects to demonstrate that

## LAND USE ALTERNATIVE A

adequate capacity exists, or to identify the necessary mitigations. The CSD defines substantial projects as those projected to generate substantial increases in wastewater. In these situations, the developer is required to prepare a hydraulic model of the pipe system between the project and the downstream limits of CSD facilities. To demonstrate capacity is available, the model must show that existing pipes flow less than two-thirds full when the new development wastewater flow is added to existing flows. In the event that adequate capacity is not available, improvements would need to be identified and constructed to provide a system that flows at less than two-thirds full. The requirement to prepare a hydraulic model and, if necessary, improve capacity is a standard condition of the CSD required for new development, independent of Land Use Alternative A. As a result, impacts on the CSD collection system would be *less than significant*.

Furthermore, the CSD is currently performing a capacity analysis of their entire collection system. Improvements required to mitigate system deficiencies as well as to accommodate future development will be identified and added to their Capital Improvement Program (CIP). Capacity fees will then be developed to fund the CIP. New development that increases wastewater transmission and treatment demand would be required to contribute towards system capacity enhancement improvements through payment of the capacity fee. In this manner, CSD would be responsible for upgrading their system rather than placing the responsibility on the developers of the largest wastewater generators, as is currently the case. If and when this fee is developed and implemented, it will create a more reliable and equitable mitigation for new development.

### City of Sunnyvale

Buildout of the portion of the Heart of the City Special Area east of Finch Avenue and south of Stevens Creek Boulevard could result in wastewater flows to the City of Sunnyvale that exceed the downstream pipe capacity if large office developments are allowed. Trunk service mains would require capacity enhancing improvements if large office users are allowed in the Cupertino service area.

Development in this area is guided by the Heart of the City Specific Plan. This Specific Plan does allow office uses in the entire corridor with appropriate mitigation measures. However, development adjacent to the single family residences on the east side along Stevens Creek Boulevard would not be large office campuses due to the small size of the properties and the need to maintain compatibility with adjoining single-family residential uses. Offices allowed in this area would be smaller, like attorney's offices or small office spaces. Modification of the Heart of the City Specific Plan to allow large office space in the area would require further environmental review, which would address sanitary sewer capacity issues, as well as neighborhood compatibility. Without modification of the Heart of the City Specific Plan, the City of Sunnyvale could continue to provide system capacity for future growth in its Cupertino service area. As a result, impacts on the City of Sunnyvale collection system would be *less than significant*.

### *Treatment Systems*

#### San Jose/Santa Clara Water Pollution Control Plant

The CSD calculated wastewater flow associated with the 2020 General Plan development allocations, together with existing flows at the time the General Plan was approved, to be 7.2 mgd. The projected additional wastewater generated by buildout of Land Use Alternative A, over and above the current General

## LAND USE ALTERNATIVE A

Plan flows, is calculated to be less than 0.13 mgd. Adding the Land Use Alternative A buildout flows (less than 1.45 mgd) to the current General Plan flow (7.2 mgd) results in a total wastewater generation of less than 7.33 mgd. The total contractual treatment allocation with the SJ/SCWPCP is 7.8 mgd. Thus, upon buildout of Land Use Alternative A, 0.47 mgd treatment capacity would be available. As a result, impacts on the contractual treatment capacity at SJ/SCWPCP would be *less than significant*.

### City of Sunnyvale

The SWPCP has a capacity of 29.5 mgd and is currently operating at a daily treatment rate of less than 15 mgd. The projected wastewater generation for the entire Heart of the City Special Area is 0.44 mgd or less. The portion of this Special Area served by the SWPCP is 4 percent of the total area of the Special Area. Assuming a uniform use distribution across the entire Special Area, the wastewater flow to the City of Sunnyvale would be 0.02 mgd or less. The projected increase amounts to 0.12-percent or less of the current daily treatment flow of 15 mgd, and 0.06 percent or less of the SWPCP's dry weather permitted capacity. Thus, the projected increase in wastewater is within the available capacity, and impacts on the SWPCP would be *less than significant*.

### *Summary*

The General Plan includes policies and strategies that, once adopted, would ensure adequate wastewater collection and treatment facilities are available for the residents of Cupertino. Within the Public Utilities, Infrastructure, and Services Element, Policy 7-2, Sunnyvale Treatment Plant, would require the City to consider the impacts on the Sunnyvale sanitary sewer system if significant office uses are proposed in the east Stevens Creek Boulevard area. Policy 7-3, Sewer Tributary Lines, would require the City to recognize that new high discharge users in the Vallco area and the Stevens Creek Boulevard and Blaney Avenue areas will require private developers to pay for the upgrading of tributary lines. Strategy 1, Cost Estimates, would require the City to develop preliminary cost estimates for the upgrading of the sewer tributary lines to discuss with prospective developers.

While the current General Plan recognizes existing system deficiencies in both the CSD and City of Sunnyvale wastewater service areas and includes the following policies to address this issue, Land Use Alternative A is within the current contractually available treatment capacity at SJ/SCWPCP and impacts would be *less than significant*.

### *Applicable Regulations*

- SWRCB Order No. 2006-0003-DWQ for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems
- SWRCB Order No. WQ 2008-0002-EXEC revising SWRCB Order No. 2006-0003-DWQ
- Chapter 15.20 of the City's Municipal Code establishing standards for individual onsite sewage disposal systems consistent with RWQCB standards.
- Cupertino Sanitary District Operations Code
- Cupertino Sanitary District Sewer System Management

**Significance Without Mitigation:** Less than significant.

## LAND USE ALTERNATIVE A

---

**UTIL-7      Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to wastewater treatment.**

---

This section analyzes potential impacts related to wastewater treatment that could occur from Land Use Alternative A in combination with reasonably foreseeable growth within the SJ/SCWPCP and SWPCP service areas.

Buildout of Land Use Alternative A would generate a minor increase in the volume of wastewater delivered for treatment at SJ/SCWPCP and SWPCP. This increase represents less than 1 percent of the available treatment capacity at the SJ/SCWPCP and SWPCP, and it would occur incrementally over a period of 26 years. Both the SJ/SCWPCP and SWPCP serving the Project Study Area currently use less than their design and permitted wastewater treatment capacity. Cumulative wastewater treatment demand over Land Use Alternative A buildout period – based on the recent trends of diminishing wastewater treatment demand and the generally projected population growth in the service areas – is far below the excess capacity of the SJ/SCWPCP and SWPCP. Because the cumulative demand would not substantially impact the existing or planned capacity of the wastewater treatment systems, which have sufficient capacity for wastewater that would be produced by Land Use Alternative A, the construction of new wastewater treatment facilities would not be necessary.

Additionally, future development under the Land Use Alternative A would be subject to the development review process and would be required to mitigate any effects to wastewater treatment services on a project-by-project basis. Future development would also be required to comply with all applicable regulations and ordinances protecting wastewater treatment services as described in Section 4.14.2.1, Environmental Setting, in Chapter 4.14, Utilities and Service Systems.

Wastewater from cumulative projects would be treated according to the wastewater treatment requirements documented in the respective NPDES permits for the SJ/SCWPCP and SWPCP, and enforced by the San Francisco RWQCB.

Therefore, cumulative projects would not exceed wastewater treatment requirements, and cumulative impacts to sanitary wastewater service would be *less than significant*.

**Significance Without Mitigation:** Less than significant

## Solid Waste

---

**UTIL-8      Implementation of Land Use Alternative A would not be served by a landfill(s) with sufficient permitted capacity to accommodate the alternative's solid waste disposal needs.**

---

Existing and potential development under Land Use Alternative A would not be served by landfill sites with sufficient permitted capacity to accommodate the city's solid waste disposal needs, based on existing contractual agreements. As described in Section 4.14.3.1, Environmental Setting, in Chapter 4.14, Utilities

**LAND USE ALTERNATIVE A**

and Service Systems, of this Draft EIR, 99 percent of all solid waste generated in Cupertino – which includes City [Recology] hauled waste, as well as self-hauled waste from private projects within the City -- is disposed at four different landfill facilities. One hundred (100) percent of City [Recology] hauled waste – which accounts for 92 percent of the total waste volume – goes to one landfill (Newby Island). Table 5.2-22 compares the remaining capacity, maximum daily and annual capacity, and estimated closure date for each facility.

**TABLE 5.2-22 LANDFILLS EXISTING CAPACITY AND ESTIMATED CLOSURE DATE**

Landfill Facility	Remaining Capacity (cubic yard)	Daily Capacity (tons/day)	Estimated Closure Date
Newby Island Landfill	18,274,953 (as of 10/16/2006)	4,000	6/1/2025 <sup>a</sup>
Guadalupe Sanitary Landfill	11,055,758 (as of 1/1/2011)	1,300	1/1/2048
Monterey Peninsula Landfill	48,560,000 (as of 12/31/2004)	3,500	2/28/2107
Altamont Landfill	45,720,000 (as of 8/22/2005)	1,500	1/1/2025

a. The agreement between the Newby Island Landfill and the City of Cupertino ends in 2023.  
Source: CalRecycle, 2014.

In 2012, the city of Cupertino’s actual disposal rate for residents was 2.6 pounds per person per day (PPD) with the target of 4.3 PPD. For employees, the disposal rate was 4.3 PPD with the target rate of 8.1 PPD.<sup>52</sup> The City of Cupertino’s disposal rates for both residents and employees have been below target rates and steadily decreasing since 2007.<sup>53</sup>

The per capita disposal rate target is also known as “the 50 percent equivalent per capita disposal target.” It is the amount of disposal Cupertino would have had during the CalRecycle-designated base period (2003 – 2006) if it had been exactly at a 50 percent diversion rate. It is calculated by CalRecycle using the average base period per capita generation for Cupertino (in pounds), then dividing this generation average in half to determine the 50 percent equivalent per capita disposal target. The target is an indicator for comparison with that jurisdiction’s annual per capita per day disposal rate beginning with the 2007 program year.

As shown on Table 5.2-23, at 2040 buildout of Land Use Alternative A, it is anticipated that the city will generate solid waste at a rate of 98,305 tons/year, which equates to approximately 269 tons/day. The anticipated amount of solid waste would have a less-than-significant impact with regard to daily per capita disposal targets, but two of four currently-used landfill facilities that receive the majority of the city’s solid waste are likely to reach their permitted maximum capacities by 2040 and will no longer be available. The Newby Island Landfill facility will reach its capacity in 2025 (the City’s agreement with the facility ends earlier, in 2023), and Altamont Landfill also is anticipated to reach its capacity in 2025, as shown in the Table

<sup>52</sup> CalRecycle, “Jurisdiction per Capita Disposal Trends: Cupertino,” <http://www.calrecycle.ca.gov/>, accessed on May 15, 2014.

<sup>53</sup> CalRecycle, “Jurisdiction per Capita Disposal Trends: Cupertino,” <http://www.calrecycle.ca.gov/>, accessed on May 15, 2014.

## LAND USE ALTERNATIVE A

5.2-20. Since the Newby Island Landfill facility currently accepts 92 percent of the solid waste generated by Cupertino, the City must find an alternative to this landfill when it closes in approximately ten years.

**TABLE 5.2-23 PROJECTED RESIDENTS, EMPLOYMENT, AND WASTE GENERATION AT 2040 BUILDOUT – LAND USE ALTERNATIVE A**

	2012 <sup>a</sup>	Existing	2040 Buildout
Residents	59,022	58,302	63,783
Employment	35,438	27,387	32,593
Residential Disposal Rate Target (pounds/person/day)	4.3	4.3	4.3
Employee Disposal Rate Target (pounds/person/day)	8.1	8.1	8.1
Maximum Disposal (tons/year)	98,704	86,237	98,305
Actual Disposal (tons/year)	27,652	-	-

a. The latest data on the actual disposal information was from 2012.  
Source: CalRecycle, 2014.

Anticipated rates of solid waste disposal would have a less-than-significant impact in regard to target disposal rates, and the City would continue its current recycling ordinances and zero-waste policies. Nevertheless, the 2023 termination of the agreement between the Newby Island Landfill facility, as well as the facility’s estimated closure date in 2025 would result in insufficient solid waste disposal capacity at buildout of Land Use Alternative A, resulting in a *significant* impact.

### Mitigation Measure

The following mitigation measure is recommended to minimize the potential for implementation of Land Use Alternative A to not be served by a landfill(s) with sufficient permitted capacity to accommodate Land Use Alternative A’s solid waste disposal needs:

**Mitigation Measure UTIL-8:** The City shall continue its current recycling ordinances and zero-waste policies in an effort to further increase its diversion rate and lower its per capita disposal rate. In addition, the City shall monitor solid waste generation volumes in relation to capacities at receiving landfill sites to ensure that sufficient capacity exists to accommodate future growth. The City shall seek new landfill sites to replace the Altamont and Newby Island landfills, at such time that these landfills are closed.

Implementation of Mitigation Measure UTIL-8 would serve to ensure sufficient capacity of landfill is available for future development under Land Use Alternative A. In addition, the trend of lower per capita solid waste volumes would continue to reduce the amount of waste disposed at landfills overall, which may delay the estimated closure date of landfill sites, including the Newby Island Landfill facility.

**Significance With Mitigation:** Less than significant.

**LAND USE ALTERNATIVE A**

---

**UTIL-9                    Land Use Alternative A would not be out of compliance with federal, State, and local statutes and regulations related to solid waste.**

---

As discussed in Section 4.14.3 of this Draft EIR, the City has complied with State requirements to reduce the volume of solid waste through recycling and reuse of solid waste. The City's per capita disposal rate is below the target rate established by CalRecycle. Cupertino adopted a Source Reduction and Recycling Element (SRRE) and a Household Hazardous Waste Element (HHWE) in compliance with the California Integrated Waste Management Act. The City has gone beyond the SRRE by implementing several programs, including the City's and Recology's organics or food waste collection program and Environmental Recycling Day events offered to residents 3 times per year by Recology. Implementation of the referenced strategies, plans, and programs, as well as the Climate Action Plan that launched in May 2014, will enable the city to meet the 75 percent of solid waste by the year 2020. These programs will be sufficient to ensure that future development in Cupertino would not compromise the ability to meet or perform better than the State mandated target.

Construction and demolition associated with future development under Land Use Alternative A would generate significant solid waste. At least 60 percent of this waste, however, would be expected to be diverted from landfill disposal by recycling in accordance with the City's construction debris ordinance. Therefore, future development would comply with applicable statutes and regulations and the impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**UTIL-10                    Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would result in significant cumulative impacts with respect to solid waste.**

---

The buildout of Land Use Alternative A will increase the quantity of solid waste for disposal. Although AB 939 established a goal for all California cities to provide at least 15 years of ongoing landfill capacity, growth from other cities in the region may exceed that which was taken into account when calculating landfill capacity. Also, because the Newby Island Landfill facility, which takes approximately 92 percent of the City's solid waste, is expected to close in 2025, Cupertino may eventually experience insufficient landfill capacity to accommodate existing or increased population and employment levels.

As shown in the Chapter 4.11, Population and Housing, of this Draft EIR, projected growth in Cupertino under Land Use Alternative A is less than that anticipated by regional projections. The 2040 buildout of Land Use Alternative A would add 7,827 fewer residents than ABAG's 2040 projection for Cupertino, and the 2040 buildout employment levels and housing units would also be below regional projections. Table 5.2-24 compares the 2040 buildout of Land Use Alternative A and the regional growth scenario.

## LAND USE ALTERNATIVE A

**TABLE 5.2-24 BUILDOUT AND REGIONAL GROWTH COMPARISON – LAND USE ALTERNATIVE A**

	ABAG Projection	2040 Buildout	Difference
Residents	71,700	63,873	-7,827
Housing Units	24,180	23,294	-886
Employment	33,260	32,593	-667

Source: Association of Bay Area Governments, Plan Bay Area, Projections 2013, Subregional Study Area Table, Santa Clara County; PlaceWorks, 2014.

Although implementation of existing waste reduction programs and diversion requirements discussed above would reduce the potential for exceeding existing capacities of landfills, the potential lack of landfill capacity for disposal of solid waste would have a significant impact. However, with incorporation of the Mitigation Measure UTIL-8, this impact related to the potential for Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, to result in significant cumulative impacts with respect to solid waste would be *less than significant*.

**Significance With Mitigation:** Less than Significant.

## Energy Conservation

**UTIL-11 Implementation of Land Use Alternative A, in combination with past, present, and reasonably foreseeable projects, would not result in a substantial increase in natural gas and electrical service demands, and would not require new energy supply facilities and distribution infrastructure or capacity enhancing alterations to existing facilities.**

The Land Use Alternative A, upon buildout, will result in 1,040,231 square feet of additional office space, 703,431 square feet of additional commercial space, 600 additional hotel rooms, and 1,895 additional housing units. The proposed increase in development would result in a long-term increase in energy demand, associated primarily with the operation of lighting and space heating/cooling in the added building space. In addition, construction activities associated with development require the use of energy (e.g. electricity and fuel) for various purposes such as the operation of construction equipment and tools, as well as excavation, grading, demolition, and vehicle travel.

Future new development would be constructed using energy efficient modern building materials and construction practices. The new buildings also would use new modern appliances and equipment, and would comply with the current CALGreen Building Code, which would require the use of recycled construction materials, environmentally sustainable building materials, building designs that reduce the amount of energy used in building heating and cooling systems as compared to conventionally built structures, and landscaping that incorporates water efficient irrigation systems.

The General Plan includes policies and strategies that, once adopted, would ensure energy conservation is practiced in Cupertino. Within the Environmental Resources/Sustainability Element, Policy 5-1, Principles



**LAND USE ALTERNATIVE A**

of Sustainability, would require the City to incorporate the principles of sustainability into Cupertino's planning and development system in order to improve the environment, reduce greenhouse gas emission and meet the needs of the present community without compromising the needs of future generations. Policy 5-3, Conservation and Efficient Use of Energy Resources, would require the City to encourage the maximum feasible conservation and efficient use of electrical power and natural gas resources for new and existing residences, businesses, industrial and public uses. Strategy 1, Alternate Energy Sources, would require the City to continue to ensure the ease of access to, and use of, solar energy and other alternate, renewable energy resources for all new and significantly renovated private and public buildings through effective policies, programs and incentives. Strategy 2, Comprehensive Energy Management Plan, would require the City to prepare and implement a comprehensive energy management plan for all applicable public facilities and equipment, to achieve the energy goals established in the City's municipal Climate Action Plan, and to embed this plan into the City's Environmentally Preferable Procurement Policy to ensure measures are achieved through all future procurement and construction practices. Strategy 4, Energy Efficient Replacements, would require the City to continue to use life cycle cost analysis, to identify City assets for replacement with more energy efficient technologies. Strategy 5, Incentive Program, would require the City to support incentive programs that include such items as reduced permit fees for building projects that exceed the City's Green Building Ordinance and CalGreen, continue to promote other incentives from the state, County and Federal Governments for improving energy efficiency and expanding renewable energy installations by posting information regarding incentive, rebate and tax credit programs on the City's web site. Strategy 6, Solar Access Standards, would require the City to continue to ensure compliance with the State of California Subdivision Map Act solar access standards in order to maximize natural heating and cooling opportunities for future residences and businesses, and to encourage the inclusion of additional shade trees and landscaping for energy efficiency. Strategy 8, Energy Cogeneration Systems, would require the City to encourage the use of energy cogeneration systems through the provision of an awareness program targeting the larger commercial and industrial users and public facilities. Strategy 9, Regulation of Building Design, would require the City to ensure designers, developers, applicants and builders meet the City's Green Building Ordinance and CalGreen, and encourage architects, building designers and contractors to exceed these requirements for new projects through the provision of incentives, to encourage either passive solar heating and/or dark plaster interior with a cover for swimming pools, cabanas and other related accessory uses where solar access is available, to encourage the use of renewable energy sources where feasible, and continue to offer energy audits and/or subvention programs that also advance community adoption of alternative energy technologies. Strategy 10, Use of Discretionary Development Permits (Use Permits), would require the City to require, as conditions of approval for new and renovated projects, the provision of energy conservation/efficiency applications, aligned with the City's Green Building Ordinance and CalGreen. Strategy 11, Energy Efficient Transportation Modes, would require the City to continue to encourage fuel-efficient transportation modes such as "clean" multi-modal public transit, car and vanpooling, flexible work hours, safe routes to schools, and pedestrian and bicycle paths through community education and training, infrastructure investment, and financial incentives, including commuter benefits programs. Policy 5-4, Green Building Design, would require the City to set standards for the design and construction of energy and resource conserving/efficient buildings (Green Building Design). Strategy 1, "Green Building" Program, would require the City to periodically review and revise the City's Green Building Ordinance to ensure alignment with state CalGreen requirements for all major private and public projects that ensure reduction in energy and water use for new development through site selection and building design. Strategy 2, Building Energy Audits, would require the City to

## LAND USE ALTERNATIVE A

continue to offer and leverage regional partners' programs to conduct building energy assessments for homes, commercial, industrial and city facilities, and recommend improvements that lead to energy and cost savings opportunities for participants.

With the implementation of these General Plan Policies and the CALGreen Building Code, significant energy conservation and savings would be realized in future new development. Even with the energy saving practices in place, it is possible that new electrical switches and/or transformers might be required to handle additional loads. However, potential environmental impacts from possible new electrical switches/transformers are not anticipated to be significant and, if necessary, would be addressed in project-specific reviews. In addition, buildout of Land Use Alternative A would not significantly increase energy demands in the context of the 70,000 square mile PG&E service territory for electricity and natural gas generation, transmission and distribution. As a result, new energy supply facilities and distribution infrastructure or capacity enhancing alterations to existing facilities would not be required. Therefore, with consideration of the applicable regulations listed below, impacts related to energy conservation would be *less than significant*.

### *Applicable Regulations*

- Federal Energy Independence and Security Act of 2007
- Federal Energy Policy Act of 2005
- California Building Code (Title 24, CCR)
- California 2006 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608)
- Governor's Green Building Executive Order (S-20-04)
- City of Cupertino General Plan, Environmental Resources/Sustainability Element
- City of Cupertino Municipal Code, Chapter 16.58, Green Building Standards

**Significance Without Mitigation:** Less than significant.

## 5.2.8 RELATIONSHIP OF THE ALTERNATIVE TO THE OBJECTIVES

As discussed in Section 3.5, Project Objectives, of Chapter 3, Project Description, of this Draft EIR, the primary purpose of this the proposed Project is to: 1) replenish, re-allocate, and increase citywide office, commercial, hotel, and residential development allocations in order to plan for anticipated future growth while, sustaining the community's character, goals, and objectives; 2) consolidate development requests by several property owners for amendments to the General Plan, by reviewing seven Study Areas; and 3) provide a full range of housing to meet the needs of all segments of the city's population.

The City has also drafted a 2040 Community Vision and Guiding Principles as part of the overall proposed Project, which builds upon the framework of the current General Plan's vision, goals, and guiding principles, and reflects the community's desires for Cupertino's future. The proposed Project is based on the vision for the city 1) to be a balanced community with: quiet and attractive residential neighborhoods; exemplary parks and schools; accessible open space areas, hillsides, and creeks; and a vibrant, mixed-use "Heart of the City;" and 2) to be safe, friendly, healthy, connected, walkable, bikeable, and inclusive for all residents and workers, with ample places and opportunities for people to interact, recreate, innovate and collaborate. This vision statement is included in the proposed General Plan and outlines the objectives of the proposed Project.

Under Land Use Alternative A, the development allocation would be replenished for office, hotel, and residential land uses as shown in Table 5.2-1. Therefore, implementation of this Alternative would not increase citywide commercial development. Although office, hotel and residential development would be replenished under this Alternative, the replenishment would be less than that of the proposed Project. Conversely, implementation of Land Use Alternative A would accommodate the RHNA for the 2014-2022 planning period to allow the city to meet its fair share housing obligation of 1,064 units. Because this Alternative would not result in the replenishment of commercial development allocation, not all of the Project Objectives, identified in Section 5.3, Project Objectives, of Chapter 5.0, Alternatives, of this Draft EIR, would be to the same degree of that of the proposed Project; however, as shown in Table 5-1, this Alternative does generally meet all of the project objectives.

## **LAND USE ALTERNATIVE A**

**LAND USE ALTERNATIVE B**

**5.3 LAND USE ALTERNATIVE B**

Land Use Alternative B would focus on several changes to the current framework of growth through increased heights and residential densities, as well as increased development allocations throughout the proposed Special Areas, including concentrated development on designated Gateways/Nodes. Land Use Alternative B would largely continue the policies of the current General Plan, while making development allocation and boundary changes throughout the buildout horizon year of 2040. The amended General Plan policies for Alternative B are shown in Appendix I, Proposed General Plan Policy Amendments, of this Draft EIR.

Table 5.3-1 shows the total built and/or approved development for 2013 conditions (“Existing”), the current General Plan development allocations (“Remaining”), and the 2040 buildout projections for this Land Use Alternative B.

As shown in Table 5.3-1, Land Use Alternative B would result in an increase of 2 million square feet of additional office space, 500 additional hotel rooms, and 1,421 residential units above what is currently planned for in the 2000-2020 General Plan, which is estimated to result in up to 8,242 additional jobs. This Alternative assumes demolition of Vallco Mall and redistribution of the 642,257 square feet of commercial space within the shopping center.

**TABLE 5.3-1 LAND USE ALTERNATIVE B DEVELOPMENT ALLOCATION & PROJECTIONS SUMMARY**

Category	Existing <sup>a</sup> (2013)	Remaining (No Project)	Net New Proposed	Total In Land Use Alternative B <sup>b</sup>	Buildout (2040) <sup>c</sup>
Office	8,929,774 sf	540,231 sf	+ 2,000,000 sf	2,540,231 sf	11,470,005 sf
Commercial	3,729,569 sf	701,413 sf	+ 625,335 sf <sup>d</sup>	1,343,670 sf	5,073,248 sf
Hotel	1,090 rooms	339 rooms	+ 500 rooms	839 rooms	1,929 rooms
Residential	21,399 units	1,895 units	+ 1,421 units	3,316 units	24,715 units
Population	58,302	5,571	4,208	9,749 <sup>e</sup>	68,051
Jobs	27,837	3,461	8,242	11,705 <sup>f</sup>	39,092

Note: sf = square feet

a. The amount of development that is built and approved in the city and the population and jobs accounted for in 2013.

b. The “remaining” (i.e. what is expected under No Project “Current General Plan” conditions) plus the “net new proposed” equals the total new buildout potential under the Land Use Alternative B.

c. The “built/approved 2013 baseline” plus the “Land Use Alternative B” equals the total 2040 buildout projections.

d. No net new commercial is proposed. This number represents the complete demolition of the Vallco Mall.

e. Population is calculated by 3,316 units times 2.94 persons per household, which is the ABAG 2040 estimated generation rate.

f. Jobs are calculated applying the City’s generation rates as follows: 2,540,231 square feet of office allocation divided by 300 square feet equals 8,467 jobs; 1,343,670 square feet of commercial allocation divided by 450 square feet equals 2,986 jobs; and 839 hotel rooms at 0.3 jobs per room equals 252 jobs for a total of 11,705 jobs.

Source: City of Cupertino.

This Alternative focuses on how development would be concentrated along the Special Areas in order to create more complete commercial, office and entertainment areas, and to address mid-term housing needs.

## LAND USE ALTERNATIVE B

This Alternative would continue to build upon the existing strengths of the Major Mixed-Use Special Areas by increasing development allocation above what is remaining in the 2000-2020 General Plan.

As shown in Table 5-2, in Chapter 5, Alternatives to the Proposed Project, of this Draft EIR, Land Use Alternative B would allocate 37 percent less office space, 37 percent fewer hotel rooms, 25 percent fewer residential units, and would not see a change in allocation for commercial space. There would be 25 percent fewer residential units and new population. As a result, as shown in Table 5-4, when compared to the proposed Project at 2040 buildout, Land Use Alternative B is projected to result in 12 percent less office space, no change in commercial space, 21 percent fewer hotel rooms, 5 percent fewer residential units and new residents, and 12 percent fewer jobs.

The differences between the proposed Project and the Land Use Alternative B would be incremental and even if no action was taken, regional growth, and the associated environmental effects linked to this growth, would continue to occur under the provisions of the current 2000-2020 General Plan.

### 5.3.1 OFFICE DEVELOPMENT ALLOCATION

The office allocation in the Heart of the City Special Area would be increased from the remaining 17,113 square feet to 1.5 million square feet, which represents an increase of 1,482,887 square feet. The Major Employers category would be increased from the remaining 523,118 square feet to 625,000 square feet, which represents an increase of 101,882 square feet. Under this Alternative, the other Special Areas would also result in replenished office space allocation, which currently have no office space development allocation remaining under the current General Plan. The Special Areas would increase office space development allocations as follows:

- Homestead: 25,000 square feet
- North Vallco Park: 75,000 square feet
- Heart of the City: 1,500,000 square feet
- North De Anza: 200,000 square feet
- South De Anza: 25,000 square feet
- Other Non-Residential Mixed-Use: 10,000 square feet
- Major Employers: 625,000 square feet
- Bubb Road: 75,000 square feet
- Monta Vista Village Neighborhood: 10,231 square feet

### 5.3.2 COMMERCIAL DEVELOPMENT ALLOCATION

Under this Alternative, the Heart of the City Special Area remaining development allocation of 695,629 square feet would be increased by 54,371 square feet and redistributed in the other Special Areas, which, with the exception of the Monta Vista Village, currently have no commercial space development allocation remaining under the current General Plan. The Monta Vista Village Neighborhood currently has 5,784 square feet of commercial space remaining.

**LAND USE ALTERNATIVE B**

The commercial development allocation would be increased and distributed as follows under this Alternative:

- Homestead: 250,000 square feet
- North Vallco Park: 100,000 square feet
- Heart of the City: 750,000 square feet
- North De Anza: 125,000 square feet
- South De Anza: 75,000 square feet
- Other Non-Residential Mixed-Use: 75,000 square feet
- Monta Vista Village Neighborhood: 18,679 square feet

**5.3.3 HOTEL DEVELOPMENT ALLOCATION**

Under this Alternative, 500 new hotel units would be added to the remaining development allocation of 339 rooms for a total of 839 hotel rooms and would be distributed in the following Special Areas:

- Homestead: 150 rooms
- North Vallco Park: 150 rooms
- Heart of the City: 439 rooms
- North De Anza: 100 rooms

**5.3.4 HOUSING DEVELOPMENT ALLOCATION**

Although the existing development allocations would limit overall development, the residential unit development allocation under this Alternative would accommodate the Regional Housing Needs Allocation (RHNA) for the 2014–2022 planning period and allow the city to meet its fair-share housing obligation of 1,064 units. As shown in Table 5.3-1, the residential allocation under this Alternative would allow for the construction of up to 3,361 units, which represents 1,421 units above the Cupertino’s fair-share housing obligation. The remaining housing development allocation would be allocated throughout the city by reducing the total number of new housing in the Bubb Road Special Area by 94 units and the South De Anza Special Area by 29 units. Under this Alternative, new residential units would be distributed in the Special Areas and Neighborhoods as follows:

- Homestead: 400 units
- North Vallco Park: 350 units
- Heart of the City: 1,700 units
- North De Anza: 170 units
- South De Anza: 201 units
- Other Non-Residential Mixed-Use: 120 units
- Monta Vista Village Neighborhood: 75 units
- Other Neighborhoods: 300 units

## LAND USE ALTERNATIVE B

### 5.3.5 DEVELOPMENT STANDARDS

The following section describes development standards that would be applicable to future development under implementation of Land Use Alternative B.

#### *Special Areas Along Major Transportation Corridors Including Gateways and Nodes and Study Areas*

In the Homestead Special Area, Study Area 3 (PG&E) and 4 (Mirapath) the maximum allowable height would be increased from 30 feet to 45 feet and density would range between 10 dwelling units per acre (du/ac) and 35 du/ac. In the Stelling Gateway, the maximum height would be 45 feet or 60 feet with a retail component and density would be 35 du/ac. In the North De Anza Gateway and Study Area 1 (Cupertino Inn and Goodyear Tire) the maximum height would be 60 feet, or 75 feet with a retail component, or 95 feet with retail and community benefits. The proposed density would be 35 du/ac.

The North Vallco Park Special Area and Study Area 5 (Cupertino Village) would permit heights up to 60 feet or 75 feet with a retail component along Wolfe Road (retail not required on east side of Wolfe Road) or up to 95 feet with retail and community benefits in the North Vallco Gateway. The proposed density would be 35 du/ac. Study Area

The Heart of the City Special Area would permit heights up to 45 feet and density would range between 25 du/ac and 35 du/ac. The South Vallco Park Gateway East and east portion of Study Area 6 (Vallco Shopping District) would allow 60 feet, or 75 feet with a retail component, and 110 feet with retail and community benefits on the east side of Wolf Road, and the density would be 35 du/ac. The South Vallco Park Gateway West and west portion of Study Area 6 (Vallco Shopping District) would permit heights up to 45 feet, 60 feet with a retail component, or 75 feet along Stevens Creek Boulevard and Wolfe Road with retail and community benefits, and the proposed density would be 35 du/ac. The City Center Node and Study Area 2 (City Center) would permit 60 feet, 75 feet with a retail component, or 90 feet with retail and community benefits at specific sites at the City Center Apartments and Parking Garage and Parking lot, and the proposed density would be 25 du/ac. The North Crossroads Node and Study Area 7 (Stevens Creek Office Center) would permit up to 45 feet, or 60 feet with a retail component, and the proposed density would increase from 25 du/ac to 35 du/ac. The Oaks Gateway would permit 45 feet, or 60 feet with a retail component, and the density would be 35 du/ac. The Community Recreation Node, De Anza College Node and Civic Center Node would permit heights up to 45 feet and the density would be 25 du/ac.

The North De Anza Special Area would permit heights up to 60 feet and the permitted density would be 25 du/ac. The South De Anza Special Area would permit height up to 30 feet and the permitted density would be increased from 15 du/ac to 25 du/ac.

#### *Other Special Areas including Neighborhoods and Non-Residential/Mixed-Use Special Areas*

Under this Alternative, height and density would remain unchanged in the Monta Vista Village Neighborhood and Bubb Road Special Area, as well as the other neighborhoods and non-residential areas; therefore, height would be consistent with existing conditions, as described under Section 3.7.3, Other



## LAND USE ALTERNATIVE B

Special Areas including Neighborhoods and Non-Residential/Mixed-Use Special Areas, Chapter 3, Project Description, of this Draft EIR.

### *Housing Element Sites*

Under this Alternative, the Housing Element Sites, as described in detail in Section 3.6.4, Housing Element Sites, in Chapter 3, Project Description, of the Draft EIR, are proposed as follows:

- Housing Element Site 1 (Shan Restaurant)
- Housing Element Site 2 (Arya/Scandinavian Design)
- Housing Element Site 3 (United Furniture/East of East Estates Drive)
- Housing Element Site 4 (Barry Swenson)
- Housing Element Site 5 (Glenbrook Apartments)
- Housing Element Site 6 (The Villages Apartments)
- Housing Element Site 7 (Carl Berg Property)
- Housing Element Site 10 (The Hamptons)
- Housing Element Site 11 (Vallco Shopping District except Rosebowl)
- Housing Element Site 12 (Homestead Lanes and Adjacency)
- Housing Element Site 13 (Loree Shopping Center)
- Housing Element Site 14 (Marina Plaza)
- Housing Element Site 15 (Stevens Creek Office Center)
- Housing Element Site 16 (Summerwinds & Granite Rock)
- Housing Element Site 17 (Homestead Road – IntraHealth/Office/Tennis Courts)
- Housing Element Site 18 (The Oaks Shopping Center)
- Housing Element Site 19 (Cypress Building Association & Hall Property)

The General Plan land use and Zoning designations, and height and density for each Housing Element Site would remain the same as existing conditions with the exception of the following Housing Element Sites:

- Housing Element Site 7 (Carl Berg Property): Height would increase from 45 feet to 60 feet. No changes to density, General Plan land use or Zoning designations.
- Housing Element Site 10 (The Hamptons): Height would increase from 60 feet to 75 feet. Density would increase from 25 dwelling units per acre (du/ac) to 65 du/ac. The General Plan land use designation would be changed from High Density (20-35 dwelling unit per gross acre [DU/Gr. Ac]) to High Density (Greater than 35 DU/Gr. Ac) and the Zoning designation would be changed from Planned Development with Residential (P(Res) - 70) to P(Res).
- Housing Element Site 11 (Vallco Shopping District except Rosebowl): Height would increase from 60 feet to 110 feet in the area bounded by I-280 to the north, Vallco Parkway to the south, and Perimeter Road to the east if future development includes a retail component and provides community benefits. Height would not increase with the exception of the area along Stevens Creek Boulevard and N. Wolfe Road where height will increase to 75 feet with retail development and community benefits. There will be no change to residential density. The General Plan land use designation would be changed from Commercial/Residential (C/R) to Commercial/Office/Residential (C/O/R) and the Zoning designation would be changed from Planned Development with Regional Shopping (P(Regional

## LAND USE ALTERNATIVE B

Shopping) to Planned Development with Regional Shopping, Professional Office, and Residential (P(Regional Shopping, OP, Res)) to allow for professional offices and residential uses.

- Housing Element Site 12 (Homestead Lanes and Adjacency): No changes to residential density, or General Plan land use designations. Height allowances would remain at 45 feet on the east side of Stelling Road, however, in addition, 60 feet would be allowed with retail development. The Zoning designation would be changed from Planned Development with General Commercial, Recreation and Entertainment (P(CG, Rec, Ent)) to Planned Development with General Commercial and Residential (P(CG, Res)) to allow for residential uses.
- Housing Element Site 14 (Marina Plaza): Height would increase from 45 feet to a maximum of 60 feet with a retail component. Density would increase from 25 du/ac to 35 du/ac. No changes to General Plan land use or Zoning designations.
- Housing Element Site 15 (Stevens Creek Office Center): Height would increase from 45 feet to 60 feet with a retail component. Residential density would increase from 25 du/ac to 35 du/ac. Zoning Designation would be changed to General Commercial, Professional Office and Residential (P(CG, OP, Res)). No changes to General Plan designation.
- Housing Element Site 16 (Summerwinds and Granite Rock): Density would increase from 15 du/ac to 25 du/ac. Zoning designation would change from Planned Development with General Commercial and Residential (P(CG, Res 5-15)) to Planned Development with General Commercial and Residential (P(CG, Res)) to allow for residential uses. No changes to height or General Plan land use designation.
- Housing Element Site 17 (Homestead Road – IntraHealth/Office/Tennis Courts): Height would increase from 30 feet to 45 feet or 60 feet with a retail component. Density would increase from 15 du/ac to 35 du/ac. Zoning designation would be changed from Planned Development with General Commercial (P(CG)) to Planned Development with General Commercial and Residential (P(CG, Res)) to allow for residential uses. No changes to General Plan land use designation.
- Housing Element Site 18 (The Oaks Shopping Center): Height would increase from 45 feet to 60 feet with a retail component. Density would increase from 25 du/ac to 35 du/ac. Zoning designation would be changed from Planned Development with General Commercial and Professional Office (P(CG, OP)) to Planned Development with General Commercial and Residential, (P(CG, Res)) to allow for future mixed-use development including residential uses.

For a detailed discussion of the Housing Element Sites, including height and density, please refer to Section 3.7.4, Housing Element Sites, in Chapter 3 of this Draft EIR.

### 5.3.6 GENERAL PLAN LAND USE MAP AND ZONING ORDINANCE AND MAP AMENDMENTS

Land Use Alternative B will also include revisions to the City's Land Use Map and Zoning Ordinance and Map for consistency with the General Plan, as a result of changes to Housing Element policies that are

## LAND USE ALTERNATIVE B

required by State Law,<sup>1</sup> or as adopted by the City Council, and by correcting inconsistencies of existing land uses identified by the City. The Major Mixed-Use Special Areas, Study Areas, Other Special Areas including Neighborhoods and Non-Residential/Mixed-Use Special Areas, and Housing Element Sites described in this chapter have been identified for their appropriateness for additional commercial, office, hotel, and higher density housing. The City would rezone and change the land use designations, densities, and height standards for these sites to accommodate the additional land uses as described in this chapter. Under this Alternative, the same Land Use and Zoning Ordinance and Map amendments would occur as with the proposed Project as detailed in Section 3.7.4, Housing Element Sites, in Chapter 3, Project Description, of this Draft EIR.

### 5.3.6.1 OTHER GENERAL PLAN AND ZONING CHANGES

Other changes to the General Plan text and figures, and Zoning Ordinance are proposed to include bringing sites with inconsistent land use and zoning designations into consistency, the identification of new neighborhood areas, a new Public Utilities, Infrastructure and Services Element, the minor reformatting, reorganization and addition of clarifying or descriptive language to the General Plan and the method in which residential density is calculated.

### General Plan Land use map and Zoning Map Conformance

The City has identified specific sites, shown on Figure 3-40, in Chapter 3, Project Description, of the Draft EIR, that represent locations where there are inconsistencies between existing land use and the current General Plan land use designation and/or Zoning designation for the location. Under the proposed Project, the General Plan or the Zoning Ordinance and/or Maps will be amended to bring consistency between the existing use and the General Plan land use and/or Zoning for the location. Table 3-22 in Chapter 3, Project Description, lists the parcels with known inconsistencies and shows how the General Plan and Zoning amendments under Land Use Alternative B will bring these locations into conformance with the current General Plan. Because these locations are currently developed and the amendments are being made to reflect the current use on the property, these amendments will not result in new development potential at these locations.

### New Neighborhoods

New neighborhood names and boundaries would be established under Land Use Alternative B. The new neighborhood names are commonly used by the residents of Cupertino, and this process will formalize the neighborhood names and define their boundaries on a map. No new development potential would occur as result of the new names or boundary identification. The new neighborhood names and boundaries are shown on Figure 3-19, Other Special Areas including Neighborhoods and Non-Residential/Mixed-Use Special Areas and are listed in Section 3.6.3.3, Other Neighborhoods, in Chapter 3, Project Description.

---

<sup>1</sup> Specific State Law includes, but is not limited to, the Federal Fair Housing Amendments Act of 1988, California's Fair Employment and Housing Act, and the State's Housing Element law.

## LAND USE ALTERNATIVE B

### Public Utilities, Infrastructure and Services Element

In order to better organize the General Plan, the City has reorganized the of policies within existing Sections (Elements) of the General Plan and relocated these policies in a newly created Section for the purposes of consolidating policies related to Public Utilities, Infrastructure and Services. The policies that will be part of the new Public Utilities, Infrastructure and Services Element are listed in Appendix I, Proposed General Plan Policy Amendments, of this Draft EIR.

### City of Cupertino Historical Register

The Seven Springs Ranch, built in 1866 and located at 11801 Dorothy Anne Way in Cupertino, is listed on the Office of Historic Preservation Directory Listings. This site has been nominated for inclusion in the National Register; however, it is not currently listed in either the National Register of Historic Places or the California Register of Historical Resources. As part of the proposed Project, this site would be added to the City's list of Historically Significant Resources. This Cultural Resources Site is discussed in detail in Chapter 4.5, Cultural Resources, of this Draft EIR and is shown on Figure 4.4-1, Cultural Resources, as Site 23.

### Residential Density

In the context of planning, residential density is the amount of residential units within a given area. Insufficient density can lead to problems in supporting neighborhood-serving retail and services, difficulties in offering a wider range of housing options, and an inability to provide the critical mass necessary to support public transportation. The City currently calculates residential density as "gross" density, which is the number of units divided by the acreage of the entire area. Under Land Use Alternative B, the City would calculate residential density as "net" density, which is the number of units divided by the acreage of residential land. The residential density under the proposed Project as described in this chapter has been calculated by net density.

## 5.3.7 LAND USE ALTERNATIVE B ANALYSIS

### 5.3.7.1 AESTHETICS

---

<b>AES-1</b>	<b>Implementation of Land Use Alternative B would not have an adverse effect on a scenic vista.</b>
--------------	---

---

Future development under Land Use Alternative B would have the potential to affect scenic vistas and/or scenic corridors if new or intensified development blocked views of areas that provide or contribute to such vistas. Potential effects could include blocking views of a scenic vista/corridor from specific publically accessible vantage points or the alteration of the overall scenic vista/corridor itself. Such alterations could be positive or negative, depending on the characteristics of individual future developments and the subjective perception of observers.

Public views of scenic corridors are considered those views as seen along a linear transportation route and public views of scenic vistas are those views of specific scenic features. Scenic vistas are generally interpreted

## LAND USE ALTERNATIVE B

as long-range views, while scenic corridors are comprised of short-, middle-, and long-range views. As stated in Section 4.1.1, Environmental Setting, of Chapter 4.1, Aesthetics, of the Draft EIR, the current General Plan does not have designated scenic corridors or vistas. However, for this analysis, the westward views of the foothills and ridgelines of the Santa Cruz Mountains are considered scenic vistas; and the State-designated, an eligible State Scenic Highway segment of Interstate 280 (I-280), from Santa Clara County line on the west and Interstate 880 (I-880) on the east, is considered a scenic corridor. The impacts to the State-designated view corridor are discussed below under Impact AES-2.

In addition to the potential for new development under implementation of Land Use Alternative B, there would be a number General Plan policies that could affect scenic vistas. Even so, other policies within the General Plan, as well as provisions of the Municipal Code would continue to regulate development, thereby preventing significant impacts to scenic vistas.

Policies 2-23 through 2-33 collectively reflect the changes to land use, development intensity, development allocations, and Special Areas that constitute the Project Components—as described in detail in Chapter 3, Project Description. Since the content of these particular policies is directly integrated with and reflective of Land Use Alternative B as a whole, impact discussions for the effects of Land Use Alternative B necessarily encompass analysis of these particular policies.

General Plan Policy 2-15, Urban Building Forms, includes minor changes, including the combination of two previous strategies regarding building massing and height, and amended Policy 2-16, Attractive Building and Site Design, includes a new strategy requiring the screening of utilities areas in new developments. Changes to acceptable heights and densities, are an integral part of the City's amended land use policies, and these changes are included as part of the Land Use Alternative B. Therefore, the potential for physical impacts from amended policies 2-15 and 2-16 is accounted for and addressed in the analysis of overall Land Use Alternative B implementation, which would continue to be governed by General Plan and Municipal Code policies related to aesthetic impacts. Additionally, the amendments to Policy 2-16, Attractive Building and Site Design, would serve to reduce aesthetic impacts from new developments. Finally, as individual projects are proposed, each would continue to be required to undergo development review that would ensure conformance with other General Plan and Municipal Code policies regarding aesthetics, including any applicable requirements for approval by the Design Review Committee.

Policy 2-20, Streetscape Design, would require that development or redevelopment projects consider unique streetscape choices for different parts of Cupertino, including conforming to the Crossroad Area Streetscape Plan in the Crossroad Area, and would establish new requirements for the selection and planting of street trees in Cupertino.

Policies 2-88 and 5-48 would respectively serve to enhance the aesthetic quality of Cupertino by encouraging new “demonstration gardens” and promoting the undergrounding of utility lines. Especially with regard to Policy 5-48, these amended policies would serve to mitigate potential aesthetic impacts of future developments under Land Use Alternative B.

As described in detail in Section 4.1.1.2, Existing Conditions, in Chapter 4.1, Aesthetics, of this Draft EIR, the Project Component locations, where potential future development is expected to occur, would be concentrated on a limited number of vacant parcels and in the form of infill/intensification on sites either

## LAND USE ALTERNATIVE B

already developed and/or underutilized, and/or in close proximity to existing residential and residential-serving development, where future development would have a lesser impact on scenic vistas. Proposed changes under Land Use Alternative B consist primarily of increased development intensities; however, some Project Component locations propose height increases at restricted areas where increased height would allow for gradual height and bulk transitions and where abrupt changes in building scale would not occur. The proposed increases would generally occur in the North De Anza Special Area by 15 feet (45 feet existing to 60 feet proposed), and in a few limited areas in the Heart of the City and North Vallco Park Special Areas ranging from 30 to 50 feet.

Because of increase in proposed building heights, potential new development under Land Use Alternative B could block the far-field views of the Santa Cruz Mountain Range and foothills from various vantage points throughout the city. However, provided that the topography in the Project Component locations is essentially flat; the views from street-level public viewing to the scenic resources are currently inhibited by existing conditions such as buildings, structures, and mature trees/vegetation; the maximum heights currently permitted limit the opportunity for these views from street-level public viewing; and the restricted locations with maximum height increases, future development under Land Use Alternative B is not anticipated to further obstruct public views of scenic resources from within the city. Similar views would continue to be available between projects and over lower density areas. Considering this and the fact that the Project Component locations are not considered destination public viewing points or are they visible from scenic vistas, overall impacts to scenic vistas would be *less than significant*.

Furthermore, potential future development in all areas where increased height is being considered would be subject to the Architectural and Site Review process, in accordance with Chapter 19.168 of the Zoning Ordinance or would be required to comply with Design Standards outlined in the General Plan, Heart of the City Specific Plan, or other appropriate Conceptual Plans, the Monta Vista Design Guidelines, or the South Vallco Specific Plan discussed in Section 4.1.1.1, above. In addition, the following current General Plan policies would ensure future development in Cupertino would conceivably reduce potential aesthetic impacts of future development under the Land Use Alternative B:

Within the Land Use/Community Design Element, Policy 2-1, Focus Development in Mixed-Use Special Areas, would require the City to, in the mixed-use Special Areas where office, commercial and residential uses are allowed, focus higher intensity development and increased building heights where appropriate in designated corridors, gateways, and nodes. Policy 2-15, Urban Building Forms, would require the City to concentrate urban building forms in the mixed-use Special Areas which would ensure that higher intensity development is limited to the major Special Areas. Policy 2-16, Attractive Building and Site Design, would require the City to emphasize attractive building and site design during the development review process by giving careful attention to building scale, mass and placement, architecture, materials, landscaping, and related design considerations, including screening of equipment and loading areas. Policy 2-18, Single-Family Residential Design, would require the City to preserve the character of residential neighborhoods by requiring new development to be compatible with the existing neighborhood. Policy 2-21, Context of Streetscape Landscaping, would require the City to, in public and private landscaping projects subject to City review, select landscaping designs that reflect the development context. Policy 2-47, Hillside Development Standards, would require the City to establish building and development standards for the hillsides that ensure hillside protection. Policy 2-48, Previously Designated Very Low Density Semi-Rural 5-

## LAND USE ALTERNATIVE B

Acre, would call for the City to allow certain hillside properties to develop using a previous General Plan Designation. Policy 2-51, Rural Improvement Standards in Hillside Areas, would call for the City to require rural improvement standards in hillside areas to preserve the rural character of the hillsides. Policy 2-52, Views for Public Facilities, would require the City to design and layout public facilities, particularly public open spaces, so they include views of the foothills or other nearby natural features, and plan hillside developments to minimize visual and other impacts on adjacent public open space. Policy 2-66, Historic Sites, would require the City to have projects on Historic Sites meet the Secretary of the Interior's Standard for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, and Restoring Historic Buildings and provide a plaque, reader board and/or other educational tools on the site to explain the historic significance of the resource(s). Under this policy, the plaque must include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. Additionally, this policy requires that for public and quasi-public sites, the City will coordinate with the property owner to allow public access of the historical site to foster public awareness and provide educational opportunities. For privately-owned sites, property owners should be encouraged, but not required, to provide access to the public. Policy 2-67, Commemorative Sites, would call for the City to require projects on Commemorative Sites to provide a plaque, reader board and/or other educational tool on the site to explain the historic significance of the resource. The plaque shall include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. Additionally, for public and quasi-public sites, this policy calls for the City to coordinate with property owners to allow public access to the historical site to foster public awareness and provide educational opportunities. For privately-owned sites, property owners should be encouraged, but not required, to provide access to the public. Policy 2-68, Community Landmarks, would call for the City to require Projects on Landmark Sites to provide a plaque, reader board and/or other educational tools on the site to explain the historic significance of the resource. Under this policy, the plaque must include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. Policy 2-69, Historic Mention/Interest Sites, would require the City to encourage agencies that have jurisdiction over the historical resource to encourage rehabilitation of the resource and provide public access to foster public awareness and provide educational opportunities. These are sites outside the City's jurisdictions, but have contributed to the City's historic past. Policy 2-70, Incentives for Preservation of Historic Resources, would require the City to utilize a variety of techniques to serve as incentives toward fostering the preservation and rehabilitation of Historic Sites including: allowing flexible interpretation of zoning ordinance not essential to public health and safety (this could include flexibility as to use, parking requirements and/or setback requirements); using the California Building Code for rehabilitation of historic structures; tax rebates (Mills Act or Local tax rebates); financial incentives such as grants/loans to assist rehabilitation efforts.

Policy 2-71, Recognizing Historical Resources, would require the City to maintain an inventory of historically significant structures and periodically updated it in order to promote awareness of these community resources. Policy 2-74, Heritage Trees, would require the City to protect and maintain heritage trees in a healthy state. Policy 2-88, Park Design, would require the City to design parks to utilize the natural features and topography of the site and to keep long-term maintenance costs low. Within the Environmental Resources/Sustainability Element, Policy 5-9, Development near Sensitive Areas, would require the City to encourage the clustering of new development away from sensitive areas such as riparian

## LAND USE ALTERNATIVE B

corridors, wildlife habitat and corridors, public open space preserves and ridgelines. New developments in these areas must have a harmonious landscaping plans approved prior to development.

**Significance Without Mitigation:** Less than significant.

---

**AES-2                    Implementation of Land Use Alternative B would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a State scenic highway.**

---

As previously discussed, the segment of I-280 is not an officially designated State Scenic Highway, but is considered to be an eligible State Scenic Highway. Future development in portions of the Homestead, North Vallco Park, North De Anza, and Heart of the City Special Areas would be within the viewshed of I-280. The future development in these areas would be similar to the existing conditions at these locations, with the exception of increased building height limits. However, as described below, these Special Areas near major transportation corridors are currently developed and the proposed land use, zoning, and development standards changes would not represent a substantial reimagining of the character in these areas.

### Homestead Special Area

#### North De Anza Gateway/Study Area 1 (Cupertino Inn and Goodyear Tire)

Study Area 1 (Cupertino Inn and Goodyear Tire) is coterminous with the North De Anza Gateway and is located at the northwest corner of the North De Anza Boulevard and I-280 intersection. Under Land Use Alternative B, future development would retain a hotel and would include a new 250-room hotel and conference facility at the Goodyear Tire property. The General Plan designation and Zoning designation would remain unchanged, with the exception of the Goodyear Tire property, which would change to Planned Development General Commercial (P(CG)) to be consistent with the Cupertino Inn property. The maximum height would range from 60 to 75 feet with a retail component or up to 95 feet if a project includes a retail component and provides community benefits.<sup>2</sup> This represents a substantial height increase from the currently permitted 1 to 3 stories at this location.

As described in Section 4.1.1.2, Existing Conditions, in Chapter 4, Aesthetics, this Study Area is proximate to existing large-scale 1 to 3 story residential developments, large format retail buildings and parking lots. While an 8- to 10-story building could cause visual interference of the foothills, with the discretionary Architectural and Site Approval of any development, the project could be required to feather the heights away from the public rights of way and from adjacent residential development. In addition, the provision of community-wide benefits, which are being proposed as a new policy in the General Plan, the additional height could mitigate any impacts. Therefore, impacts to views of scenic resource from the I-280 viewing corridor would be *less than significant*.

---

<sup>2</sup> Community benefits are described under Section 3.7, Project Components, Chapter 3, Project Description, of this Draft EIR.



## LAND USE ALTERNATIVE B

### Study Area 3 (PG&E) and Study Area 4 (Mirapath)

Because Study Area 3 (PG&E) and Study Area 4 (Mirapath) are adjacent properties, in the case of complete redevelopment, it is intended that both properties would be master planned in order to ensure cohesive development. Under Land Use Alternative B, the Study Areas land use designation and zoning would be amended to support a retail store/center in the future use. A maximum height of 30 feet would be permitted. These amendments would not result in substantially taller development as the existing building heights are 1 to 2 stories. Given these Study Areas are generally surrounded by single-family residential, a commercial strip mall, and townhomes, as described in Section 4.1.1.2, Existing Conditions, in Chapter 4.1, Aesthetics, of this Draft EIR, and the retail/store use on these Study Areas would be a new use, with respect to damaging or obstructing a view of a scenic resource from a scenic highway, the foreground views would continue to be of the built urban environment and the far-distant views to the Santa Cruz Mountains would not be obstructed; thus, impacts would be *less than significant*.

### Stelling Gateway/ Housing Element Sites 12 (Homestead Lanes and Adjacency) and 17 (Homestead Road – IntraHealth/Office/Tennis Courts)

The Stelling Gateway is located in the western end of the Homestead Special Area and includes Housing Element Site 12 (Homestead Lanes and Adjacency) and Housing Element Site 17 (Homestead Road – IntraHealth/Office/Tennis Courts). Under Land Use Alternative B, building heights would range from 45 feet to 60 feet with a retail component, which, when compared to existing conditions that permit a building height range of 30 feet on the west side of Stelling Road, to 45 feet east of Stelling Road, represents a 15-foot increase. Under the Land Use Alternative B, there would be no changes to the current General Plan land use designation for Housing Element Site 12, but a General Plan land use designation would be required for Housing Element Site 17 to allow a change from 15 du/ac, to a maximum of 35 du/ac. The Zoning designation would be amended for both sites to Planned Development with General Commercial and Residential (P(CG, Res)) to allow for residential uses. The permitted density would remain at 35 dwelling units per acre east of Stelling but would change from 15 du/ac to 35 du/ac on the west side of Stelling Road. These amendments would not result in substantially taller development given the location is surrounded by 1- to 2-story developments as described above in Section 4.1.1.2, Existing Conditions, in Chapter 4.1, Aesthetics. These amendments would allow for the development of one additional story for future projects at these sites. With the discretionary Architectural and Site review of any future proposed development, the City could require that the development feather the heights away from the public rights of way and from adjacent residential development. Therefore, impacts to views of scenic resource from the I-280 viewing corridor would be *less than significant*.

### North Vallco Park Special Area

### North Vallco Gateway/Study Area 5 (Cupertino Village)/Housing Element Site 10 (The Hamptons)

There are no proposed changes to the current General Plan land use designation for the Study Area; however, under the Land Use Alternative B, the General Plan land use designation for Housing Element Site 10 would be changed to High Density with greater than 35 dwelling unit per gross acre (High Density (Greater than 35 DU/Gr. Ac)) and the Zoning designation for the Study Area would be changed to Planned

## LAND USE ALTERNATIVE B

Development with General Commercial, Professional Office, and Residential uses P(CG, OP, Res) to accommodate office uses. The Zoning designation for Housing Element Site 10 would be amended to Planned Development with Residential (P(Res)). The proposed density in this Gateway and Study Area would be 25 dwelling units per acre with the exception of Housing Element Site 10, which would be 110 dwelling units per acre. Maximum building heights would range from 60 feet or 75 feet with a retail component along Wolfe Road (retail not required on east side of Wolfe Road) or up to 95 feet with retail and community benefits in the North Vallco Gateway, with 95 feet permitted on Housing Element Site 10.

Currently, the Study Area and Gateway include large surface parking lots, specialty retail stores, restaurants, professional offices, and financial services, and Housing Element Site 10 is currently occupied with a 342-unit multi-family housing development. The location is also surrounded by a 4-story hotel and residential development, including both 3-story, multi-family residential and single-family houses as described above in Section 4.1.1.2, Existing Conditions, in Chapter 4.1, Aesthetics.

While these amendments represent greater intensity and building heights (1 story to 95 feet at Study Area 5 (Cupertino Village) and North Vallco Gateway, and 60 feet to 95 feet at Housing Element Site 10), given the surrounding land uses, and the nearby projects under construction, including the Apple Campus 2 site, the City could, as part of its discretionary Architecture and Site Approval permit process, require buildings to be set back from the public rights of way and adjacent residential development. Additionally, the taller heights west of North Wolfe Road are located east of the residential development. Any views of the mountains are currently impeded by the existing tree canopy and three-story Arioso apartment complex from North Wolfe Road, but there will be no changes from the I-280 viewshed since the freeway is located south of the site. On the east side of North Wolfe Road, the taller heights may marginally impede views of the Santa Cruz mountains for the users of the Apple Campus, but not from the I-280 viewshed since the freeway is located south of the site. Therefore, impacts to views of scenic resource from the I-280 viewing corridor would be *less than significant*.

### Heart of the City Special Area

South Vallco Park East and West Gateways/Study Area 6 (Vallco Shopping District)/Housing Element Site 11 (Vallco Shopping District except Rosebowl)

The South Vallco Park Gateways East and West include Study Area 6 (Vallco Shopping District) and Housing Element Site 11 (Vallco Shopping District except Rosebowl). These Project Component locations are bounded by I-280 to the north. Under this Alternative, Study Area 6 (Vallco Shopping District) could include a major redesign of the Vallco Shopping Mall area to create a “downtown” for Cupertino. Proposed uses would include commercial, office, residential, public/quasi-public, and hotel. A majority of this Study Area is also being considered as potential Housing Element Site 11 (Vallco Shopping District except Rosebowl).

Under Land Use Alternative B, maximum heights in the South Vallco Gateway West would be 45 feet, 60 feet with a retail component, or 75 feet along Stevens Creek Boulevard and Wolfe Road with retail and community benefits. In South Vallco Gateway East, the maximum heights would be 60 feet, or 75 feet with a

## LAND USE ALTERNATIVE B

retail component, and 110 feet with retail and community benefits on the east side of Wolf Road, with the exception of the Rosebowl mixed-use development site currently under construction.<sup>3</sup> The Zoning designations would be amended to Planned Development, Regional Shopping, Professional Office, and Residential (P(Regional Shopping, OP, Res)) to allow for office and residential uses. Further, the General Plan designations would be changed to Commercial/Office/Residential (C/O/R) to allow for office uses in addition to commercial and residential uses, which are the existing designations. No changes would be made to the residential density.

This Study Area and Housing Element Site are considered the city's regional shopping district and consists of many retail stores and restaurants. As described above in Section 4.1.1.2, Existing Conditions, in Chapter 4.1, Aesthetics, the Vallco Shopping District is surrounded with commercial and industrial uses, as well as some residential neighborhoods further to the west away from Stevens Creek Boulevard. Therefore, future development could allow taller buildings to be constructed, given the existing range in heights of 1-story to 5-stories would be amended to allow up to 110 feet under certain conditions on a portion of the Site. The City could, in conjunction with its discretionary permit process, Architectural and Site Approval, require that the development be stepped back from public rights of way. Additionally, it is assumed that such development (where heights taller than the base height are being proposed) would maintain a 1:1 ratio from low density single family residential development. In addition, the General Plan Amendments include a policy that states that the tallest heights proposed with the Project would not be considered and/or approved by the City unless a retail component, thereby generating sales tax revenue to the City, and substantial community wide benefits, as direct benefits to the public above and beyond the project obligations, are included as part of a Development Agreement.

Because of the existing site conditions, and because the surrounding area has large scale retail and industrial uses, impacts to the views of scenic resource from the I-280 viewing corridor would be *less than significant*.

### North De Anza Special Area

Under Land Use Alternative B, the North De Anza Special Area would remain an office area consisting of mid-rise buildings. This Special Area is a major north/south connector that includes many office and commercial uses. Future development permitted in this Special Area would result in increased office, commercial, and hotel allocations, and increased residential units, with no changes to the current permitted density and an increase in the permitted building heights from 45 feet to 60 feet. This increase in height could allow approximately two additional floors to be constructed in this area, allowing buildings approximately 4-5 stories in height to be constructed. This area has mainly 2-3 story office buildings. In addition to the heavy tree canopy and the large landscape easement required from De Anza Boulevard, the impact to views from the public right of way would not be substantial. Additionally, the City's discretionary review process, Architectural and Site Approval, could ensure that the buildings have adequate setback from residential development. The analysis also assumes that any development would provide appropriate buffers and/or height transitions for buildings adjacent to low-density residential development.

---

<sup>3</sup> Community benefits are described in Chapter 3, Project Description, of this Draft EIR, under Section 3.7.

## LAND USE ALTERNATIVE B

Because this Special Area is currently comprised of mid-rise office buildings, Land Use Alternative B would not represent a substantial change in the visual character even with the increase in building heights as potential new development would be dispersed throughout the overall Special Area and thus would not form a uniform wall that could potentially obstruct views from the I-280 viewshed. Accordingly, potential future development would not damage a scenic resource or obstruct a view of a scenic resource from the I-280 viewshed, the foreground views would continue to be of the built urban environment and the far-distant views to the Santa Cruz Mountains would remain; thus, impacts would be *less than significant*.

### Housing Element Site 7 (Carl Berg Property)

Housing Element Site 7 (Carl Berg Property), which was built on in 1975, currently has light industrial (research and office) uses with a large amount of surface parking. There would be no changes to the designation, zoning, or density on this housing Site. Under Land Use Alternative B, there would be a 15-foot increase (45 feet existing to 60 feet proposed) in building height; however, given this Site's proximity to existing large-scale residential developments and large format office buildings and parking lots along I-280, the potential increase in building height would not damage or obstruct a view of a scenic resource from the I-280 viewshed. The foreground views would continue to be of the built urban environment and the far-distant views to the Santa Cruz Mountains would remain; thus, impacts would be *less than significant*.

### Housing Element Site 6 (The Villages Apartments)

Housing Element Site 6 (The Villages Apartments) is not located within a Special Area; however, it will be located in the Garden Gate Planning Area and is situated on the south side of I-280 south of the Homestead Special area and west of the North De Anza Special Area and Housing Element Site 7 (Carl Berg Property). Under Land Use Alternative B, there would be a 15-foot increase (45 feet existing to 60 feet proposed) in building height; however, given this site's proximity to existing large-scale residential developments and large format office buildings and parking lots along I-280, the potential increase in building height would not damage or obstruct a view of a scenic resource from the I-208 viewshed. The foreground views would continue to be of the built urban environment and the far-distant views to the Santa Cruz Mountains would remain; thus, impacts would be *less than significant*.

### Summary

As described above, the land use or intensity changes do not represent a substantial reimagining of the character of the Project Component locations in the I-280 viewshed given the existing viewshed within this area is largely urbanized and built out. The potential future development under Land Use Alternative B would primarily involve gradual changes in development intensity along the I-280 viewshed, similar to existing buildings, albeit with increased building height potential. New and/or intensified uses in the I-280 viewshed, as result of Land Use Alternative B, would be dispersed within the Special Areas near major transportation corridors discussed here, namely Heart of the City, North De Anza, Vallco Park North, South De Anza, and Homestead Special Areas, and would not fully obstruct views of far-field scenic resources (e.g. Santa Cruz Mountains) from I-280.

As discussed under impact AES 1, above, Policies 2-23 through 2-33 are analyzed as an integral, inseparable component of Land Use Alternative B, and Policies 2-15, 2-16, 2-18, 2-20, 2-82, 2-88, and 7-4 under Land

## LAND USE ALTERNATIVE B

Use Alternative B would not cause adverse physical changes that could create aesthetic impacts in Cupertino. Individual developments would continue to be subject to General Plan policies and Municipal Code provisions related to aesthetics, including potential project-level design review requirements. Moreover, certain policy changes would serve to reduce aesthetic impacts from new and existing developments. Therefore, the policy amendments under Land Use Alternative B would not result in impacts under this threshold of significance.

Furthermore, potential future development where increases in height are requested would be subject to the Architectural and Site Review process, in accordance with Chapter 19.168 of the Zoning Ordinance. Future development would also be required to comply with Design Standards outlined in the Heart of the City Specific Plan the Vallco Specific Plan, and other Conceptual Plans as described above in Section 4.1.1.1, Environmental Setting, of Chapter 4.1, Aesthetics and the General Plan policies outlined in impact discussion AES-1, that limit the height and bulk of buildings. Accordingly, impacts related to scenic resources in the I-280 viewshed would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>AES-3</b>	<b>Implementation of Land Use Alternative B would not substantially degrade the existing visual character or quality of the Site and its surroundings.</b>
--------------	--

---

The Project Component locations are concentrated on areas either already developed and/or underutilized, and/or in close proximity to existing residential and residential-serving development. Future building form and massing may be greater than existing conditions, but would not necessarily degrade the existing surrounding character.

Implementation of this Alternative would allow continued development and redevelopment throughout the city. As discussed above, future development in the Homestead Special Area, North Vallco Park Special Area, the North De Anza Special Area and Housing Element Site 7 (Carl Berg Property) and the South Vallco Park West Gateway and South Vallco Park West Gateway in the Heart of the City Special Area, would not result in a substantial change to the existing visual character of the Site or its surroundings. Potential impacts to visual character from future development on the remaining Project Component locations under Land Use Alternative B are discussed below.

### Heart of the City Special Area

#### Oaks Gateway/Housing Element Site 18 (The Oaks Shopping Center)

The Oaks Gateway is coterminous with Housing Element Site 18 (The Oaks Shopping Center) located on the north side of Stevens Creek Boulevard between State Route 85 (SR 85) and Mary Avenue. Under Land Use Alternative B, the permitted density would increase to 35 du/ac and building heights would range from 45 feet to 60 feet with a retail component. Because this Project Component location is within the existing 1-story Oaks Shopping Center, which currently has entitlements for a mixed-use office/commercial building and a hotel which expire in September 2014, and is surrounded by urban land uses and SR 85 to the west, future development permitted under Land Use Alternative B would not adversely impact the

## LAND USE ALTERNATIVE B

visual character of the Site or its surroundings. Thus, impacts from new development to the visual character or quality of the site or surrounding areas would be *less than significant*.

North Crossroads Node/Study Area 7 (Stevens Creek Office Center)/Housing Element Sites 14 (Marina Plaza) and 15 (Stevens Creek Office Center)

The North Crossroads Gateway includes Study Area 7 (Stevens Creek Office Center), and Housing Element Sites 14 (Marina Plaza) and 15 (Stevens Creek Office Center), located along Stevens Creek Boulevard, a major commercial corridor that currently houses major retailers in big-box buildings. A new 16,000-square foot retail project (Saich Way Station) is also scheduled for construction in Spring/Summer 2014. Other properties near these Project Component locations include large, 1- to 2-story buildings. The proposed density at this location would be 35 du/ac and building heights would range from 45 feet to 60 feet, with 60 feet only allowed with a retail component.

Under Land Use Alternative B, development within Study Area 7 (Stevens Creek Office Center), which is coterminous with Housing Element Site 15 (Stevens Creek Office Center), could include new hotel, commercial, and residential mixed-use development with a maximum height of 45 feet, or up to 60 feet if a project includes a retail component. Zoning Designation would be changed to General Commercial, Professional Office and Residential (P(CG, OP, Res)). No changes to General Plan designation.

Under Land Use Alternative B, there would be no changes to the General Plan land use designation or Zoning at Housing Element Site 14 (Marina Plaza) and the permitted density would increase to 35 du/ac and the maximum height would be 45 feet, or 60 feet with a retail component.

Because the area is largely built out and within one of the major commercial areas in the city, and is surrounded by big-box development with a dense urban character, new development on these Sites would not degrade the visual character of the Site or the area; thus, impacts would be *less than significant*.

City Center Node/Study Area 2 (City Center)

The City Center Node includes Study Area 2 (City Center). The proposed density at this Node would be 25 dwelling units per acre and the maximum height would range from 60 to 75 feet with a retail component, or up to 90 feet if a project includes a retail component and provides community benefits.<sup>4</sup> These heights would generally be the same as that of the overall Node. For the portion of this Node designated as Study Area 2 (City Center), a new 415,000-square-foot office building along with the addition of four levels to an existing aboveground garage could be developed. Residential density would increase from 25 du/ac to 35 du/ac.

Because this Project Component location is currently developed with mixed-use development offering residential, office, and commercial space, and is surrounded by higher density uses ranging from 1- to 8-story buildings, future development permitted under Land Use Alternative B would not adversely impact the visual character of the Site or its surroundings; thus impacts would be *less than significant*.

---

<sup>4</sup> Community benefits are described in Chapter 3, Project Description, of this Draft EIR, under Section 3.7.

## LAND USE ALTERNATIVE B

### Housing Element Site 1 (Shan Restaurant)

Under Land Use Alternative B, there would be no changes to building height; therefore, future development permitted under Land Use Alternative B would not adversely impact the visual character of the Site or its surroundings; thus impacts would be *less than significant*.

### Other Housing Element Sites

Under Land Use Alternative B there would be no changes to the General Plan land use designation or zoning at Housing Element Sites 2 (Arya/Scandinavian Design), 3 (United Furniture/East of East Estates Drive), 4 (Barry Swenson), 5 (Glenbrook Apartments), 13 (Loree Shopping Center) and 19 (Cypress Building Association & Hall Property); thus impacts from future development permitted under Land Use Alternative B would not adversely impact the visual character of the Site or its surroundings; thus impacts would be *less than significant*.

### South De Anza Special Area

Under Land Use Alternative B, the South De Anza Special Area would remain a general commercial area south of Stevens Creek Boulevard. This Special Area would allow in increased office and commercial, allocations, with an increase in the density from 5 to 15 dwelling units per acre to 25 dwelling units per acre, but no height increases would occur and the land uses would remain the same; thus, future development permitted under Land Use Alternative B would not adversely impact the visual character of the Site or its surroundings; thus impacts would be *less than significant*.

### Housing Element Site 16 (Summerwinds and Granite Rock)

Under Land Use Alternative B, there would be no changes to the General Plan land use designation; but no height increases would be occur and the land uses would generally remain the same; thus, future development permitted under Land Use Alternative B would not adversely impact the visual character of the Site or its surroundings; thus impacts would be *less than significant*.

### Other Special Areas including Neighborhoods and Non-Residential/Mixed-Use Special Areas

#### Monta Vista Village Neighborhood

Under Land Use Alternative B, one additional unit would be permitted in the Monta Vista Village Neighborhood. The only change in land use designation would occur in the area on either side of Pasadena Avenue between Granada Avenue and Olive Avenue. The land use designation would change to 10 to 15 dwelling units per acre to allow the existing number of units currently existing on the site to be replaced. This change reflects the existing number of units on properties in that area. This change would allow property owners in that area to replace the same number of units on the site. Additional development allocation in this Neighborhood includes an increase of 10,231 square feet for office, and 18,679 square feet (12,895 square feet net increase) for commercial uses. In order to be consistent with the change in the density of the area discussed above, the zoning designation would also be changed to Planned Residential

## LAND USE ALTERNATIVE B

with a density of 10 to 15 units per acre. Because the land uses would remain the same and there would be no increase in building height limits, future development permitted under Land Use Alternative B would not adversely impact the visual character of the Site or its surroundings; thus impacts would be *less than significant*.

### Bubb Road Special Area

Under Land Use Alternative B, the Bubb Road Special Area would remain at 20 dwelling units per acre, but no new residential units would be permitted in this area because the existing 94-unit residential allocation would be allocated to other areas of the city more appropriate for residential development.<sup>5</sup> Additional development allocation in this Special Area includes 70,000 square feet for office uses. There are no proposed General Plan land use designations or Zoning designation changes for this Special Area under Land Use Alternative B. Because the land uses would remain the same and there would be no increase in building height limits, future development permitted under Land Use Alternative B would not adversely impact the visual character of the Site or its surroundings; thus, impacts would be *less than significant*.

### Other Neighborhoods

Under Land Use Alternative B, an additional 59 residential units would be permitted in the Zoning designations. The existing density and height standards would remain the same under Land Use Alternative B. There are no proposed General Plan land use designations or Zoning designation changes for the Other Neighborhoods under Land Use Alternative B. Because the land uses would remain the same and there would be no increase in building height limits, future development permitted under Land Use Alternative B would not adversely impact the visual character of the Site or its surroundings; thus, impacts would be *less than significant*.

### Other Non-Residential Mixed-Use Special Areas

Under Land Use Alternative B, a maximum of 10,000 square feet of office uses and 75,000 square feet of commercial uses would be permitted throughout the locations that are comprised of existing mixed-use office and commercial properties distributed throughout the city as discussed under Section 4.1.1.2, Existing Conditions, in Chapter 4.1, Aesthetics, of this Draft EIR. Furthermore, 50 additional residential units, for a total of 120 residential units, would be permitted. Because the land uses would remain the same and there would be no increase in building height limits, future development permitted under Land Use Alternative B would not adversely impact the visual character of the Site or its surroundings; thus, impacts would be *less than significant*.

---

<sup>5</sup> As shown in Table 3-2, Buildout Summary – All Project Components Development Allocation, Chapter 3, Project Description, of this Draft EIR, the remaining total residential allocation is 479 units throughout the Special Centers/Other Areas and the project proposes 521 units for a difference of 42 additional residential units in the Special Centers/Other Areas under Land Use Alternative B. This results from 50 proposed unit in the Other Commercial area plus 27 proposed units in the Monta Vista Neighborhood Center area plus 59 proposed units in the Other Neighborhood area for a total of 136 proposed units; 136 proposed units minus the 94 currently permitted in the Bubb Road area equals 42 new units in the Special Centers/Other Areas.



## LAND USE ALTERNATIVE B

### General Plan and Zoning Ordinance Conformance Sites

Under Land Use Alternative B, the City-identified sites, shown on Figure 3-40, that represent locations where there are inconsistencies between existing land use and the General Plan land use designation and/or Zoning designation for the location, would not result in changes to the character of the existing Site or its surroundings. Under Land Use Alternative B, the General Plan or the Zoning Ordinance and/or Maps will be amended to bring consistency between the existing use and the General Plan land use and/or Zoning for the location. Thus, *no impact* would occur.

### Summary

As described above, potential future development under Land Use Alternative B would create a slight shift in uses and involve notable changes in building intensity and height in limited areas of some Project Components. However, given the existing commercial, industrial, and residential uses surrounding Project Component locations, gradual development of future projects would not substantially degrade the existing visual character or quality of the sites and their surroundings.

As discussed under Impact AES-1, above, Policies 2-23 through 2-33 are analyzed as an integral, inseparable component of Land Use Alternative B, and amended policies 2-15, 2-16, 2-18, 2-20, 2-82, 2-88, and 7-4 under Land Use Alternative B would not cause adverse physical changes that could create aesthetic impacts in Cupertino. Individual developments would continue to be subject to General Plan policies and Municipal Code provisions related to aesthetics, including potential project-level design review requirements. Moreover, certain policy changes would serve to reduce aesthetic impacts from new and existing developments. Therefore, the policy amendments under Land Use Alternative B would not result in impacts under this threshold of significance.

Furthermore, potential future development would, in all the areas where additional height is allowed, be subject to the City's discretionary review processes, including the Development Permit and Architectural and Site Approval Review, in accordance with Chapter 19.168 of the Zoning Ordinance. Future development would also be required to comply with Design Standards outlined in the Heart of the City Specific Plan, the Vallco Master Plan, and the Monta Vista Design Guidelines and other Conceptual Plans as described in Section 4.1.1.1, Regulatory Framework, in Chapter 4.1, Aesthetics and the General Plan policies outlined in impact discussion AES-1, would ensure that the bulk, mass, height, and architectural character of new development are compatible with surrounding uses. Thus, overall impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

## LAND USE ALTERNATIVE B

---

**AES-4                    Implementation of Land Use Alternative B would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**

---

Nighttime illumination and glare impacts are the effects of a project's exterior lighting upon adjoining uses and areas. Light and glare impacts are determined through a comparison of the existing light sources with the proposed lighting plan or policies.

Currently, the Project Study Area contains many existing sources of nighttime illumination. These include street and parking area lights, security lighting, and exterior lighting on existing residential, commercial, and institutional buildings. Additional onsite light and glare is caused by surrounding land uses and traffic on SR 85 and I-280.

As discussed under impact AES 1, above, Policies 2-23 through 2-33 are analyzed as an integral, inseparable component of Land Use Alternative B, and amended policies 2-15, 2-16, 2-18, 2-20, 2-82, 2-88, and 7-4 under Land Use Alternative B would not cause adverse physical changes that could create aesthetic impacts in Cupertino. Individual developments would continue to be subject to General Plan policies and Municipal Code provisions related to aesthetics, including potential project-level design review requirements. Moreover, certain policy changes would serve to reduce aesthetic impacts from new and existing developments. Therefore, the policy amendments under Land Use Alternative B would not result in impacts under this threshold of significance.

The Land Use Alternative B would modify land uses, zoning, and density, which in turn would intensify related lighting sources. In addition to new building, security, and lighting for parking areas, buildout of the Project Study Area would also include lighting aimed at properly illuminating the Project Component locations. Because Land Use Alternative B allows higher intensity development in most of the Project Study Area, its implementation would likely result in larger buildings with more exterior glazing (i.e. windows and doors) that could result in new sources of glare. Despite the new and expanded sources of nighttime illumination and glare, Land Use Alternative B is not expected to generate a substantial increase in light and glare.

Besides general guidelines that require lighting that is context sensitive in style and intensity, new developments would also have to comply with the General Plan policies and Municipal Code provisions that ensure new land uses do not generate excessive light levels. The City's General Plan policies also require reducing light and glare spillover from future development to surrounding land uses by buffering new development with landscaping and trees. The preservation of mature trees with substantial tree canopies would diffuse the overall amount of light generated by new development and glare generated by windows of multistory buildings.

## LAND USE ALTERNATIVE B

Furthermore, because the Project Component locations and surrounding area are largely developed, the lighting associated with Land Use Alternative B would not substantially increase nighttime light and glare within the Project Study Area or its surroundings. Therefore, impacts relating to light and glare would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**AES-5                      Implementation of Land Use Alternative B, in combination with past, present and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to aesthetics.**

---

This EIR takes into account growth projected by Land Use Alternative B within the Cupertino city boundary and Sphere of Influence (SOI), in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). The cumulative setting for visual impacts includes potential future development under the proposed General Plan combined with effects of development on lands adjacent to the city within Los Altos and Sunnyvale to the north, Santa Clara and San Jose to the east, and Saratoga to the south, and the unincorporated areas of Santa Clara County to the west and south.

Significant impacts, including those associated with scenic resources, visual character, and increased light and glare would generally be site-specific and would not contribute to cumulative impacts after implementation of the General Plan policies and the provisions stated in the Municipal Code. The proposed heights in some areas of this Alternative would, within the designated growth areas, drastically alter the City's vertical landscape and urban form over time, as new development is proposed.

Because of the developed nature of the Project Study Area, future development under the General Plan Amendment, Housing Element Update, and associated Rezoning, in combination with other new development, would not negatively impact the visual character of the City. Furthermore, Land Use Alternative B would not constitute a significant adverse impact because redevelopment of the area is also anticipated in the current specific plans and the City's General Plan policies.

As discussed under Impact AES-1, above, Policies 2-23 through 2-33 are analyzed as an integral, inseparable component of Land Use Alternative B, and amended Policies 2-15, 2-16, 2-18, 2-20, 2-82, 2-88, and 7-4 under Land Use Alternative B would not cause adverse physical changes that could create aesthetic impacts in Cupertino. Individual developments would continue to be subject to General Plan policies and Municipal Code provisions related to aesthetics, including potential project-level design review requirements. Moreover, certain policy changes would serve to reduce aesthetic impacts from new and existing developments. Therefore, the policy amendments under Land Use Alternative B would not result in cumulative impacts to aesthetics.

Moreover, as part of the approval process, potential new development under Land Use Alternative B would be subject to environmental review and architectural and site design review, to ensure that the development is aesthetically pleasing and compatible with adjoining land uses. With the development review mechanisms in place, approved future development under Land Use Alternative B is not anticipated to create substantial

## LAND USE ALTERNATIVE B

impacts to visual resources. Therefore, Land Use Alternative B would result in a cumulatively *less-than-significant* contribution to aesthetic impacts.

**Significance Without Mitigation:** Less than significant.

### 5.3.7.2 AIR QUALITY

---

**AQ-1                      Implementation of Land Use Alternative B would not conflict with or obstruct implementation of the applicable air quality plan.**

---

#### 2010 Bay Area Clean Air Plan

The current Air Quality Management Plan (AQMP) is the 2010 Bay Area Clean Air Plan. The primary goals of the 2010 Bay Area Clean Air Plan are to attain the State and Federal AAQS, reduce population exposure and protect public health in the Bay Area, and reduce Greenhouse Gas (GHG) emissions and protect the climate. Bay Area Air Quality Management District (BAAQMD) considers the Plan consistent with the AQMP in accordance with the following:

##### *Attain Air Quality Standards*

BAAQMD's 2010 Bay Area Clean Air Plan strategy is based on regional population and employment projections within the Bay Area compiled by ABAG. Demographic trends incorporated into the Plan Bay Area determine vehicle miles traveled (VMT) within the Bay Area, which BAAQMD utilizes to forecast future air quality trends. The San Francisco Bay Area Air Basin (SFBAAB) is currently designated a nonattainment area for Ozone (O<sub>3</sub>), fine inhalable particulate matter (PM<sub>2.5</sub>), and coarse inhalable particulate matter (PM<sub>10</sub>; State Ambient Air Quality Standards (AAQS) only). As discussed in Chapter 4.11, Population and Housing, of this Draft EIR, the growth projections for the City of Cupertino would exceed the employment projections identified by ABAG. ABAG forecasts the population in Cupertino could grow to 71,700 by 2040.<sup>6</sup> The buildout projections resulting from future development under Land Use Alternative B estimates that the residential population could grow to 68,051 by 2040. Therefore, additional residential population resulting from implementation of Land Use Alternative B would not exceed regional projections (3,649 fewer residents). With respect to employment, ABAG forecasts 33,260 employees in the City of Cupertino in 2040.<sup>7</sup> Buildout of Land Use Alternative B would exceed the regional projections by 5,832 employees. However, growth under Land Use Alternative B would come incrementally over a period of approximately 26 years and would be guided by a policy framework that is generally consistent with many of the principal goals and objectives established in regional planning initiatives for the Bay Area. Therefore, while growth anticipated under Land Use Alternative could exceed regional growth projections for Cupertino by 5,832 employees, this additional growth would be consistent with the regional planning objectives established for the Bay Area. Consequently, emissions within the City of Cupertino are included in BAAQMD's projections, and future development in the City of Cupertino through the Land Use

---

<sup>6</sup> Association of Bay Area Governments (ABAG), 2014, Plan Bay Area Projections 2013.

<sup>7</sup> Association of Bay Area Governments (ABAG), 2014, Plan Bay Area Projections 2013.

## LAND USE ALTERNATIVE B

Alternative B horizon year 2040 would not hinder BAAQMD's ability to attain the California or National AAQS. Accordingly, impacts would be *less than significant*.

### *Reduce Population Exposure and Protect Public Health*

The City of Cupertino is already largely developed. Future growth under Land Use Alternative B would be accommodated through redevelopment of infill sites. As identified in the discussion of community risk and hazards (see Impact AQ-4 below), new sensitive land uses could be proximate to major sources of TACs, and new industrial/commercial land uses could generate an increase in Toxic Air Contaminants (TACs). Adherence to BAAQMD regulations would ensure new sources of TACs do not expose populations to significant health risk; however, siting of land uses proximate to major sources of air pollution is outside the control of BAAQMD. These impacts are addressed under Impact AQ-4, below. Implementation of current and amended General Plan policies, and strategies, and mitigation to reduce community risk and hazards listed in AQ-4 below would ensure these impacts are *less than significant*.

### *Reduce GHG Emissions and Protect the Climate*

The GHG emissions impacts of Land Use Alternative B are discussed in Chapter 4.6, Greenhouse Gas Emissions, of this Draft EIR. Goals and policies have been incorporated within Land Use Alternative B, as identified in Chapter 4.6, Greenhouse Gas Emissions, to reduce VMT and associated GHG emissions. In addition, the City of Cupertino is also preparing a Climate Action Plan (CAP) to reduce community-wide GHG emissions. The City's CAP would identify GHG reduction measures for community-wide operations.

The current and amended General Plan policies and strategies would also reduce GHG emissions, as described in more detail in Chapter 4.6, Greenhouse Gas Emissions, of this Draft EIR. Future development under the Land Use Alternative B would be required to adhere to statewide measures that have been adopted to achieve the GHG reduction targets of Assembly Bill 32. In addition, the Land Use Alternative B is consistent with regional strategies for infill development identified by the MTC/ABAG in the Plan Bay Area. Consequently, Land Use Alternative B is consistent with the goals of the 2010 Bay Area Clean Air Plan to reduce GHG emissions and protect the climate. As identified above, Land Use Alternative B would support the goals of the 2010 Bay Area Clean Air Plan. New policies would be introduced as part of Land Use Alternative B to minimize impacts. Impacts would be *less than significant*.

### Include Applicable Control Measures from the AQMP

Table 5.3-2 identifies the control measures included in the 2010 Bay Area Clean Air Plan, and, as shown, implementation of Land Use Alternative B goals, policies, and actions in Table 5.3-2 would ensure that Land Use Alternative B would be consistent with the 2010 Bay Area Clean Air Plan and that the impacts due to inconsistency would be *less than significant*.

### Disrupt or Hinder Implementation of any AQMP Control Measures

Table 5.3-2 identifies the control measures included in the 2010 Bay Area Clean Air Plan. As identified in the table, Land Use Alternative B would not hinder BAAQMD from implementing the control measures in the 2010 Bay Area Clean Air Plan. Impacts are *less than significant*.

**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
Stationary and Area Sources Control Measures	<ul style="list-style-type: none"> <li>▪ SSM 1 – Metal Melting Facilities</li> <li>▪ SSM 2 – Digital Printing</li> <li>▪ SSM 3 – Livestock Waste</li> <li>▪ SSM 4 – Natural Gas Processing and Distribution</li> <li>▪ SSM 5 – Vacuum Trucks</li> <li>▪ SSM 6 – General Particulate Matter Weight Rate Limitations</li> <li>▪ SSM 7 – Open Burning</li> <li>▪ SSM 8 – Cole Calcining</li> <li>▪ SSM 9 – Cement Kilns</li> <li>▪ SSM 10 – Refinery Boilers and Heaters</li> <li>▪ SSM 11 – Residential Fan Type Furnaces</li> <li>▪ SSM 12 – Space Heating</li> <li>▪ SSM 13 – Dryers, Ovens, Kilns</li> <li>▪ SSM 14 – Glass Furnaces</li> <li>▪ SSM 15 – Greenhouse Gases in Permitting Energy Efficiency</li> <li>▪ SSM 16 – Revise Regulation 2, Rule 2: New Source Review</li> <li>▪ SSM 17 – Revise Regulation 2, Rule 5 New Source Review for Air Toxics</li> <li>▪ SSM 18 – Revise Air Toxics “Hot Spot” Program</li> </ul>	<p>Stationary and area source control measures are sources regulated directly by BAAQMD. To implement the stationary and area source control measures, BAAQMD adopts/revises rules or regulations to implement the control measures and reduce emissions from stationary and area sources. Because BAAQMD is the implementing agency, new and existing sources of stationary and area sources in the City would be required to comply with these control measures in the 2010 Bay Area Clean Air Plan.</p>
Mobile Source Control Measures	<ul style="list-style-type: none"> <li>▪ MSM A-1 – Promote Clean, fuel Efficient Light &amp; Medium-Duty Vehicles</li> <li>▪ MSM A-2 – Zero Emission Vehicle and Plug-in Hybrids</li> <li>▪ MSM A-3 – Green Fleets (Light Medium &amp; Heavy-Duty Vehicles)</li> <li>▪ MSM A-4 – Replacement or Repair of High Emitting Vehicles</li> <li>▪ MSM B-1 – HDV Fleet Modernization</li> <li>▪ MSM B-2 – Low NO<sub>x</sub> Retrofits for In-Use Engines</li> <li>▪ MSM B-3 – Efficient Drive Trains</li> <li>▪ MSM C-1 – Construction and Farming Equipment</li> <li>▪ MSM C-2 – Lawn &amp; Garden Equipment</li> <li>▪ MSM C-3 – Recreational Vessels</li> </ul>	<p>Mobile Source Control Measures that would reduce emissions by accelerating the replacement of older, dirtier vehicles and equipment, through programs such as the BAAQMD’s Vehicle Buy-Back and Smoking Vehicle Programs, and promoting advanced technology vehicles that reduce emissions. The implementation of these measures rely heavily upon incentive programs, such as the Carl Moyer Program and the Transportation Fund for Clean Air, to achieve voluntary emission reductions in advance of, or in addition to, CARB requirements. CARB has new regulations that require the replacement or retrofit of on-road trucks, construction equipment, and other specific equipment that is diesel powered. Land Use Alternative B would not hinder the ability of BAAQMD to implement these regional programs.</p>
Transportation Control Measures	<ul style="list-style-type: none"> <li>▪ TCM A-1 – Improve Local and Regional Rail Service</li> <li>▪ TCM A-2 – Improve Local and Regional Rail Service</li> <li>▪ TCM B-1 – Implement Freeway Performance Initiative</li> <li>▪ TCM B-2 – Improve Transit Efficiency and Use</li> <li>▪ TCM B-3 – Bay Area Express Land Network</li> </ul>	<p>Transportation Control Measures (TCM) are strategies to reduce vehicle trips, vehicle use, VMT, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions. While most of the TCMs are implemented at the regional level—that is, by the MTC or Caltrans—there are measures for which the 2010 Bay Area Clean Air Plan relies upon local communities to assist with implementation.</p>

**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
<ul style="list-style-type: none"> <li>▪ TCM B-4 – Goods Movement Improvements and Emission Reduction Strategies</li> <li>▪ TCM C-1 – Support Voluntary Employer-Based Trip Reduction Program</li> <li>▪ TCM C-2 – Implement Safe Routes to Schools and Safe Routes to Transit</li> <li>▪ TCM C-3 – Promote Rideshare Service and Incentives</li> <li>▪ TCM C-4 – Conduct Public Outreach and Education</li> <li>▪ TCM C-5 – Promote Smart Driving/Speed Moderation</li> <li>▪ TCM D-1 – Improve Bicycle Access and Facilities</li> <li>▪ TCM D-2 – Improve Pedestrian Access and Facilities</li> <li>▪ TCM D-3 – Support Local Land Use Strategies</li> <li>▪ TCM E-1 – Value Pricing Strategies</li> <li>▪ TCM E-2 Parking Pricing and Management</li> <li>▪ TCM E-3 – Implement Transportation Pricing Reform</li> </ul>	<p>Land Use Alternative B includes policies and strategies related to transportation and land use that would assist BAAQMD in meeting the regional goals of the 2010 Bay Area Clean Air Plan, including:</p> <ul style="list-style-type: none"> <li>▪ Policy 2-1: Focus Development in Mixed-Use Special Areas. In the mixed-use Special Areas (shown in Figure 2-B) where office, commercial and residential uses are allowed, focus higher intensity development and increased building heights where appropriate in designated corridors, gateways, and nodes.</li> <li>▪ Policy 2-2: Connections Between Special Areas, Employment Centers and the Community. Provide strong connections between the mixed-use Special Areas, employment centers and the surrounding community.                             <ul style="list-style-type: none"> <li>Strategy 1. Neighborhood Connections. Enhance pedestrian and bicycle connections from the mixed-use Special Areas and employment centers to surrounding neighborhoods.</li> <li>Strategy 2. Public Access. Provide pedestrian and bicycle paths through new and redevelopment projects to enhance public access to and through the development.</li> </ul> </li> <li>▪ Policy 2-19: Compatibility of Lot Sizes. Ensure that zoning, subdivision and lot line adjustment requests related to lot size or lot design consider the need to preserve neighborhood lot patterns.                             <ul style="list-style-type: none"> <li>Strategy 1. Minimum Lot Size. Increase the minimum lot size if the proposed new lot size is smaller than and not compatible with the surrounding neighborhood.</li> <li>Strategy 2. Flag Lots. Create flag lots in proposed subdivisions when they are the only reasonable alternative that integrates with the lot pattern in the neighborhood.</li> </ul> </li> <li>▪ Policy 2-26: Heart of the City Special Area. Create a positive and memorable image along Stevens Creek Boulevard of mixed-use development; enhanced activity gateways and nodes; and safe and efficient circulation and access for all modes of transportation.                             <ul style="list-style-type: none"> <li>Strategy 1. Heart of the City Specific Plan. Maintain the Heart of the City Specific Plan as the primary implementation tool for the City to use for this area.</li> <li>Strategy 2. Traffic Calming. Evaluate options on Stevens Creek Boulevard to improve the pedestrian environment by proactively managing speed limits and traffic signal synchronization.</li> </ul> </li> <li>▪ Policy 4-5: Pedestrian Access. Create pedestrian access between new subdivisions and school sites. Review existing neighborhood circulation plans to improve safety and access for pedestrians and bicyclists to school sites, including</li> </ul>	

**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>completing accessible network of sidewalks and paths</p> <ul style="list-style-type: none"> <li> <p>▪ Policy 2-82: Open Space and Trail Linkages. Dedicate or acquire open space lands and trail linkages to connect areas and provide for a more walkable community.</p> <p>Strategy 1. Cupertino Pedestrian Transportation Guidelines. Implement the recommendations of the Cupertino Pedestrian Transportation Plan to develop a City trail/pedestrian linkage between major mixed-use Special Areas, employment centers, neighborhoods, and major open space areas.</p> <p>Strategy 2. Trail Projects. Implement the trail projects described in this element. Evaluate any safety, security and privacy impacts and mitigations associated with trail development. Work with affected neighborhoods in locating trails.</p> <p>Strategy 3. Dedicated Trails or Easements. Require dedication or easements for trails, as well as their implementation, as part of the development process, where appropriate.</p> </li> <li> <p>▪ Policy 4-1: City Participation in Regional Transportation Planning. Participate actively in developing regional approaches to meeting the transportation needs of the residents of the Santa Clara Valley. Work closely with neighboring jurisdictions and agencies responsible for roadways, transit facilities and transit services in Cupertino.</p> <p>Strategy 1. Regional Transportation Planning. Participate in regional transportation planning in order to minimize adverse impacts on Cupertino’s circulation system. Work with all regional transportation agencies to develop programs consistent with the goals and policies of Cupertino’s General Plan. Work with neighboring cities to address regional transportation and land use issues of mutual interest.</p> <p>Strategy 2. Jobs–Housing Balance. Minimize regional traffic impacts on Cupertino by supporting regional planning programs to manage the jobs-housing balance throughout Santa Clara County and the Silicon Valley, including the Bay Area region’s Sustainable Communities Strategy and Regional Transportation Plan.</p> <p>Strategy 3. Interchange Improvements. Identify potential interchange improvements, such as I-280 with the Lawrence Expressway Stevens Creek Boulevard, and North Wolfe Road, that would encourage the use of the freeway and reduce the use of local streets..</p> <p>Strategy 4. Congestion Management Plan (CMP). Actively participate in the preparation of the CMP and other regional efforts to control traffic congestion and limit air pollution.</p> <p>Strategy 5. Traffic Impact Analysis (TIA). Require TIA reports that meet the</p> </li> </ul>



**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>requirements of the Santa Clara Valley Transportation Authority (VTA) for all developments projected to generate more than 100 trips in the morning or afternoon peak hour.</p> <p>Strategy 6. Multi-modal Transportation. Ensure that connections are provided to enable travelers to transition from one mode of transportation to another (e.g. bicycle to bus).</p> <p>Strategy 7. Regional Bus and Rapid Transit Service. Support the expansion of the VTA’s regional bus transit system and extension of bus and/or light rail rapid transit into the Stevens Creek and De Anza Corridors to fulfill the “spoke and wheel” transit system designed to serve all of Santa Clara County. Specific actions to implement this strategy are:</p> <ul style="list-style-type: none"> <li>○ Review all right-of-way improvement projects for potential opportunities and constraints to rapid transit development.</li> <li>○ Encourage higher density and mixed-use development in rapid transit corridors and ensure developments are designed to enhance the use of transit.</li> <li>○ Seek the cooperative support of residents, property owners and businesses in planning rapid transit extensions.</li> <li>○ Actively seek to have Cupertino represent West Valley cities and ultimately chair the VTA Board of Directors to promote the above policy</li> </ul> <p>■ Policy 4-3: Reduced Reliance on the Use of Single-Occupant Vehicles .Promote a general decrease in reliance on private, mostly single-occupant vehicles (SOV) by encouraging attractive alternatives.</p> <p>Strategy 1. Alternatives to the SOV. Encourage the use of alternatives to the SOV including increased car-pooling, use of public transit, bicycling and walking.</p> <p>Strategy 2. Transportation System Management (TSM) Programs. Encourage TSM programs for employees in both the public and private sectors by including preferred parking for carpools, providing bus passes, encouraging compressed workweeks, and providing incentives and rewards for bicycling and walking.</p> <p>Strategy 3. Telecommuting, Teleconferencing and Other Electronic Communication. Encourage employers to use the internet to reduce commute travel. Encourage schools, particularly at the college and high school levels, to make maximum use of the internet to limit the need to travel to and from the campus.</p> <p>Strategy 4. Design of New Developments. Encourage new commercial developments to provide shared office facilities, cafeterias, day-care facilities,</p>

**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>lunchrooms, showers, bicycle parking, home offices, shuttle buses to transit facilities and other amenities that encourage the use of transit, bicycling, walking or telecommuting as commute modes to work. Provide pedestrian pathways and orient buildings to the street to encourage pedestrian activity.</p> <p>Strategy 5. Street Space for Alternative Transportation. Provide space on appropriate streets for bus turnouts, or safe and accessible bike lanes or pedestrian paths.</p> <p>Strategy 6. Alternative Transportation Information. Use the Cupertino Scene and other media to provide educational material on alternatives to the SOV.</p> <p>Strategy 7. Citizen Participation. Continue to work with the City Bicycle Pedestrian Commission, community groups and residents to eliminate hazards and barriers to bicycle and pedestrian transportation.</p> <p>Strategy 8. Transportation Demand Management (TDM) Programs. Require large employers to develop and maintain TDM programs to reduce the vehicle trips generated by their employees. Work together with the large employers to develop a tracking system for the TDM programs to allow ongoing assessment of results.</p> <ul style="list-style-type: none"> <li>▪ Policy 4-4: Improved Pedestrian and Bicycle Circulation Throughout Cupertino. Expand the city-wide pedestrian and bicycle network in order to provide improved recreation, mobility and safety.</li> </ul> <p>Strategy 1. The Pedestrian Transportation Plan. Implement the projects recommended in the Pedestrian Transportation Plan including:</p> <ul style="list-style-type: none"> <li>○ After engineering review, and where found to be feasible, improve safety at selected intersections by one or more of the following: prohibit right-turn-on-red, add time to the pedestrian signal phase, construct a median and/or reduce corner radii.</li> <li>○ Where feasible provide missing sidewalks on arterial and collector streets and on neighborhood streets as desired by residents.</li> <li>○ Identify a citywide pedestrian circulation grid including shortcuts, pathways and bridges, where needed, to close gaps in the pedestrian circulation system.</li> </ul> <p>Strategy 2. Pedestrian Grid. Consider developing a quarter-mile grid of safe, walk-able sidewalks and paths to provide pedestrian access among residential, shopping, recreation and business locations.</p> <p>Strategy 3. Schools. Work with the School District to encourage students to walk, bike, or carpool to school.</p>

**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>Strategy 4. Pedestrian Time on Traffic Signals. With engineering review, provide additional time for pedestrians to cross streets at appropriate intersections. Added time would be most appropriate near shopping districts, schools and senior citizen developments. This strategy should be considered even if it could reduce the level of service for automobile traffic.</p> <p>Strategy 5. Pedestrian Improvements. To enhance walking, consider various improvements to roadways to make them more pedestrian friendly and less auto-centric. Where a median is provided, it should be wide enough to safely accommodate pedestrians. Streets that connect major pedestrian activity centers should be evaluated for potential improvements for pedestrians. Working with the neighborhood, consider reducing residential street widths to promote slower traffic.</p> <p>Strategy 6. Crosswalk Marking, Medians, and “Chokers.” Following engineering review, mark crosswalks with pavement treatment scaled to the speed of traffic. Use medians and “chokers” to narrow the width of the street where feasible and appropriate, and to indicate and identify entrances to neighborhoods.</p> <p>Strategy 7. Preparation of Transportation Impact Analysis (TIA). Encourage all public construction and private development projects that require a TIA to analyze potential bicycle and pedestrian impacts in accordance with the Santa Clara County Valley Transportation Authority (VTA) TIA Guidelines.</p> <p>Strategy 8. Cupertino Bicycle Transportation Plan. Maintain the Cupertino Bicycle Transportation Plan, as needed. Include top priority bicycle projects in the annual Capital Improvement Program. Continue to identify barriers to safe and convenient bicycle access and then identify how and when these barriers will be removed.</p> <p>Strategy 9. Bicycle Transportation Plan Improvements. Implement the specific improvements identified in the Bicycle Transportation Plan. The existing Network is shown in Figure 4-B.</p> <p>Strategy 10. Bicycle Facilities in New Developments. Encourage the developers of major new or remodeled buildings to include secure interior and/or fully weather protected bicycle parking. Continue to implement the Ordinance requirement for 10% of bicycle parking to be Class 1.</p> <p>Strategy 11. Traffic Calming on Bicycle Routes. Where feasible and appropriate, implement traffic calming on those bicycle routes where automobile traffic volumes are low. Reference the Santa Clara County Valley Transportation Authority’s Bicycle Technical Guidelines for recommended traffic calming measures. Bicycle traffic flows best where automobile traffic volume and speeds are low and where there are no stop signs or traffic signals to hinder through</p>

**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>traffic flow.</p> <p>Strategy 12. Bicycle Parking. Provide bicycle parking in multi-family residential developments and in commercial districts as required under the parking requirements of the Municipal Code.</p> <p>Strategy 13. Funding Sources. Identify funding sources for regular maintenance and cleaning of all public bicycle and pedestrian facilities as part of the City’s operation budget, and prioritize routine street maintenance for streets with bike facilities.</p> <p>Strategy 14. Public and Private Partnerships. Partner with other agencies and/or organizations to establish programs for bicyclists, pedestrians, and motorists of all ages.</p> <ul style="list-style-type: none"> <li>▪ Policy 4-6: Regional Trail Development. Continue to plan and provide for a comprehensive system of trails and pathways consistent with regional systems, including the Bay Trail, Stevens Creek Corridor and Ridge Trail, and with the policies contained in the Land Use and Community Design Element. The General Alignment of the Bay Trail, as shown in the Association of Bay Area Governments’ Bay Trail planning document, is incorporated in the General Plan by reference.</li> <li>▪ Policy 4-7: Increased Use of Public Transit. Support and encourage the increased use of public transit.</li> </ul> <p>Strategy 1. Transit Facilities in New Developments. Ensure all new development projects include amenities to support public transit such as: bus stop shelters; space for transit vehicles to stop and maneuver as needed; transit maps and schedules. Encourage commercial and institutional developments to support bus passes for employees.</p> <p>Strategy 2. Transit Stop Amenities. Work with the VTA and adjacent property owners to provide attractive amenities such as seating, lighting and signage at all bus stops.</p> <p>Strategy 3. Vallco Park Transit Station. Work with the VTA to study and develop a transit transfer station at South Vallco Park Gateways.</p> <p>Strategy 4. Rapid Transit. Work with the Santa Clara Valley Transportation Authority (VTA) to plan for and develop bus and/or light rail rapid transit services in the Stevens Creek and north De Anza corridors to take advantage of the potential increase in mixed-use activities in the De Anza College customer base. Consider increased frequency of service to encourage ridership. Review impacts to ensure that operations are optimized.</p> <p>Policy 4-9: Traffic Service and Pedestrians Needs. Balance the needs of</p>

**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>pedestrians with desired traffic service. Where necessary and appropriate, allow a lowered level of service standard to better accommodate pedestrians on major streets and at specific intersections.</p> <ul style="list-style-type: none"> <li> <p>▪ Policy 4-12: Street Improvement Planning. Plan street improvements such as curb cuts, sidewalks, bus stop turnouts, bus shelters, light poles, benches and trash containers as an integral part of a project to ensure an enhanced streetscape and the safe movement of people and vehicles with the least possible disruption to the streetscape.</p> <p>Strategy 1. Sidewalk Access to Parking or Buildings. Examine sidewalk to parking areas or building frontages at the time individual sites develop to regulate the entry to the site at a central point. Sidewalks in the Crossroads Area shall be wide enough to accommodate increased pedestrian activity.</p> <p>Strategy 2. Bus Stop Turnouts in Street Frontages. Require bus stop turnouts, or partial turnouts, within the street frontage of a new or redeveloping site. This policy does not apply to the Crossroads Area. Bus stops should include shelters, benches, trash receptacles and other amenities as appropriate. Follow the VTA specifications for improving bus stops.</p> <p>Strategy 3. Roadway Maintenance Funding. Identify and secure new funding sources to fund the on-going routine maintenance of roadways.</p> <p>Strategy 4. Timing of Improvements. Integrate the financing, design and construction of pedestrian and bicycle facilities with street projects. Build pedestrian and bicycle improvements at the same time as improvements for vehicular circulation.</p> </li> <li> <p>▪ Policy 4-13: Safe Parking Lots. Require parking lots that are safe for pedestrians.</p> <p>Strategy 1. Safe Spaces for Pedestrians. Require parking lot design and construction to include clearly defined spaces for pedestrians so that foot traffic is separated from the hazards of car traffic and people are directed from their cars to building entries.</p> </li> <li> <p>▪ Policy 4-15: School Traffic Impacts on Neighborhoods. Minimize the impact of school drop-off, pick-up and parking on neighborhoods.</p> <p>Strategy 1. Coordination with School Districts. Coordinate with the School Districts to develop plans and programs that encourage car/van-pooling, stagger hours of adjacent schools, drop-off locations, encourage walking and bicycling to school.</p> <p>Strategy 2. Teen Commission. Encourage the Teen Commission to work with schools to encourage year-round programs to incentivize walking and biking to</p> </li> </ul>

**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>school.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-3: Conservation and Efficient Use of Energy Resources. Encourage the maximum feasible conservation and efficient use of electrical power and natural gas resources for new and existing residences, businesses, industrial and public uses.</li> </ul> <p>Strategy 1. Alternate Energy Sources. Continue to ensure the ease of access to and use of solar energy and other alternate, renewable energy resources for all new and significantly renovated private and public buildings through effective policies, programs and incentives.</p> <p>Strategy 2. Comprehensive Energy Management Plan. Prepare and implement a comprehensive energy management plan for all applicable public facilities, equipment to achieve the energy goals established in the City’s municipal Climate Action Plan. Embed this plan into the City’s Environmentally Preferable Procurement Policy to ensure measures are achieved through all future procurement and construction practices.</p> <p>Strategy 3. Consistency with State and Federal Regulation. Continue to evaluate, and revise as necessary, applicable City codes, ordinances and procedures for inclusion of local, state and federal policies and standards that promote energy and water conservation.</p> <p>Strategy 4. Energy Efficient Replacements. Continue to use life cycle cost analysis to identify City assets for replacement with more energy efficient technologies.</p> <p>Strategy 5. Incentive Program. Support incentive programs to include such items as reduced permit fees for building projects that exceed the City’s Green Building Ordinance and CalGreen. Continue to promote other incentives from the state, county and federal governments for improving energy efficiency and expanding renewable energy installations by posting information regarding incentive, rebate and tax credit programs on the City’s web site.</p> <p>Strategy 6. Solar Access Standards. Continue to ensure compliance with the State of California Subdivision Map Act solar access standards in order to maximize natural heating and cooling opportunities for future residences and businesses. Encourage the inclusion of additional shade trees and landscaping for energy efficiency.</p> <p>Strategy 7. Educational Programs. Continue to:</p> <ul style="list-style-type: none"> <li>○ Offer conservation/efficiency educational programs and leverage those available through the County and the Bay Regional Energy Network to serve all utility users.</li> </ul>

**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<ul style="list-style-type: none"> <li>○ Provide informational materials and host energy conservation workshops for businesses and residents.</li> <li>○ Provide, or partner with other agencies to offer, educational materials, seminar and staff training on energy conservation/efficiency for those who design, build and manage building facilities, and for those who regulate building design and construction, per the City’s GreenBiz Program. In partnership with De Anza College develop a “Sustainable Building Practices” guide for Cupertino residents and businesses that builds upon the City’s Green Building Ordinance. The Guide should include information regarding current rebates and subsidies to make implementing a sustainable building more financially attractive with references back to the City, State, Federal and other web sites for up-to-date information. Provide, or partner with other agencies to offer, educational materials, seminars and a certification program for contractors and architects who have participated in “Sustainable Building” courses. Many of the curriculums are currently available at De Anza College. As an incentive for participating in the “Sustainable Building” program the City will maintain a “Sustainable Builder/ Developer” page on their current City website. This page will not be an endorsement of the individual or company listed, but a resource center for the community.</li> <li>○ Establish and maintain an Energy Information Center or Kiosk at City Hall where information concerning energy issues, building standards, recycling and assistance is available.</li> </ul> <p>Strategy 8. Energy Cogeneration Systems. Encourage the use of energy cogeneration systems through the provision of an awareness program targeting the larger commercial and industrial users and public facilities.</p> <p>Strategy 9. Regulation of Building Design. Ensure designer, developers, applicants and builders meet the City’s Green Building Ordinance and CalGreen and encourage architects, building designers and contractors to exceed these requirements for new projects through the provision of incentives. Encourage either passive solar heating and/or dark plaster interior with a cover for swimming pools, cabanas and other related accessory uses where solar access is available. Encourage the use of renewable energy sources where feasible, and continue to offer energy audits and/or subvention programs that also advance community adoption of alternative energy technologies.</p> <p>Strategy 10. Use of Discretionary Development Permits (Use Permits). Require, as</p>

## LAND USE ALTERNATIVE B

TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN

Type	Measure Number / Title	Consistency
Land Use and Local Impact Control Measures	<ul style="list-style-type: none"> <li>▪ LUM 1 – Goods Movement</li> <li>▪ LUM 2 – Indirect Source Review</li> <li>▪ LUM 3 – Enhanced CEQA Program</li> <li>▪ LUM 4 – Land Use Guidelines</li> <li>▪ LUM 5 – Reduce Risk in Impacted Communities</li> <li>▪ LUM 6 – Enhanced Air Quality Monitoring</li> </ul>	<p>conditions of approval for new and renovated projects, the provision of energy conservation/efficiency applications, aligned with the City’s Green Building Ordinance and CalGreen.</p> <p>Strategy 11. Energy Efficient Transportation Modes. Continue to encourage alternative, fuel-efficient transportation modes such as “clean” multi-modal public transit, car and vanpooling, flexible work hours, safe routes to schools, and pedestrian and bicycle paths through community education and training, infrastructure investment, and financial incentives, including commuter benefits programs.</p> <p>The 2010 Bay Area Clean Air Plan also includes land use measures to reduce air quality emissions and/or air quality exposure in the SFBAAB. The following Land Use Alternative B policies support these land use measures:</p> <ul style="list-style-type: none"> <li>▪ Policy 5-5: Air Pollution Effects of New Development. Minimize the air quality impacts of new development projects and the impacts affecting new development.</li> </ul> <p>Strategy 1. Toxic Air Contaminants. Continue to review projects for potential generation of toxic air contaminants at the time of approval and confer with BAAQMD on controls needed if impacts are uncertain.</p> <p>Strategy 2. Dust Control. Continue to require water application to non-polluting dust control measures during demolition and the duration of the construction period.</p> <p>Strategy 3. Planning Decisions. Continue to assess the potential for air pollution effects of future land use and transportation planning, and ensure that planning decisions support regional goals of improving air quality.</p> <p>Strategy 4. Environmental Review. Continue to evaluate the relationship of sensitive receptors, such as convalescent hospitals and residential uses, to pollution sources through the environmental assessment of new development.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-6: Air Pollution Effects of Existing Development. Minimize the air quality impacts of existing development.</li> </ul> <p>Strategy 1. Public Education Program. Establish a Citywide public education program regarding the implications of the Clean Air Act and provide information on ways to reduce and control emissions; continue to provide information about alternative commutes, carpooling and restricting exacerbating activities on “Spare the Air” high-pollution days.</p> <p>Strategy 2. Home Occupations. Expand the allowable home occupations in residentially zoned properties to reduce the need to commute to work.</p>



**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
Energy and Climate Control Measures	<ul style="list-style-type: none"> <li>▪ ECM 1 – Energy Efficiency</li> <li>▪ ECM 2 – Renewable Energy</li> <li>▪ ECM 3 – Urban Heat Island Mitigation</li> <li>▪ ECM 4 – Tree Planting</li> </ul>	<p>Strategy 3. Tree Planting. Continue to implement the City’s tree planting program to increase the City’s urban canopy on City property and encourage native, shade-producing, drought-tolerant tree and other plantings on private property.</p> <p>Strategy 4. Fuel-efficient Vehicles. Per the City’s Environmentally Preferable Procurement Policy, prioritize the City’s purchase, replacement and ongoing use of fuel-efficient and low polluting vehicles. Update the City’s Vehicle Replacement Policy and Budget to require vehicle lifecycle cost analyses and include alternative fueling infrastructure review and related funding allocations. Update the City’s Vehicle Use Policy to encourage alternative vehicle use across all departments and fuel-saving driver behaviors and habits. Review and implement fleet management best practices to support fuel conservation, including scheduled maintenance and fleet fuel tracking. Pursue available grant funding to offset the cost of implementing these programs.</p> <p>Strategy 5. Monitor Quarry Emissions. Continue to work with County to monitor and influence/encourage improvement of emissions and dust from the Hanson and Stevens Creek Quarries on the West end of the City.</p> <ul style="list-style-type: none"> <li>▪ Policy 2-8: Neighborhood Compatibility. Minimize potential conflicts with residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, limitations, site design and other appropriate measures. Create zoning or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through measures such as: daylight planes for single-family development, minimum setback standards, landscape screening, acoustical analysis, location and orientation of service areas away from residential uses and limitations on hours of operation.</li> <li>▪ Policy 6-28: Proximity of Residents to Hazardous Materials. Assess future residents’ exposure to hazardous materials when new residential development or childcare facilities are proposed in existing industrial and manufacturing areas. Do not allow residential development or childcare facilities if such hazardous conditions cannot be mitigated to an acceptable level of risk.</li> </ul> <p>The 2010 Bay Area Clean Air Plan also includes measures to reduce energy use, water use, and waste generation. The following Land Use Alternative B policies support these energy efficiency and other sustainability measures:</p> <ul style="list-style-type: none"> <li>▪ Policy 5-1: Principles of Sustainability. Incorporate the principles of sustainability into Cupertino’s planning and development system in order to improve the environment, reduce greenhouse gas emission and meet the needs of the</li> </ul>

**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>present community without compromising the needs of future generations.</p> <p>Strategy 1. Greenhouse Gas Emission Reduction Target. The City shall adopt and maintain a Climate Action Plan consistent with State Law.</p> <p>Strategy 2. Sustainability Task Force or Commission. Appoint a Task Force or Commission to oversee the implementation of the City’s Climate Action Plan. The goals of this Task Force/Commission would be:</p> <ul style="list-style-type: none"> <li>a. Write and keep current the Climate Action Plan through ongoing measurement of municipal and city-wide programs to help achieve the Environmental Resources and Sustainability section of the General Plan.</li> <li>b. Identify resources, technologies, and products to attain the greenhouse gas emissions reductions targets established in the City’s Climate Action Plan and evaluate the life-cycle cost of ownership for each recommended.</li> <li>c. Work with City staff to evaluate the financial feasibility of these recommendations on an ongoing basis.</li> </ul> <p>Strategy 3. Implementation Programs. Continue to adopt and implement new energy efficiency and renewable energy policies and implementation programs that incorporate the City’s existing planning and regulatory process.</p> <p>Strategy 4. City-Wide Inventory. Continue to conduct an ongoing municipal and community-wide greenhouse gas emissions inventory and periodically review the City’s Climate Action Plan in order to identify issues, opportunities and planning alternatives.</p> <p>Strategy 5. Sustainable Energy and Water Conservation Plan. Prepare and implement a comprehensive Climate Action Plan that prioritizes energy and water conservation measures. This plan will specifically include recommendations regarding:</p> <ul style="list-style-type: none"> <li>a. Reduction of energy consumption.</li> <li>b. Reduction of fossil fuel use.</li> <li>c. Maximum use of renewable energy resources.</li> <li>d. Improve City-wide water conservation.</li> <li>e. Reduce water consumption within municipal operations.</li> <li>f. Promote and incentivize reduced residential and business water use.</li> </ul> <p>Strategy 6. Community Gardens. Encourage community and school gardens, which provide a more livable environment by regulating temperature, noise and pollution, and create access to healthy, local sources of food.</p> <p>Strategy 7. Fiscally Sustainable Waste Management. Consider environmental and social costs in all decision-making and budget decisions.</p>

**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<ul style="list-style-type: none"> <li> <p>▪ Policy 5-3: Conservation and Efficient Use of Energy Resources. Encourage the maximum feasible conservation and efficient use of electrical power and natural gas resources for new and existing residences, businesses, industrial and public uses.</p> <p>Strategy 1. Alternate Energy Sources. Continue to ensure the ease of access to and use of solar energy and other alternate, renewable energy resources for all new and significantly renovated private and public buildings through effective policies, programs and incentives.</p> <p>Strategy 2. Comprehensive Energy Management Plan. Prepare and implement a comprehensive energy management plan for all applicable public facilities, equipment to achieve the energy goals established in the City’s municipal Climate Action Plan. Embed this plan into the City’s Environmentally Preferable Procurement Policy to ensure measures are achieved through all future procurement and construction practices.</p> <p>Strategy 3. Consistency with State and Federal Regulation. Continue to evaluate, and revise as necessary, applicable City codes, ordinances and procedures for inclusion of local, state and federal policies and standards that promote energy and water conservation.</p> <p>Strategy 4. Energy Efficient Replacements. Continue to use life cycle cost analysis to identify City assets for replacement with more energy efficient technologies.</p> <p>Strategy 5. Incentive Program. Support incentive programs to include such items as reduced permit fees for building projects that exceed the City’s Green Building Ordinance and CalGreen. Continue to promote other incentives from the state, county and federal governments for improving energy efficiency and expanding renewable energy installations by posting information regarding incentive, rebate and tax credit programs on the City’s web site.</p> <p>Strategy 6. Solar Access Standards. Continue to ensure compliance with the State of California Subdivision Map Act solar access standards in order to maximize natural heating and cooling opportunities for future residences and businesses. Encourage the inclusion of additional shade trees and landscaping for energy efficiency.</p> <p>Strategy 7. Educational Programs. Continue to:</p> <ul style="list-style-type: none"> <li>○ Offer conservation/efficiency educational programs and leverage those available through the County and the Bay Regional Energy Network to serve all utility users.</li> <li>○ Provide informational materials and host energy conservation workshops for businesses and residents.</li> </ul> </li> </ul>

**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<ul style="list-style-type: none"> <li>o Provide, or partner with other agencies to offer, educational materials, seminar and staff training on energy conservation/efficiency for those who design, build and manage building facilities, and for those who regulate building design and construction, per the City’s GreenBiz Program. In partnership with De Anza College develop a “Sustainable Building Practices” guide for Cupertino residents and businesses that builds upon the City’s Green Building Ordinance. The Guide should include information regarding current rebates and subsidies to make implementing a sustainable building more financially attractive with references back to the City, State, Federal and other web sites for up-to-date information. Provide, or partner with other agencies to offer, educational materials, seminars and a certification program for contractors and architects who have participated in “Sustainable Building” courses. Many of the curriculums are currently available at De Anza College. As an incentive for participating in the “Sustainable Building” program the City will maintain a “Sustainable Builder/ Developer” page on their current City website. This page will not be an endorsement of the individual or company listed, but a resource center for the community.</li> <li>o Establish and maintain an Energy Information Center or Kiosk at City Hall where information concerning energy issues, building standards, recycling and assistance is available.</li> </ul> <p>Strategy 8. Energy Cogeneration Systems. Encourage the use of energy cogeneration systems through the provision of an awareness program targeting the larger commercial and industrial users and public facilities.</p> <p>Strategy 9. Regulation of Building Design. Ensure designer, developers, applicants and builders meet the City’s Green Building Ordinance and CalGreen and encourage architects, building designers and contractors to exceed these requirements for new projects through the provision of incentives. Encourage either passive solar heating and/or dark plaster interior with a cover for swimming pools, cabanas and other related accessory uses where solar access is available. Encourage the use of renewable energy sources where feasible, and continue to offer energy audits and/or subvention programs that also advance community adoption of alternative energy technologies.</p> <p>Strategy 10. Use of Discretionary Development Permits (Use Permits). Require, as conditions of approval for new and renovated projects, the provision of energy conservation/efficiency applications, aligned with the City’s Green Building</p>

**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>Ordinance and CalGreen.</p> <p>Strategy 11. Energy Efficient Transportation Modes. Continue to encourage alternative, fuel-efficient transportation modes such as “clean” multi-modal public transit, car and vanpooling, flexible work hours, safe routes to schools, and pedestrian and bicycle paths through community education and training, infrastructure investment, and financial incentives, including commuter benefits programs.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-4: Green Building Design. Set standards for the design and construction of energy and resource conserving/ efficient building (Green Building Design).                     <p>Strategy 1. “Green Building” Program. Periodically review and revise the City’s Green Building Ordinance to ensure alignment with state CalGreen requirements for all major private and public projects that ensure reduction in energy and water use for new development through site selection and building design.</p> <p>Strategy 2. Building Energy Audits. Continue to offer and leverage regional partners’ programs to conduct building energy assessments for homes, commercial, industrial and city facilities and recommend improvements that lead to energy and cost savings opportunities for participants.</p> <p>Strategy 3. “Green Buildings” Evaluation Guide. Prepare a “Green Building” evaluation guide based upon the City’s Green Building Ordinance, CalGreen, and above listed “essential components” for use by the city staff when reviewing projects.</p> <p>Strategy 4. Staff Training. Continue to train appropriate staff in the design principles, costs, and benefits of sustainable building and landscape design. Encourage staff to attend outside trainings on these topics and attain relevant program certifications (e.g. Green Point Rater, LEED Accredited Professional).</p> <p>Strategy 5. “Green Buildings” Informational Seminars. Conduct and/or participate in “Green Building” informational seminars and workshops for members of the design and construction industry, land development, real estate sales, lending institutions, landscaping and design, the building maintenance industry and prospective project applicants. Consider modeling this program after the CERT program.</p> <p>Strategy 6. Public Communication. Further accelerate community adoption of green building practices through regularly featured articles in the Cupertino Scene, media outreach to the Courier and the Guide (San Jose Mercury), streaming sustainable building and other conservation courses or seminars on the City Channel, and make these recordings available at the Library.</p> </li> <li>▪ Policy 5-7: Use of Open Fires and Fireplaces. Discourage high pollution fireplace</li> </ul>

**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>use.</p> <p>Strategy 1. Bay Area Air Quality Management District (BAAQMD) Literature. Continue to make available BAAQMD literature on reducing pollution from fireplace use.</p> <p>Strategy 2. Installation of New Fireplaces. Continue to prohibit the use of wood-burning fireplaces in new construction, except for Environmental Protection Agency Certified Woodstoves.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-28: Interagency Coordination. Continue to actively pursue interagency coordination for regional water supply problem solving.</li> <li>▪ Policy 5-29: Coordination of Local Conservation Policies with Regionwide Conservation Policies. Continue to coordinate citywide water conservation efforts with the Santa Clara Valley Water District (SCVWD), San Jose Water Company and Cal Water.</li> </ul> <p>Strategy. Water Conservation Measures. Implement the drought plans from the City’s water retailers (San Jose Water Company and California Water Company) and SCVWD when water conservation efforts are needed.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-30: Public Information Effort. Provide the public information regarding water conservation/efficiency techniques, including how paving and other impervious surfaces impact runoff.</li> </ul> <p>Strategy 1. Outreach. Participate in regional public outreach with other stormwater co-permittees. Also continue to send educational information and notices to households and businesses with water prohibitions, water allocations and conservation tips. Continue to offer featured articles in the Cupertino Scene and Cupertino Courier. Provide conservation Public Service Announcements on the City’s Channel and Cupertino Radio.</p> <p>Strategy 2. Demonstration Gardens. Include water-wise demonstration gardens in some parks where feasible as they are re-landscaped or improved using drought tolerant native and non-invasive, non-native plants.</p> <p>Strategy 3. Master Gardeners. Work with the County Master Gardeners and other relevant stewardship partners to identify water-wise plant materials and irrigation methods for use in public and private areas. This information should be shared on the City’s Green web site and included in Cupertino Scene Environmental Section.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-31: Water Use Efficiency. Promote efficient use of water throughout the City.</li> </ul> <p>Strategy 1. Recycled Water. Encourage onsite water recycling including the use</p>

**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>of cisterns to collect rain runoff and treated gray water systems.</p> <p>Strategy 2. Landscaping Plans. Per the City’s Greywater Ordinance, require water-efficient landscaping plans that incorporate the usage of recycled water for landscape irrigation as part of the development review process.</p> <p>Strategy 3. Water Conservation Programs. Continue to work with the Santa Clara Valley Water District, San Jose Water and Cal Water to undertake programs that promote water use efficiency for municipal, residential, and commercial customers. Continue activities that support the City’s Green Business Certification goals of long-term water conservation within City buildings, including installation of low-flow toilets and showers, installation of automatic shut off valves in lavatories and sinks and water efficient outdoor irrigation, per the City’s Water Efficient Landscaping Ordinance, Environmentally Preferable Procurement Policy, and the Parks &amp; Recreation Green Policies.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-38: Commercial/Industrial Recycling. Expand existing commercial and industrial recycling programs to meet and surpass AB939 waste stream reduction goals.</li> </ul> <p>Strategy. Increase Recycling. Request that all commercial and industrial uses to increase their recycling efforts to help the city achieve its recycling goals.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-39: Residential Recycling. A comprehensive recycling program is to be provided for all residential and multi-family dwellings.</li> </ul> <p>Strategy 1. Coordination with Solid Waste and Recycling Contractor. Work closely with the City’s solid waste and recycling contractor to develop and implement efficient and effective recycling methods.</p> <p>Strategy 2. E-Waste Recycling Program. Continue/make permanent the e-waste recycling program.</p> <p>Strategy 3. Curbside Recycling of Yard Waste and Compostables. Include vegetable, fruit and other appropriate food items, as well as recycling of non-reusable batteries.</p> <ul style="list-style-type: none"> <li>▪ Policy 5-40: On-site Garbage and Organic Collection Area Dedication. Modify existing, and require for new developments, on-site waste facility requirements for all multi-family residential, commercial and industrial land uses to have adequate covered area for a combination of garbage, recycling and organic collection.</li> </ul> <p>Strategy. Ordinance Revisions. Revise existing ordinances as needed relative to on-site waste facility requirements for all multi-family residential, commercial and industrial zoning districts to require adequate covered area for a</p>

**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
		<p>combination of garbage, recycling and organic collection.</p> <ul style="list-style-type: none"> <li> <p>▪ Policy 5-41: Public Education. Promote the existing public education program regarding the reduction of solid waste disposal while encouraging recycling and organic diversion.</p> <p>Strategy 1. Recycling Program Information. Use the local television channel, the Cupertino Scene, the Internet and other available media to provide information to the residents about the objectives of the City’s recycling and organic diversion programs.</p> <p>Strategy 2. Reusable Products. Encourage use of reusable products.</p> </li> <li> <p>▪ Policy 5-42: City Recycling and Organic Diversion. Encourage City staff to recycle and compost at all City facilities.</p> <p>Strategy 1. Recycling and Organic Diversion Opportunities. Provide collection bins and increase the number of existing recycling and organic bins at strategically located areas to facilitate disposal of recyclable and organic materials, including all City parks.</p> <p>Strategy 2. Schools and Institutions. Partner with schools/institutions in Cupertino to ensure that they understand and are adhering to the City’s recycling and organic diversion goals and providing adequate recycling and composting opportunities to staff and students.</p> </li> <li> <p>▪ Policy 5-43: Re-distribution of Reusable Materials. Through public education, encourage residents and businesses to re-distribute reusable materials (e.g. garage sales, materials exchange).</p> <p>Strategy 1. Dissemination of Recycling Information. Disseminate information to both businesses and residents regarding the benefits of recycling and further reducing the solid waste stream.</p> <p>Strategy 2. Use of the Internet. Set up a web site for the benefit of the public where information can be posted identifying the availability of recyclable materials and the location of exchanges.</p> <p>Strategy 3. Encouragement of Product Stewardship. Per the City’s Extended Producer Responsibility (EPR) policy, support EPR initiatives and statewide legislation that will give incentive for the redesign of products and packaging to facilitate the re-use of materials and to make the overall products less toxic and easier to recycle.</p> </li> <li> <p>▪ Policy 5-44: Reuse of Building Materials. Encourage the recycling and reuse of building materials, including recycling materials generated by the demolition and remodeling of buildings.</p> </li> </ul>



**LAND USE ALTERNATIVE B**

**TABLE 5.3-2 CONTROL MEASURES FROM THE 2010 BAY AREA CLEAN AIR PLAN**

Type	Measure Number / Title	Consistency
Further Study Control Measures	<ul style="list-style-type: none"> <li>▪ FSM 1 – Adhesives and Sealants</li> <li>▪ FSM 2 – Reactivity in Coating and Solvents</li> <li>▪ FSM 3 – Solvent Cleaning and Degreasing Operations</li> <li>▪ FSM 4 – Emissions from Cooling Towers</li> <li>▪ FSM 5 – Equipment Leaks</li> <li>▪ FSM 6 – Wastewater from Coke Cutting</li> <li>▪ FSM 7 – SO<sub>2</sub> from Refinery Processes</li> <li>▪ FSM 8 – Reduce Emission from LPG, Propane, Butane, and other Pressurized Gases</li> <li>▪ FSM 9 – Greenhouse Gas Mitigation in BACT and TBACT Determinations</li> <li>▪ FSM 10 Further Reductions from Commercial Cooking Equipment</li> <li>▪ FSM 11 – Magnet Source Rule</li> <li>▪ FSM 12 – Wood Smoke</li> <li>▪ FSM 13 – Energy Efficiency and Renewable Energy</li> <li>▪ FSM 14 – Winery Fermentation</li> <li>▪ FSM 15 – Composting Operations</li> <li>▪ FSM 16 – Vanishing Oils and Rust Inhibitors</li> <li>▪ FSM 17 – Ferry System Expansion</li> <li>▪ FSM 18 – Greenhouse Gas Fee</li> </ul>	<p>Strategy 1. Post Demolition and Remodeling Projects. Encourage contractors to post demolition and remodeling projects on the Internet announcing the availability of potential reusable materials.</p> <p>Strategy 2. Public and Private Projects. Require contractors working on City projects to use recycled building materials and sustainably harvested wood products to the maximum extent possible and encourage them to do the same on private projects.</p> <p>The majority of the Further Study control measures apply to sources regulated directly by BAAQMD. Because BAAQMD is the implementing agency, new and existing sources of stationary and area sources in the City would be required to comply with these additional further study control measures in the 2010 Bay Area Clean Air Plan.</p>

Source: Bay Area Air Quality Management District, 2011 Revised, California Environmental Quality Act Air Quality Guidelines.

## LAND USE ALTERNATIVE B

### Regional Growth Projections for VMT and Population and Employment

Future development under Land Use Alternative B would result in additional sources of criteria air pollutants. Growth accommodated within the City would occur over a 20-year or longer time horizon. As a result, BAAQMD's approach to evaluating impacts from criteria air pollutants generated by long-term growth associated with a plan is done in comparison to BAAQMD's AQMP rather than a comparison of emissions to project-level significance thresholds. This is because BAAQMD's AQMP plans for growth in the SFBAAB are based on regional population and employment projections identified by ABAG and growth in Vehicle Miles Traveled (VMT) identified by Santa Clara Valley Transportation Agency (VTA). Changes in regional, community-wide emissions in Cupertino could affect the ability of BAAQMD to achieve the air quality goals identified in the AQMP. Consequently, air quality impacts for a plan-level analysis are based on consistency with the regional growth projections.

As previously discussed under subheading "Attain Air Quality Standards" above, the additional residential population resulting from implementation of Land Use Alternative B is within the regional population projections (3,649 fewer residents) but would exceed the regional employment projections (5,832 more employees). However, because future growth under Land Use Alternative B would come incrementally over approximately 26 years and would be guided by a policy framework that is generally consistent with many of the principal goals and objectives established in regional planning initiatives for the Bay Area, this additional growth would be consistent with the regional planning objectives established for the Bay Area, which concentrates new development within infill sites. The General Plan includes policies and strategies that, once adopted, would ensure coordination with regional agencies on regional planning initiatives. Policy 5-5, Air Pollution Effects of New Development, would require the City to minimize the air quality impacts of new development projects and the impacts affecting new development. Supporting Strategy 3 would require the City to assess the potential for air pollution effects of future land use and transportation planning, to ensure that planning decisions support regional goals of improving air quality. The Circulation Element also includes policies regarding coordination with regional transportation planning agencies. Policy 4-1, City Participation in Regional Transportation Planning, would require the City actively participate in developing regional approaches to meeting the transportation needs of the residents of the Santa Clara Valley.

Citywide VMT estimates derived from assumed 2040 land use under Land Use Alternative B were calculated by Hexagon Transportation Consultants, using the VTA model. Land uses in the City would generate 897,419 VMT per day (10.47 miles per service population per day in 2013). Based on the future estimates of VMT per person for Cupertino as projected by the VTA model for year 2040, 1,097,596 VMT per day (10.24 miles per service population per day in 2040) would be generated in the City. Table 5.3-3 compares the projected increase in service population with the projected increase in VMT. As shown in this table, daily VMT in the Project Study Area would increase at a slower rate (22.3 percent) between 2013 and 2040 than would the service population of the Project Study Area (25.0 percent). BAAQMD's AQMP would require that the VMT increase be less than or equal to the projected population increase and the project. Land Use Alternative B would result in a lower VMT rate of growth than rate of service population growth. Consequently, impacts for the City of Cupertino would be *less than significant*.

**LAND USE ALTERNATIVE B**

**TABLE 5.3-3 COMPARISON OF THE CHANGE IN SERVICE POPULATION AND VMT FOR LAND USE ALTERNATIVE B**

Category	2013	2040 Land Use Alternative B	Change	Percent Change
Population	58,302	68,051	9,749	16.7%
Employment	27,387	39,092	11,705	42.7%
Total Service Population	85,689	107,143	21,454	25.0%
VMT/Day	897,419	1,097,596	200,177	22.3%

Notes: VMT is provided by Hexagon based on the VTA model.

*Applicable Regulations*

- Assembly Bill (AB) 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations (CCR): Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code
- California Air Resources Board (CARB) Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- CARB Rule 2477 (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate
- BAAQMD, Regulation 2, Rule 2, New Source Review
- BAAQMD, Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
- BAAQMD Regulation 6, Rule 1, General Requirements
- BAAQMD Regulation 6, Rule 2, Commercial Cooking Equipment
- BAAQMD Regulation 7, Odorous Substances
- BAAQMD Regulation 8, Rule 3, Architectural Coatings
- BAAQMD Regulation 8, Rule 4, General Solvent and Surface Coatings Operations
- BAAQMD Regulation 8, Rule 7, Gasoline Dispensing Facilities
- BAAQMD Regulation 11, Rule 2, Asbestos, Demolition, Renovation and Manufacturing

Land Use Alternative B would support the primary goals of the 2010 Bay Area Clean Air Plan. The buildout of Land Use Alternative B would not conflict with the BAAQMD Bay Area Clean Air Plan goal for community-wide VMT to increase at a slower rate compared to population and employment growth. The rate of growth in VMT would not exceed the rate of population and employment growth. Consequently, impacts are *less than significant*.

**Significance Without Mitigation:** Less than significant.

## LAND USE ALTERNATIVE B

---

**AQ-2 Implementation of Land Use Alternative B would violate any air quality standard or contribute substantially to an existing or projected air quality violation.**

---

BAAQMD has identified thresholds of significance for criteria pollutant emissions and criteria air pollutant precursors, including reactive organic gases (ROG), nitric oxide (NO), PM<sub>10</sub> and PM<sub>2.5</sub>. Development projects below the significance thresholds are not expected to generate sufficient criteria pollutant emissions to violate any air quality standard or contribute substantially to an existing or projected air quality violation. According to BAAQMD's CEQA Guidelines, long-range plans (e.g. general plan, redevelopment plans, specific plans, area plans, community plans, regional plans, congestion management plans, etc.) present unique challenges for assessing impacts. Due to the SFBAAB's nonattainment status for ozone and PM and the cumulative impacts of growth on air quality, these plans almost always have *significant, unavoidable* adverse air quality impacts.

### Operational Emissions

Although BAAQMD's CEQA Air Quality Guidelines only require an emissions inventory of criteria air pollutants for project-level analyses, an inventory of criteria air pollutants was generated for Land Use Alternative B, since enough information regarding the buildout of the current General Plan is available and can be used to identify the magnitude of emissions from buildout of Land Use Alternative B. Table 5.3-4 identifies the emissions associated with buildout of Land Use Alternative B. Subsequent environmental review of development projects would be required to assess potential impacts under BAAQMD's project-level thresholds shown in Table 5.3-4.

The General Plan includes policies and strategies that, once adopted, would reduce criteria air pollutants from development projects to the maximum extent practicable. Within the Land Use/ Community Design Element, Policy 2-2, Connections Between Special Areas, Employment Centers and the Community and supporting strategies would require the city to provide strong connections between the mixed-use Special Areas, employment centers, and the surrounding community. Policy 2-12, Long Term Growth Boundary, would require the City to allow modification of the long-term growth boundary only in conjunction with a comprehensive review of the City's General Plan. Policy 2-22, Jobs/Housing Balance and supporting strategies, require the City to strive for a more balanced ratio of jobs and housing units. Policy 2-26, Heart of the City Special Area, and supporting strategies, require the City to create a positive and memorable image along Stevens Creek Boulevard of mixed-use development; enhanced activity gateways and nodes; and safe and efficient circulation and access for all modes of transportation. Policy 4-5, Pedestrian Access, require the City to create pedestrian access between new subdivisions and school sites. Review existing neighborhood circulation plans to improve safety and access for pedestrians and bicyclists to school sites, including completing accessible network of sidewalks and paths. Within the Environmental Resources/Sustainability Element, Policy 5-1, Principles of Sustainability, Policy 5-3, Conservation and Efficient Use of Energy Resources, Policy 5-4, Green Building Design, require the City to apply the principles of sustainability, conserve energy, set standards for the design and construction of energy and resource conserving/efficient building (Green Building Design).

**LAND USE ALTERNATIVE B**

**TABLE 5.3-4 COMMUNITY-WIDE CRITERIA AIR POLLUTANTS GENERATED BY LAND USE ALTERNATIVE B**

Category	Criteria Air Pollutants (average lbs/day)			
	ROG	NO <sub>x</sub>	Exhaust PM <sub>10</sub>	Exhaust PM <sub>2.5</sub>
Transportation <sup>a</sup>	66	376	128	56
Energy <sup>b</sup>	60	526	41	41
Area Sources <sup>c</sup>	1,606	773	57	56
<b>Total</b>	<b>1,732</b>	<b>1,674</b>	<b>226</b>	<b>153</b>
Change from 2013 Land Uses	309	1,417	193	130
BAAQMD Average Daily Project-Level Threshold	54	54	82	54
<b>Exceeds Average Daily Threshold</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Total Tons per Year (tpy)	315 tpy	297 tpy	40 tpy	27 tpy
Change from 2013 Land Uses	56 tpy	39 tpy	6 tpy	4 tpy
BAAQMD Annual Project-Level Threshold	10 tpy	10 tpy	15 tpy	10 tpy
<b>Exceeds Annual Threshold</b>	<b>Yes</b>	<b>Yes</b>	No	No

Note: Emissions may note total to 100 percent due to rounding.

a. Transportation. VMT is based on data provided by Hexagon, based on VTA model for Cupertino and modeled with EMFAC2011-PL for running exhaust emissions using 2035 emission rates (note: 2040 emissions rates are not available). VMT is multiplied by 347 days/year to account for reduced traffic on weekends and holidays.

b. Energy. Based on three-year average (2012–2010) of energy use provided by Pacific Gas & Electric (PG&E) and forecast based on Land Use Alternative B housing units (residential), employment (non-residential), and service population (City) projections. The nonresidential sector includes direct access customers, county facilities, and other district facilities within the City boundaries.

c. Area Sources – Off-road Emissions. Generated using OFFROAD2007. Estimated based on population (Landscaping), employment (Light Commercial Equipment), and construction building permits (Construction) for Cupertino as a percentage of Santa Clara County. Annual construction emissions forecasts are assumed to be similar to historic levels. Forecasts for landscaping equipment use are based on Land Use Alternative B population projections, and for light commercial equipment use are based on Land Use Alternative B employment projections. Excludes BAAQMD-permitted sources. ROG emissions from consumer product use based on the emissions rates in CalEEMod 2013.2.2. Daily construction emissions multiplied by 347 days/year to account for reduced/limited construction activity on weekends and holidays. Excludes fugitive emissions from construction sites.

Policy 5-6, Air Pollution Effects of Existing Development, and supporting strategies require the City to minimize the air quality impacts of existing development through citywide public education program regarding the implications of the Clean Air Act expanding home occupations, increase planting of trees on City property and encourage the practice on private property, and maintain City use of fuel-efficient and low polluting vehicles. Policy 5-7, Use of Open Fires and Fireplaces, would require the City to discourage high pollution fireplace use. Within the Circulation Element, Policy 4-1, City Participation in Regional Transportation Planning, and supporting strategies would require the City to participate actively in developing regional approaches to meeting the transportation needs of the residents of the Santa Clara Valley and work closely with neighboring jurisdictions and agencies responsible for roadways, transit facilities and transit services in Cupertino. Policy 4-3, Reduced Reliance on the Use of Single-Occupant Vehicles, and supporting strategies, require the City to promote a general decrease in reliance on private, mostly single-occupant vehicles (SOV) by encouraging attractive alternatives by encouraging the use of alternatives to the SOV including increased car-pooling, use of public transit, bicycling and walking; TSM programs; employers

## LAND USE ALTERNATIVE B

to use the internet to reduce commute travel; schools, particularly at the college and high school levels, to make maximum use of the internet to limit the need to travel to and from the campus, new commercial developments to provide shared office facilities, cafeterias, day-care facilities, lunchrooms, showers, bicycle parking, home offices, shuttle buses to transit facilities and other amenities that encourage the use of transit, bicycling, walking or telecommuting as commute modes to work. Provide pedestrian pathways and orient buildings to the street to encourage pedestrian activity. Require the use the Cupertino Scene and other media to provide educational material on alternatives to the SOV and to continue to work with the City Bicycle/Pedestrian Advisory Committee, community groups and residents to eliminate hazards and barriers to bicycle and pedestrian transportation.

Despite implementation of the existing and amended Land Use Alternative B policies and strategies, as identified in Table 5.3-4, criteria air pollutant emissions associated with buildout of Land Use Alternative B would generate a substantial increase in emissions that exceeds the BAAQMD regional significance thresholds (ROG, NO<sub>x</sub>, and PM<sub>10</sub>). Criteria air pollutant emissions would be generated from on-site area sources (e.g. landscaping fuel, consumer products), vehicle trips generated by the project, and energy use (e.g. natural gas used for cooking and heating). This is considered a *significant* impact.

### *Applicable Regulations*

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 CCR: Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code
- CARB Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- CARB Rule 2477 (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate
- BAAQMD, Regulation 2, Rule 2, New Source Review
- BAAQMD, Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
- BAAQMD Regulation 6, Rule 1, General Requirements
- BAAQMD Regulation 6, Rule 2, Commercial Cooking Equipment
- BAAQMD Regulation 7, Odorous Substances
- BAAQMD Regulation 8, Rule 3, Architectural Coatings
- BAAQMD Regulation 8, Rule 4, General Solvent and Surface Coatings Operations
- BAAQMD Regulation 8, Rule 7, Gasoline Dispensing Facilities
- BAAQMD Regulation 11, Rule 2, Asbestos, Demolition, Renovation and Manufacturing

### Mitigation Measures

Future development under Land Use Alternative B would result in a substantial long-term increase in criteria air pollutants over the 26-year General Plan horizon. Criteria air pollutant emissions would be

## LAND USE ALTERNATIVE B

generated from on-site area sources (e.g. landscaping fuel, consumer products), vehicle trips generated by the project, and energy use (e.g. natural gas used for cooking and heating). The General Plan policies and strategies listed previously under Impact AQ-1 and listed above would minimize emissions to the extent feasible; however, there are no additional measures available to mitigate this impact due to the level of growth forecast in the city. Impacts are *significant*.

Compliance with the goals and policies of Land Use Alternative B would reduce operational emissions from development under the Land Use Alternative B. In addition, Mitigation Measure AQ-4a (for new sources of toxic air contaminants, see below), would also reduce criteria air pollutants associated with light industrial land uses within the city. Future development in Cupertino could generate operational emissions in excess of the BAAQMD significance thresholds. Operational emissions from future development would be determined during project-level CEQA review. The total criteria air pollutant emissions from operation of future development projects under Land Use Alternative B would be substantial and would contribute to increases in concentrations of air pollutants, which could contribute to ongoing violations of air quality standards. It should be noted that the identification of this program-level impact does not preclude the finding of less-than-significant impacts for subsequent projects that comply with BAAQMD screening criteria or meet applicable thresholds of significance. However, due to the programmatic nature of Land Use Alternative B, no additional mitigation measures are available, and the impact is considered *significant and unavoidable*.

**Significance Without Mitigation:** Significant and unavoidable.

### Construction Emissions

BAAQMD's plan-level guidelines do not require an evaluation of construction emissions for plan-level projects. There is no proposed development under Land Use Alternative B at this time. Future development proposals under Land Use Alternative B would be subject to separate environmental review pursuant to CEQA in order to identify and mitigate potential air quality impacts. Because the details regarding future construction activities are not known at this time, including phasing of future individual projects, construction duration and phasing, and preliminary construction equipment, construction emissions are evaluated qualitatively in accordance with BAAQMD's plan-level guidance.

Construction emissions associated with individual development projects under Land Use Alternative B would generate an increase in criteria air pollutants and TACs. BAAQMD has developed project-level thresholds for construction activities. Subsequent environmental review of future development projects would be required to assess potential impacts under BAAQMD's project-level thresholds. Construction emissions from buildout of future projects within Cupertino would primarily be 1) exhaust emissions from off-road diesel-powered construction equipment; 2) dust generated by demolition, grading, earthmoving, and other construction activities; 3) exhaust emissions from on-road vehicles and 4) off-gas emissions of ROG from application of asphalt, paints, and coatings.

The General Plan includes policies and strategies that, once adopted, would minimize impacts during construction. Within the Environmental Resources/Sustainability Element, Policy 5-5, Air Pollution Effects of New Development, would require the City to minimize the air quality impacts of new development

## LAND USE ALTERNATIVE B

projects and the impacts affecting new development. Strategy 2, Dust Control, directs the City to require water application to non-polluting dust control measures during demolition and the duration of the construction period. Within the Land Use/Community Design Element, Policy 2-51, Rural Improvement Standards in Hillside Areas, directs the City to require rural improvement standards in hillside areas to preserve the rural character of the hillsides. Strategy 1, Mass Grading in New Construction, would require the City to follow natural land contour and avoid mass grading in new construction, especially in flood hazard or hillside areas. Grading large, flat areas shall be avoided.

Existing federal, State, and local regulations, and policies and strategies of Land Use Alternative B described throughout this chapter protect local and regional air quality. Continued compliance with these regulations and implementation of General Plan policies and strategies, would reduce construction-related impacts to the extent feasible. However, if uncontrolled, fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>) levels downwind of actively disturbed areas during construction or overlapping construction activities could violate air quality standards or contribute substantially to an existing or projected air quality violation and expose sensitive receptors to elevated concentrations of pollutants during construction activities. Consequently, impacts are *significant*.

### *Applicable Regulations*

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 CCR: Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code
- CARB Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- CARB Rule 2477 (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate
- BAAQMD, Regulation 2, Rule 2, New Source Review
- BAAQMD, Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
- BAAQMD Regulation 6, Rule 1, General Requirements
- BAAQMD Regulation 6, Rule 2, Commercial Cooking Equipment
- BAAQMD Regulation 7, Odorous Substances
- BAAQMD Regulation 8, Rule 3, Architectural Coatings
- BAAQMD Regulation 8, Rule 4, General Solvent and Surface Coatings Operations
- BAAQMD Regulation 8, Rule 7, Gasoline Dispensing Facilities
- BAAQMD Regulation 11, Rule 2, Asbestos, Demolition, Renovation and Manufacturing

### Mitigation Measures

**Mitigation Measure AQ-2a:** As part of the City's development approval process, the City shall require applicants for future development projects to comply with the current Bay Area Air Quality Management District's basic control measures for reducing construction emissions of PM<sub>10</sub>.



## LAND USE ALTERNATIVE B

**Mitigation Measure AQ-2b:** As part of the City’s development approval process the City shall require applicants for future development projects that could generate emissions in excess of the Bay Area Air Quality Management District’s (BAAQMDs) current significance thresholds during construction, as determined by project-level environmental review, when applicable, to implement the current BAAQMD construction mitigation measures (e.g. Table 8-3 of the BAAQMD CEQA Guidelines) or any construction mitigation measures subsequently adopted by the BAAQMD.

While Mitigation Measure AQ-2a would require adherence to the current Bay Area Air Quality Management District’s basic control measures for reducing construction emissions of PM<sub>10</sub> and Mitigation Measure AQ-2b would require adherence to BAAQMD’s basic control measures for fugitive dust control and would ensure impacts from fugitive dust generated during construction activities are less than significant, applicants for future development in Cupertino could generate construction exhaust emissions in excess of the BAAQMD significance thresholds. An analysis of emissions generated from the construction of specific future projects under the General Plan would be required to evaluate emissions compared to BAAQMD’s project-level significance thresholds during individual environmental review. It should be noted that the identification of this program-level impact does not preclude the finding of less-than-significant impacts for subsequent projects that comply with BAAQMD screening criteria or meet applicable thresholds of significance. However, due to the programmatic nature of Land Use Alternative B, no additional mitigation measures are available and the impact is considered *significant and unavoidable*.

**Significance With Mitigation:** Significant and unavoidable.

---

**AQ-3**                      **Implementation of Land Use Alternative B would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).**

---

This section analyzes potential impacts related to air quality that could occur from the buildout associated with Land Use Alternative B in combination with the regional growth within the air basin. The SFBAAB is currently designated a nonattainment area for California and National O<sub>3</sub>, California and National PM<sub>2.5</sub>, and California PM<sub>10</sub> AAQS. At a plan-level, air quality impacts are measured by the potential for a project to exceed BAAQMD’s significance criteria and contribute to the State and Federal nonattainment designations in the SFBAAB. Any project that produces a significant project-level regional air quality impact in an area that is in nonattainment adds to the cumulative impact. Any project that produces a significant project-level regional air quality impact in an area that is in nonattainment adds to the cumulative impact. Pursuant to the CEQA Guidelines Section 15130(b)(1), cumulative impacts can be based on the growth projections in a local General Plan. Consequently, the analysis in this chapter is Land Use Alternative B’s contribution to cumulative impacts. Land Use Alternative B’s contribution to cumulative air quality impacts are identified under the impact discussion in AQ-2. The analyses in these sections identify whether Land Use Alternative B would generate a substantial increase in criteria air pollutants (Impact AQ-2). Land Use Alternative B would generate a substantial increase in criteria air pollutant emissions from construction and operational activities. Consequently, Impact AQ-2 identified a regional air quality impact as *significant*.

## LAND USE ALTERNATIVE B

### *Applicable Regulations*

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 CCR: Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code
- CARB Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- CARB Rule 2477 (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate
- BAAQMD, Regulation 2, Rule 2, New Source Review
- BAAQMD, Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
- BAAQMD Regulation 6, Rule 1, General Requirements
- BAAQMD Regulation 6, Rule 2, Commercial Cooking Equipment
- BAAQMD Regulation 7, Odorous Substances
- BAAQMD Regulation 8, Rule 3, Architectural Coatings
- BAAQMD Regulation 8, Rule 4, General Solvent and Surface Coatings Operations
- BAAQMD Regulation 8, Rule 7, Gasoline Dispensing Facilities
- BAAQMD Regulation 11, Rule 2, Asbestos, Demolition, Renovation and Manufacturing

### Mitigation Measures

There are no additional measures available to mitigate this impact.

Criteria air pollutants generated by land uses within Land Use Alternative B would cumulatively contribute to the nonattainment designations of the SFBAAB. Construction activities associated with individual development projects have the potential to generate substantial emissions of ROG<sub>s</sub> during application of paints, and NO<sub>x</sub> and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) from use of heavy off-road construction equipment and construction vehicle trips. Operation of Land Use Alternative B would generate an increase of ROG<sub>s</sub>, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> from vehicle trips generated by the proposed land uses, area sources (e.g. landscape fuel use, consumer products), and energy use (e.g. natural gas used for cooking and heating). The SFBAAB is designated nonattainment under the California AAQS for PM<sub>10</sub> and nonattainment under both the California and National AAQS for PM<sub>2.5</sub>.<sup>8</sup> Emissions of particulate matter generated by Land Use Alternative B would contribute to the SFBAAB's particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) nonattainment designations. The SFBAAB is designated nonattainment of the 1-hour California AAQS and 8-hour California and National AAQS for O<sub>3</sub>.<sup>9</sup>

---

<sup>8</sup> California Air Resources Board (CARB), 2013. "Area Designations Maps: State and National," updated April, <http://www.arb.ca.gov/desig/adm/adm.htm>.

<sup>9</sup> California Air Resources Board (CARB), 2013. "Area Designations Maps: State and National," updated April, <http://www.arb.ca.gov/desig/adm/adm.htm>.

## LAND USE ALTERNATIVE B

Emissions of ROGs, NO<sub>x</sub>, and particulate matter would contribute to the SFBAAB's O<sub>3</sub> nonattainment designation. Consequently, impacts are *significant*.

**Significance With Mitigation:** Significant and unavoidable.

---

**AQ-4                      Implementation of Land Use Alternative B would expose sensitive receptors to substantial concentrations of air pollution.**

---

### Carbon Monoxide Hotspots

Areas of vehicle congestion have the potential to create pockets of Carbon Monoxide (CO) called hotspots. These pockets have the potential to exceed the State one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9.0 ppm. Because CO is produced in the greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds.

Land Use Alternative B includes policies and strategies to encourage bicycle, pedestrian, and transit use to tie land use and transportation, which ensures consistency with VTA's 2013 Congestion Management Program. Within the Circulation Element, Policy 4-4, Improve Pedestrian and Bicycle Circulation Throughout Cupertino, would require the City to Expand city-wide pedestrian and bicycle circulation in order to provide improved recreation, mobility and safety. Supporting strategies include implementing the Pedestrian Guidelines; considering developing safe, walk-able sidewalks and paths; promoting the Safe Route to Schools program; providing additional time for pedestrians to cross streets and other pedestrian improvements to roadways to make them more pedestrian friendly and less auto-centric; and implementing the Bicycle Plan. Policy 4-6, Regional Trail Development, would require the City to continue to plan and provide for a comprehensive system of trails and pathways consistent with regional systems, including the Bay Trail, Stevens Creek Special Area and Ridge Trail and with the policies contained in the Land Use and Community Design Element. Policy 4-7, Increased Use of Public Transit, would require the City to support and encourage the increased use of public transit. Policy 4-9, Traffic Service and Pedestrians Needs, would require the City to balance the needs of pedestrians with desired traffic service. Where necessary and appropriate, allow a lowered LOS standard to better accommodate pedestrians on major streets and at specific intersections. Policy 4-12, Street Improvement Planning, would require the City to plan street improvements such as curb cuts, sidewalks, bus stop turnouts, bus shelters, light poles, benches and trash containers as an integral part of a project to ensure an enhanced streetscape and the safe movement of people and vehicles with the least possible disruption to the streetscape. Policy 4-13, Safe Parking Lots, directs the City to require parking lots that are safe for pedestrians. Policy 4-15, School Traffic Impacts on Neighborhoods, would require the City to minimize the impact of school drop-off, pick-up and parking on neighborhoods.

## LAND USE ALTERNATIVE B

As demonstrated by the policies above, Land Use Alternative B would be consistent with the VTA's 2013 Congestion Management Program.<sup>10</sup> In addition, the SFBAAB has been designated attainment under both the national and California AAQS for CO. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—in order to generate a significant CO impact.<sup>11</sup> Land Use Alternative B would not increase traffic volumes at affected intersections by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited. Trips associated with Land Use Alternative B would not exceed the screening criteria of the BAAQMD. Therefore, Land Use Alternative B would not have the potential to substantially increase CO hotspots at intersections in Cupertino. Localized air quality impacts related to mobile-source emissions would therefore be *less than significant*.

### Toxic Air Contaminants – New Sources of Air Toxics

Various industrial and commercial processes (e.g. manufacturing, dry cleaning) allowed under the current General Plan would be expected to release TACs. TAC emissions generated by stationary and point sources of emissions within the SFBAAB are regulated and controlled by BAAQMD. However, emissions of TAC from mobile sources when operating at a property (e.g. truck idling) are regulated by statewide rules and regulations, not by BAAQMD, and have the potential to generate substantial concentrations of air pollutants.

Existing land uses that have the potential to generate substantial stationary sources of emissions that would require a permit from BAAQMD for emissions of TACs include industrial land uses, such as chemical processing facilities, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. Emissions of stationary source TACs would be controlled by BAAQMD through permitting and would be subject to further study and health risk assessment prior to the issuance of any necessary air quality permits under BAAQMD Regulation 2, Rule 2, New Source Review, and Rule 5, New Source Review of Toxic Air Contaminants.

Mobile sources of TACs are not regulated by BAAQMD. The primary mobile source of TACs within the City of Cupertino is truck idling and use of off-road equipment at warehousing operations. Warehousing operations could generate a substantial amount of Diesel particulate matter (DPM) emissions from off-road equipment use and truck idling. In addition, some warehousing and industrial facilities may include use of transport refrigeration units (TRUs) for cold storage. New land uses in the City of Cupertino that are permitted under Land Use Alternative B that use trucks, including trucks with TRUs, could generate an increase in DPM that would contribute to cancer and non-cancer health risk in the SFBAAB. Impacts could occur at facilities that permit 100 or more truck trips per day or 40 or more trucks with TRUs within 1,000 feet of a sensitive land use. These new land uses could be near existing sensitive receptors within and outside the City of Cupertino. In addition, trucks would travel on regional transportation routes through the SFBAAB contributing to near-roadway DPM concentrations.

---

<sup>10</sup> Santa Clara Valley Transportation Authority (VTA), 2013. 2013 Congestion Management Program, <http://www.vta.org/sfc/servlet.shepherd/version/download/068A0000001Q7pt>, October.

<sup>11</sup> Bay Area Air Quality Management District (BAAQMD), 2011 (Revised), *CEQA Air Quality Guidelines*.

**LAND USE ALTERNATIVE B**

To reduce community risk and hazards from placement of new sources of air toxics, implementation of the General Plan policies and strategies would minimize impacts. Within the Environmental Resources/Sustainability Element, Policy 5-5, Air Pollution Effects of New Development, would require the City to minimize the air quality impacts of new development projects and the impacts affecting new development. Supporting strategies requiring the City to review projects for potential generation of toxic air contaminants at the time of approval and confer with BAAQMD on controls needed if impacts are uncertain and assess the potential for air pollution effects of future land use and transportation planning, and ensure that planning decisions support regional goals of improving air quality. Policy 5-6, Air Pollution Effects of Existing Development, require the City to minimize the air quality impacts of existing development. Within the Land Use/Community Design Element, Policy 2-8, Neighborhood Compatibility, would require the City to minimize potential conflicts with residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, limitations, site design and other appropriate measures. Create zoning or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through measures such as: daylight planes for single-family development, minimum setback standards, landscape screening, acoustical analysis, location and orientation of service areas away from residential uses and limitations on hours of operation.

General Plan Policy 5-5, Air Pollution Effects of New Development, and the accompanying Strategy 1, Toxic Air Contaminants, would require that projects that generate new sources of TACs would be required to reduce emissions. However, future projects would need to ensure that they could achieve BAAQMD's performance standards (ten in one million [10E-06],  $PM_{2.5}$  concentrations exceed  $0.3 \mu\text{g}/\text{m}^3$ , or the appropriate noncancer hazard index exceeds 1.0) and consequently, mitigation is needed to ensure that new projects are evaluated in accordance with BAAQMD's CEQA Guidelines. Community risk and hazard impacts are *significant*.

### **Toxic Air Contaminants – Siting of Sensitive Receptors**

Regulation of land uses falls outside CARB jurisdiction, CARB developed and approved the Air Quality and Land Use Handbook: A Community Health Perspective (2005) to provide guidance regarding the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. This guidance document was developed to assess compatibility and associated health risks when placing sensitive receptors near existing pollution sources.

CARB's recommendations on the siting of new sensitive land uses were based on a compilation of recent studies that evaluated data on the adverse health effects ensuing from proximity to air pollution sources. The key observation in these studies is that proximity to air pollution sources substantially increases both exposure and the potential for adverse health effects. There are three carcinogenic toxic air contaminants that constitute the majority of the known health risks from motor vehicle traffic, DPM from trucks, and benzene and 1,3-butadiene from passenger vehicles. Table 4.2-9, CARB Recommendations for Siting New Sensitive Land Uses, in Chapter 4.2, Air Quality, of this Draft EIR, shows a summary of CARB recommendations for siting new sensitive land uses within the vicinity of air-pollutant sources.

## LAND USE ALTERNATIVE B

Recommendations in Table 4.2-9 are based on data that show that localized air pollution exposures can be reduced by as much as 80 percent by following CARB minimum distance separations.

Local air pollution sources in the City of Cupertino include mobile (roadways, including SR 85 and I-280) and stationary/area sources (industrial, warehousing, commercial/retail, institutional, and residential land uses). Figure 4.2-3, Sources of Toxic Air Contaminants in the City of Cupertino, in Chapter 4.2, Air Quality, of this Draft EIR, identifies several major areas of the city that have the potential to expose sensitive receptors to substantial pollutant concentrations within 1,000 feet of the sources identified.

- Stationary sources in Cupertino were identified using BAAQMD's Stationary Source Screening Analysis Tool. There are approximately 86 potential stationary sources in or near the City of Cupertino. Of these sources, approximately 4 are industrial uses, 25 emergency diesel generators, 4 auto body repair and refinishing facilities, 23 gas stations, 13 dry cleaners, and 17 miscellaneous sources (e.g. technology companies, city services, printing shops, furniture refinishing, etc.).
- High-volume roadways with over 10,000 vehicles per day were also mapped using the California Environmental Health Tracking Program's (CEHTP's) Traffic Linkage web service and 2040 traffic projections from the traffic analysis prepared by Hexagon Transportation Consultants.<sup>12</sup> A total of 13 high volume roadways were identified within 1,000 feet of the City, including I-280 and SR 85.

The Union Pacific (UP) rail line is included in Figure 4.2-3 since UP uses diesel-fueled locomotives, which are a source of TAC emissions. Figure 4.2-3, Sources of Toxic Air Contaminants in the City of Cupertino, in Chapter 4.2, Air Quality, also identifies a 500-foot screening area around high-volume roadways and a 200-foot screening area for rail lines. Because these are screening distances, refined analysis of the effects from many of the high volume roadways and rail lines may show much lower potential TAC exposure and smaller buffer zones. A refined analysis or site-specific health risk assessment should be conducted for all new sensitive sources that are sited within this area to determine the actual health impact. The following current and amended General Plan policies and strategies would minimize emissions:

The General Plan includes policies and strategies that, once adopted, would minimize emissions. Within the Environmental Resources/Sustainability Element, Policy 5-5: Air Pollution Effects of New Development, would require the City to minimize the air quality impacts of new development projects and the impacts affecting new development. Supporting strategy 3 and 4 require the City to assess the potential for air pollution effects of future land use and transportation planning, and ensure that planning decisions support regional goals of improving air quality, and evaluate the relationship of sensitive receptors, such as convalescent hospitals and residential uses, to pollution sources through the environmental assessment of new development. Within the Health and Safety Element, Policy 6-28, Proximity of Residents to Hazardous Materials, would require the City to assess future residents' exposure to hazardous materials when new residential development of childcare facilities are proposed in existing industrial and manufacturing areas. Do not allow residential development if such hazardous conditions cannot be mitigated to an acceptable level of risk. In addition, Land Use Element Policy 2-8, Neighborhood Compatibility, would require the City to minimize potential conflicts with residential neighborhoods from noise, traffic, light and visually

---

<sup>12</sup> California Environmental Health Tracking Program (CEHTP), 2013. Traffic linkage web service. [http://www.ehpb.org/traffic\\_tool.jsp](http://www.ehpb.org/traffic_tool.jsp).

## LAND USE ALTERNATIVE B

intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, limitations, site design and other appropriate measures. Create zoning or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through measures such as: daylight planes for single-family development, minimum setback standards, landscape screening, acoustical analysis, location and orientation of service areas away from residential uses and limitations on hours of operation.

Implementation of General Plan Policy 5-5, Air Pollution Effects of New Development, its accompanying Strategy 4, Environmental Review, and Policy 6-28, Proximity of Residents to Hazardous Materials, would reduce impacts from placement of sensitive receptors proximate to major sources of air pollution. However, future projects proximate to major sources of air pollution (i.e. when within 1,000 feet of an industrial area) would need to ensure that they could achieve BAAQMD's performance standards (ten in one million [10E-06], PM<sub>2.5</sub> concentrations exceed 0.3 µg/m<sup>3</sup>, or the appropriate noncancer hazard index exceeds 1.0) and consequently, mitigation is needed to ensure that when new projects are evaluated in accordance with BAAQMD's CEQA Guidelines. Consequently, impacts are *significant*.

### *Applicable Regulations*

- CARB Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- CARB Rule 2477 (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate
- BAAQMD, Regulation 2, Rule 2, New Source Review
- BAAQMD, Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
- BAAQMD Regulation 6, Rule 1, General Requirements
- BAAQMD Regulation 6, Rule 2, Commercial Cooking Equipment
- BAAQMD Regulation 7, Odorous Substances
- BAAQMD Regulation 8, Rule 3, Architectural Coatings
- BAAQMD Regulation 8, Rule 4, General Solvent and Surface Coatings Operations
- BAAQMD Regulation 8, Rule 7, Gasoline Dispensing Facilities
- BAAQMD Regulation 11, Rule 2, Asbestos, Demolition, Renovation and Manufacturing

### Mitigation Measure

**Mitigation Measure AQ-4a:** Applicants for future non-residential land uses within the city that: 1) have the potential to generate 100 or more diesel truck trips per day or have 40 or more trucks with operating diesel-powered TRUs, and 2) are within 1,000 feet of a sensitive land use (e.g. residential, schools, hospitals, nursing homes), as measured from the property line of Land Use Alternative B to the property line of the nearest sensitive use, shall submit a health risk assessment (HRA) to the City of Cupertino prior to future discretionary Project approval. The HRA shall be prepared in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment and the Bay

## LAND USE ALTERNATIVE B

Area Air Quality Management District. If the HRA shows that the incremental cancer risk exceeds ten in one million (10E-06),  $PM_{2.5}$  concentrations exceed  $0.3 \mu\text{g}/\text{m}^3$ , or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that Best Available Control Technologies for Toxics (T-BACTs) are capable of reducing potential cancer and noncancer risks to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include but are not limited to:

- Restricting idling on-site.
- Electrifying warehousing docks.
- Requiring use of newer equipment and/or vehicles.
- Restricting offsite truck travel through the creation of truck routes.

T-BACTs identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site development plan as a component of Land Use Alternative B.

**Mitigation Measure AQ-4b:** Applicants for residential and other sensitive land use projects (e.g. hospitals, nursing homes, day care centers) in Cupertino within 1,000 feet of a major sources of TACs (e.g. warehouses, industrial areas, freeways, and roadways with traffic volumes over 10,000 vehicle per day), as measured from the property line of the project to the property line of the source/edge of the nearest travel lane, shall submit a health risk assessment (HRA) to the City of Cupertino prior to future discretionary Project approval. The HRA shall be prepared in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment (OEHHA) and the Bay Area Air Quality Management District. The latest OEHHA guidelines shall be used for the analysis, including age sensitivity factors, breathing rates, and body weights appropriate for children age 0 to 16 years. If the HRA shows that the incremental cancer risk exceeds ten in one million (10E-06),  $PM_{2.5}$  concentrations exceed  $0.3 \mu\text{g}/\text{m}^3$ , or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that mitigation measures are capable of reducing potential cancer and non-cancer risks to an acceptable level (i.e. below ten in one million or a hazard index of 1.0), including appropriate enforcement mechanisms. Measures to reduce risk may include but are not limited to:

- Air intakes located away from high volume roadways and/or truck loading zones.
- Heating, ventilation, and air conditioning systems of the buildings provided with appropriately sized Maximum Efficiency Rating Value (MERV) filters.

Mitigation measures identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site development plan as a component of Land Use Alternative B. The air intake design and MERV filter requirements shall be noted and/or reflected on all building plans submitted to the City and shall be verified by the City's Planning Division.

Buildout of the Land Use Alternative B could result in new sources of criteria air pollutant emissions and/or toxic air contaminants near existing or planned sensitive receptors. Existing and Land Use Alternative B policies would reduce concentrations of TACs and  $PM_{2.5}$  generated by new development. Review of projects



## LAND USE ALTERNATIVE B

by BAAQMD for permitted sources of air toxics (e.g. industrial facilities, dry cleaners, and gasoline dispensing facilities) would ensure health risks are minimized. Mitigation Measure AQ-4a would ensure mobile sources of TACs not covered under BAAQMD permits are considered during subsequent project-level environmental review. Development of individual projects would be required to achieve the incremental risk thresholds established by BAAQMD, and impacts would be less than significant. Placement of new sensitive receptors near major sources of TACs and PM<sub>2.5</sub> could expose people to substantial pollutant concentrations. Existing and Land Use Alternative B policies would reduce concentrations of criteria air pollutant emissions and air toxics generated by new development. Mitigation Measure AQ-4b would ensure that placement of sensitive receptors near major sources of air pollution would achieve the incremental risk thresholds established by BAAQMD, and impacts would be *less than significant*.

**Significance With Mitigation:** Less than significant.

---

**AQ-5**                      **Implementation of Land Use Alternative B would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).**

---

Sources of objectionable odors may occur within the City. BAAQMD's Regulation 7, Odorous Substances, places general limitations on odorous substances and specific emission limitations on certain odorous compounds. In addition, odors are also regulated under BAAQMD Regulation 1, Rule 1-301, Public Nuisance, which states that "no person shall discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or the public; or which endangers the comfort, repose, health or safety of any such persons or the public, or which causes, or has a natural tendency to cause, injury or damage to business or property." Under BAAQMD's Rule 1-301, a facility that receives three or more violation notices within a 30 day period can be declared a public nuisance.

There are two types of odor impacts: 1) siting sensitive receptors near nuisance odors, and 2) siting new sources of nuisance odors near sensitive receptors. Table 4.2-10, BAAQMD Odor Screening Distances, in Chapter 4.2, Air Quality, of this Draft EIR, identifies screening distances from potential sources of objectionable odors within the SFBAAB. Odors from these types of land uses are regulated under BAAQMD Regulation 7, Odorous Substances.<sup>13</sup>

### Siting Receptors Proximate to Odor Sources

Sensitive receptors, such as the residential uses associated with planned development under Land Use Alternative B, may be placed within the distances to these sources specified in Table 4.2-10. In general, the

---

<sup>13</sup> It should be noted that while restaurants can generate odors, these sources are not identified by BAAQMD as nuisance odors since they typically do not generate significant odors that affect a substantial number people. Larger restaurants that employ five or more people are subject to BAAQMD Regulation 7, Odorous Substances.

## LAND USE ALTERNATIVE B

City's land use plan designates residential areas and commercial/industrial areas of the City to prevent potential mixing of incompatible land use types, with the exception of mixed-use areas that combine commercial with residential. BAAQMD Regulation 7, Odorous Substances, would require abatement of any nuisance generated by an odor complaint. Implementation of the Policy 2-8, Neighborhood Compatibility, would require the City to minimize potential conflicts with residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, limitations, site design and other appropriate measures. Create zoning or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through measures such as daylight planes for single-family development, minimum setback standards, landscape screening, acoustical analysis, location and orientation of service areas away from residential uses, and limitations on hours of operation.

Because existing sources of odors are required to comply with BAAQMD Regulation 7, impacts to siting of new sensitive land uses would be *less than significant*.

### *Applicable Regulations*

- California Health & Safety Code, Section 114149
- BAAQMD Regulation 7, Odorous Substances

**Significance Without Mitigation:** Less than significant.

## Siting New Odor Sources

While not all sources in Table 4.2-10, in Chapter 4.2, Air Quality, of this Draft EIR, are found in the City (e.g. rendering plants, confined animal facilities), commercial and industrial areas in the City of Cupertino have the potential to include land uses that generate objectionable odors. Buildout permitted under Land Use Alternative B could include new sources of odors, such as composting, greenwaste, and recycling operations; food processing; chemical manufacturing; and painting/coating operations, because these are permitted uses in the commercial and/or industrial areas in the City. Future environmental review could be required for industrial projects listed in Table 4.2-8, in Chapter 4.2, Air Quality, of this Draft EIR, to ensure that sensitive land uses are not exposed to objectionable odors. BAAQMD Regulation 7, Odorous Substances, would require abatement of any nuisance generating an odor complaint. Typical abatement includes passing air through a drying agent followed by two successive beds of activated carbon to generate odor-free air. Facilities listed in Table 4.2-10 in Chapter 4.2, Air Quality, of this Draft EIR, would need to consider measures to reduce odors as part of their CEQA review. Implementation of the following Land Use Alternative B policies would also reduce potential land use incompatibilities:

The General Plan includes policies and strategies that, once adopted, would also reduce potential land use incompatibilities regarding objectionable odors. Within the Land Use/Community Design Element, Policy 2-8, Neighborhood Compatibility, would require the City to minimize potential conflicts with residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, limitations, site design and other appropriate measures. Create zoning or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through measures such as: daylight planes for single-family development,

## LAND USE ALTERNATIVE B

minimum setback standards, landscape screening, acoustical analysis, location and orientation of service areas away from residential uses and limitations on hours of operation. Within the Environmental Resources/Sustainability Element, Policy 5-5, Air Pollution Effects of New Development, would require the City to minimize the air quality impacts of new development projects and the impacts affecting new development. Supporting strategies 3 and 4, require the City to assess the potential for air pollution effects of future land use and transportation planning, and ensure that planning decisions support regional goals of improving air quality, and evaluate the relationship of sensitive receptors, such as convalescent hospitals and residential uses, to pollution sources through the environmental assessment of new development. Consequently, review of projects using BAAQMD's odor screening distances during future CEQA review and compliance with BAAQMD Regulation 7 would ensure that odor impacts are minimized and are *less than significant*.

### *Applicable Regulations*

- California Health & Safety Code, Section 114149
- BAAQMD Regulation 7, Odorous Substances

**Significance Without Mitigation:** Less than significant.

---

**AQ-6**                      **Implementation of Land Use Alternative B, in combination with past, present and reasonably foreseeable projects, would result in significant cumulative impacts with respect to air quality.**

---

As described under AQ-3, regional air quality impacts were identified as significant; therefore, in combination with past, present, and reasonably foreseeable projects, Land Use Alternative B, even with mandatory compliance with applicable regulations, as well as, the mitigation measures and General Plan policies outlined above, would result in a *significant* cumulative impact with respect to air quality .

**Significance With Mitigation:** Significant and unavoidable.

### 5.3.7.3 BIOLOGICAL RESOURCES

---

**BIO-1**                      **Implementation of Land Use Alternative B would not have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife, or U.S. Fish and Wildlife Service.**

---

Development and land use activities consistent with the implementation of Land Use Alternative B components would occur in urbanized areas where special-status species are generally not expected to occur. The potential for occurrence of special-status species in developed areas is generally very remote in comparison to undeveloped lands with natural habitat that contain essential habitat characteristics for the range of species known from the west Cupertino vicinity.

## LAND USE ALTERNATIVE B

The General Plan includes policies and strategies that, once adopted, would minimize impacts to special-status species associated with potential future development under Land Use Alternative B. Policy 5-9, Development Near Sensitive Areas, would require the City to encourage the clustering of new development away from sensitive areas such as riparian corridors, wildlife habitat and corridors, public open space preserves and ridgelines. Additionally, new developments in these areas must have a harmonious landscaping plan approved prior to development. Strategy 1, Riparian Corridor Protection, directs the City to require riparian corridor protection through the development approval process. Policy 5-10, Landscaping Near Natural Vegetation, would require the City to, per the City's Water Efficient Landscaping Ordinance, Environmentally Preferable Procurement Policy, and the Parks & Recreation Green Policies, continue to Emphasize drought tolerant and pest resistant native and non-invasive, nonnative, drought tolerant plants and ground covers when landscaping properties near natural vegetation, particularly for control of erosion from disturbance to the natural terrain. The strategy for this policy, Native Plants, would require the City to encourage drought tolerant native and drought tolerant, noninvasive, non-native plants and trees, and minimize lawn area in the hillsides. Policy 5-14, Recreation and Wildlife Trails, would require the City to provide open space linkages within and between properties for both recreational and wildlife activities, most specifically for the benefit of wildlife that is threatened, endangered, or designated as species of special concern. Policy 5-18, Natural Water Bodies and Drainage Systems, would require the City to require that site design respect the natural topography and drainages to the extent practicable to reduce the amount of grading necessary and limit disturbance to natural water bodies and natural drainage systems caused by development including roads, highways, and bridges. Strategy 1 for this policy, Volunteer Program, would require the City to encourage volunteer organizations to help restore and clean creek beds in Cupertino to reduce pollution and help return waterways to their natural state. Policy 5-21, Compact Development Away from Sensitive Areas, would require the City to, where such measures do not conflict with other municipal purposes or goals, encourage, via zoning ordinances, compact development located away from creeks, wetlands, and other sensitive areas. Policy 5-27, Natural Water Courses, would require the City to retain and restore creek beds, riparian corridors, watercourses and associated vegetation in their natural state to protect wildlife habitat and recreation potential and assist groundwater percolation. Encourage land acquisition dedication of such areas. Strategy 4 under Proposed Policy 2-20, Streetscape Design, would be amended to direct the City to use native trees when conducting new or replacement street tree planting. This policy would serve to improve urban habitat for native and special-status species.

However, some special-status bird species such as Cooper's hawk and white-tailed kite could utilize the remaining riparian corridors and heavily wooded areas for nesting, dispersal and other functions when they pass through urbanized areas. More common birds protected under the federal Migratory Bird Treaty Act (MBTA) may nest in trees and other landscaping on the Project Component sites. Preconstruction surveys are typically required to confirm that no bird nests in active use are present when tree and vegetation removal is to occur during the bird-nesting season (February 1 to August 31). Given the remote potential for occurrence of nesting birds at one or more of the project component sites and possibility that nests could be inadvertently destroyed or nests abandoned as a result of construction activities, this would be considered a potentially *significant impact*.

## Mitigation Measures

The following mitigation measure is recommended to minimize the possible loss or abandonment of nests of birds protected under the federal MBTA and California Department of Fish and Game code:

**Mitigation Measure BIO-1:** Nests of raptors and other birds shall be protected when in active use, as required by the federal Migratory Bird Treaty Act and the California Department of Fish and Game Code. If construction activities and any required tree removal occur during the breeding season (February 1 and August 31), a qualified biologist shall be required to conduct surveys prior to tree removal or construction activities. Preconstruction surveys are not required for tree removal or construction activities outside the nesting period. If construction would occur during the nesting season (February 1 to August 31), preconstruction surveys shall be conducted no more than 14 days prior to the start of tree removal or construction. Preconstruction surveys shall be repeated at 14-day intervals until construction has been initiated in the area after which surveys can be stopped. Locations of active nests containing viable eggs or young birds shall be documented and protective measures implemented under the direction of the qualified biologist until the nests no longer contain eggs or young birds. Protective measures shall include establishment of clearly delineated exclusion zones (i.e. demarcated by identifiable fencing, such as orange construction fencing or equivalent) around each nest location as determined by a qualified biologist, taking into account the species of birds nesting, their tolerance for disturbance and proximity to existing development. In general, exclusion zones shall be a minimum of 300 feet for raptors and 75 feet for passerines and other birds. The active nest within an exclusion zone shall be monitored on a weekly basis throughout the nesting season to identify signs of disturbance and confirm nesting status. The radius of an exclusion zone may be increased by the qualified biologist if project activities are determined to be adversely affecting the nesting birds. Exclusion zones may be reduced by the qualified biologist only in consultation with CDFW. The protection measures shall remain in effect until the young have left the nest and are foraging independently or the nest is no longer active.

With the incorporation of the above Mitigation Measure BIO-1, this impact on special-status and non-special status bird species that are protected under the federal MBTA and CDFG Code would be *less than significant*.

**Significance With Mitigation:** Less than significant.

---

<b>BIO-2</b>	<b>Implementation of Land Use Alternative B would not have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife, or U.S. Fish and Wildlife Service.</b>
--------------	--

---

Development and land use activities consistent with Land Use Alternative B would occur in urbanized areas where sensitive natural communities are absent; therefore, *no impact* would occur.

**Significance Without Mitigation:** No impact.

## LAND USE ALTERNATIVE B

---

**BIO-3                    Implementation of Land Use Alternative B would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.**

---

Development and land use activities consistent with Land Use Alternative B Components would occur in urbanized areas where jurisdictional waters are absent. Indirect impacts to wetlands and jurisdictional other waters include: 1) an increase in the potential for sedimentation due to construction grading and ground disturbance, 2) an increase in the potential for erosion due to increased runoff volumes generated by impervious surfaces, and 3) an increase in the potential for water quality degradation due to increased levels in non-point pollutants. However, indirect impacts could be largely avoided through effective implementation of Best Management Practices during construction and compliance with water quality controls. As discussed in Section 4.8.1.1, Regulatory Framework, Chapter 4.9, Hydrology and Water Quality, of this Draft EIR, water quality in stormwater runoff is regulated locally by the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), which includes provision C.3 of the Municipal Regional Storm Water National Pollutant Discharge Elimination System (NPDES) Permit (MRP), adopted by the San Francisco Bay Regional Water Quality Control Board (RWQCB). Adherence to these permit conditions would require new development or redevelopment projects to incorporate treatment measures, an agreement to maintain them, and other appropriate source control and site design features that reduce pollutants in runoff to the maximum extent practicable. Many of the requirements involve low impact development (LID) practices such as the use of onsite infiltration that reduce pollutant loading. Incorporation of these measures can even improve on existing conditions.

In addition, future development would be required to comply with the NPDES Permit (Municipal Code Chapter 9.18, Stormwater Pollution Prevention and Watershed Protection) and implement a construction SWPPP that require the incorporation of BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction.

The indirect water quality-related issues are discussed further in Chapter 4.9, Hydrology and Water Quality, of this Draft EIR. As discussed in Impact HYDRO-1, water quality impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

**BIO-4                    Implementation of Land Use Alternative B would not interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.**

---

Development and land use activities consistent with Land Use Alternative B Components would occur in urbanized areas where sensitive wildlife resources and important wildlife movement corridors are no longer present because of existing development. Wildlife species common to urban and suburban habitat could be displaced where existing structures are demolished and landscaping is removed as part of future

## LAND USE ALTERNATIVE B

development, but these species are relatively abundant, and adapted to human disturbance. Compliance with the General Plan policies and strategies would ensure that new structures and landscaping installed as part of future development would provide replacement habitat for wildlife species adapted to urban areas. Additionally, Strategy 4 under Proposed Policy 2-20, Streetscape Design, would require the City to use native trees when conducting new or replacement street tree planting. This policy would serve to improve urban habitat linkages for migration of native and special-status species. Potential impacts on the movement of fish and wildlife, wildlife corridors, or wildlife nursery sites would be considered *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**BIO-5                    Implementation of Land Use Alternative B would not conflict with any local polices or ordinances protecting biological resources.**

---

Development and land use activities consistent with Land Use Alternative B would occur in urbanized areas where sensitive biological and wetland resources are generally considered to be absent, and no major conflicts with the relevant policies or ordinances in the Cupertino General Plan and/or Municipal Code, as described in section 4.3.1, Environmental Setting, Chapter 4.3, Biological Resources, of this Draft EIR, are anticipated.

With adherence to the General Plan policies listed in impact discussion BIO-1, and the Protected Tree Ordinance and Water Protection Ordinance, no conflicts with local plans and policies are anticipated, and impacts would be considered *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**BIO-6                    Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to biological resources.**

---

This EIR takes into account growth projected by Land Use Alternative B within the Cupertino city boundary and Sphere of Influence (SOI), in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). The geographic scope of the cumulative analysis for biological resources considers the surrounding incorporated and unincorporated lands, and the region.

The potential impacts of proposed development on biological resources tend to be site-specific, and the overall cumulative effect would be dependent on the degree to which significant vegetation and wildlife resources are protected on a particular site. This includes preservation of well-developed native vegetation (native grasslands, oak woodlands, riparian woodland, etc.), populations of special-status plant or animal species, and wetland features (including freshwater seeps and tributary drainages).

To some degree, cumulative development contributes to an incremental reduction in the amount of existing wildlife habitat, particularly for birds and larger mammals. Habitat for species intolerant of human

## LAND USE ALTERNATIVE B

disturbance can be lost as development encroaches into previously undeveloped areas, disrupting or eliminating movement corridors and fragmenting the remaining suitable habitat retained within parks, private open space, or undeveloped properties. New development in the region would result in further conversion of existing natural habitats to urban and suburban conditions, limiting the existing habitat values of the surrounding area. This could include further loss of wetlands and sensitive natural communities, reduction in essential habitat for special-status species, removal of mature native trees and other important wildlife habitat features, and obstruction of important wildlife movement corridors. Additional development may also contribute to degradation of the aquatic habitat in the creeks throughout the region, including the Project Study Area.

Grading associated with construction activities generally increases erosion and sedimentation, and urban pollutants from new development would reduce water quality. However, most of the parcels within the Project Component locations are already developed and occur within urbanized areas, thus avoiding or diminishing effects on biological resources. With implementation of the Mitigation Measure BIO-1 identified above, Land Use Alternative B would not make a significant contribution to cumulative impacts to biological resources. Therefore, Land Use Alternative B would result in a *less-than-significant* cumulative impact on biological resources.

**Significance With Mitigation:** Less than significant.

### 5.3.7.4 CULTURAL RESOURCES

---

<b>CULT-1</b>	<b>Implementation of Land Use Alternative B would not have the potential to cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.</b>
---------------	--

---

The types of cultural resources that meet the definition of historical resources under CEQA generally consist of districts, sites, buildings, structures, and objects that are significant for their traditional, cultural, and/or historical associations. Historical architectural resources may be impacted by development allowed under the current General Plan. Archaeological deposits are addressed in CULT-2, and human remains are addressed below in impact discussion CULT-4, below.

As shown on Figure 4.4-1 and listed in Section 4.4.2.3, Historic Sites Within Project Components, in Chapter 4.4, Cultural Resources, of this Draft EIR, several historical resources are within the boundaries of some Cultural Resource Sites. Therefore, implementation of this Alternative could have the potential to directly impact cultural resources, by increasing commercial, office, hotel, and residential development allocations and providing for potential new development at the following Cultural Resource Sites:

### Major Mixed-Use Special Areas

#### South De Anza Special Area

- Cultural Resource Site 15 (Not evaluated for National and/or California Register eligibility)
- Cultural Resource Site 58 (City of Cupertino Commemorative Site)



## LAND USE ALTERNATIVE B

### Heart of the City Special Area

- Cultural Resource Site 19 (National Register/California Register/Local Landmark)
- Cultural Resource Site 25 (Local Landmark, National Register/Not evaluated for California Register eligibility)
- Cultural Resource Site 31 (Ineligible for National Register/Not evaluated for California Register eligibility)
- Cultural Resource Site 32 (California Register/Local Landmark)
- Cultural Resource Site 42 (City of Cupertino Local Historic Site)
- Cultural Resource Site 43 (City of Cupertino Local Historic Site)
- Cultural Resource Site 44 (City of Cupertino Local Historic Site)
- Cultural Resource Site 57 (National Register/Commemorative Site)
- Cultural Resource Site 59 (City of Cupertino Commemorative Site)
- Cultural Resource Site 60 (City of Cupertino Commemorative Site)
- Cultural Resource Site 64 (City of Cupertino Community Landmark)
- Cultural Resource Site 65 (City of Cupertino Community Landmark)
- Cultural Resource Site 67 (City of Cupertino Community Landmark)
- Cultural Resource Site 68<sup>14</sup> (City of Cupertino Community Landmark)

### North De Anza Special Area

- Cultural Resource Site 66 (City of Cupertino Community Landmark)

### Study Areas

#### Study Area 6 (Vallco Shopping District)

- Cultural Resource Site 6815 (City of Cupertino Community Landmark)

### Other Special Areas including Residential and Non-Residential/Mixed-Use Special Areas

#### Monta Vista Village Neighborhood

- Cultural Resource Site 52 (California Register/Eligible for National Register)
- Cultural Resource Site 53 (City of Cupertino Commemorative Site)
- Cultural Resource Site 54 (City of Cupertino Commemorative Site)
- Cultural Resource Site 62 (City of Cupertino Community Landmark)

#### Bubb Road Special Area

- Cultural Resource Site 55 (City of Cupertino Commemorative Site)

---

<sup>14</sup> Cultural Resource Site 68 is also in Study Area 6 (Vallco Shopping District ) and Housing Element Site 11 (Vallco Mall).

<sup>15</sup> Cultural Resource Site 68 is also in Heart of the City Special Area and Housing Element Site 11 (Vallco Mall).

## LAND USE ALTERNATIVE B

### Housing Element Sites

#### Housing Element Site 11 (Vallco Shopping District except Rosebowl)

- Cultural Resource Site 6816 (City of Cupertino Community Landmark)

#### General Plan and Zoning Ordinance Conformance Sites

- Cultural Resource Site 41 (City of Cupertino Local Historic Site)
- Cultural Resource Site 49 (City of Cupertino Commemorative Site)
- Cultural Resource Site 50 (City of Cupertino Commemorative Site)

Where Cultural Resource Sites listed above and their immediate surroundings do not contain properties currently on the California Register or appear to be eligible for listing on the California Register, as described above, impacts from implementation of this Alternative would result in *less-than-significant* impacts on historical resources at these sites. However, for Cultural Resource Sites that contain properties currently on the California Register or appear to be eligible for listing on the California Register where the historical buildings might be demolished or materially altered to allow future development, this Alternative would cause significant impacts. The following Cultural Resource Sites could be impacted by future development under Land Use Alternative B:

#### Heart of the City Special Area

- Cultural Resource Site 19 (National Register/California Register/Local Landmark)
- Cultural Resource Site 25 (Local Landmark, National Register/Not evaluated for California Register eligibility)
- Cultural Resource Site 32 (California Register/Local Landmark)
- Cultural Resource Site 57 (National Register/Commemorative Site)

#### Monta Vista Village Neighborhood

- Cultural Resource Site 52 (California Register/Eligible for National Register)

Even if the historical resources were retained, future development under the Land Use Alternative B permitted by the General Plan could cause a significant impact on the historical resource in question if the new construction were incompatible with the Cultural Resources Site relationships that characterize the existing property (for example, new construction which extends to all property lines where the historical pattern is to have setbacks), or if the massing (height and bulk) of the new construction were incompatible with the historical resource. Lastly, the design characteristics and materials of the new construction could cause an impact on adjoining or nearby historical buildings (for example, a flat-roofed building with aluminum windows and a rain-screen wall finish next to a gable-roofed building with period-revival stucco walls). Because the purpose of the Alternative is to allow denser new development and because the factors described above which could impair the historic integrity of resources are generally more important with larger and denser new construction, the impacts on historical resources could be significant.

---

<sup>16</sup> Cultural Resource Site 68 is also in Heart of the City Special Area and Study Area 6 (Vallco Shopping District).

**LAND USE ALTERNATIVE B**

However, the General Plan includes policies and strategies that, once adopted, would minimize potential impacts to historic resources. Policy 2-66, Historic Sites, would require future development projects under Land Use Alternative B that would occur on Historic Sites to meet the Secretary of the Interior's Standard for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, and Restoring Historic Buildings and provide a plaque, reader board and/or other educational tools on the site to explain the historic significance of the resource(s). The plaque shall include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. For public and quasi-public sites, the City shall coordinate with property owner to allow public access of the historical site to foster public awareness and provide educational opportunities. For privately-owned sites, property owners should be encouraged, but not required, to provide access to the public. Strategy 1 states that as part of the development review process for projects proposing to demolish or significantly alter existing building(s) more than 45 years old, city staff shall determine if the project is subject to completion of a site-specific historic resources study. Strategy 2 states that if it is determined that a site-specific historic resources study is required, the study shall be prepared by a qualified architectural historian meeting the Secretary of the Interior's Standards for Architecture or Architectural History. Site-specific historic resource studies required under Strategy 1 could include a records search of the California Historical Resources Information System, an intensive-level pedestrian field survey, an evaluation of significance using standard National Register Historic Preservation and California Register Historic Preservation evaluation criteria, and recordation of all identified historic buildings and structures on California Department of Parks and Recreation 523 Site Record forms. These studies also provide a description of the historic context and setting, methods used in the investigation, results of the evaluation, and recommendations for management of identified resources. When applicable, the specific requirements for inventory areas and documentation format required by certain agencies, such as the Federal Highway Administration and California Department of Transportation (Caltrans), would also be required to be adhered to. Where future development or adjacent properties are found to be eligible for listing on the California Register, Policy 2-67, Commemorative Sites, would require that projects on Commemorative Sites are required to provide a plaque, reader board and/or other educational tool on the site to explain the historic significance of the resource. The plaque shall include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. For public and quasi-public sites, the City shall coordinate with property owner to allow public access to the historical site to foster public awareness and provide educational opportunities. For privately-owned sites, property owners should be encouraged, but not required, to provide access to the public. Policy 2-68, Community Landmarks, would require that projects on Landmark Sites provide a plaque, reader board and/or other educational tools on the site to explain the historic significance of the resource. The plaque shall include the city seal, name of resource, date it was built, a written description and photograph and shall be placed in a location where the public can view the information. Policy 2-69, Historic Mention/Interest Sites, would require the City to encourage agencies that have jurisdiction over the historical resource to encourage rehabilitation of the resource and provide public access to foster public awareness and provide educational opportunities. These are sites outside the City's jurisdictions, but have contributed to the City's historic past. Policy 2-70, Incentives for Preservation of Historic Resources, would require the City to utilize a variety of techniques to serve as incentives toward fostering the preservation and rehabilitation of Historic Sites including; 1) allowing flexible interpretation of zoning ordinance not essential to public health and safety. This could include flexibility as to use, parking requirements and/or setback requirements; 2) using the California Building Code for rehabilitation of historic structures; 3) tax

## LAND USE ALTERNATIVE B

rebates; and 4) financial incentives such as grants/loans to assist rehabilitation efforts. Policy 2-71, Recognizing Historical Resources, states that an inventory of historically significant structures shall be maintained and periodically updated by the City in order to promote awareness of these community resources. Finally, Policy 2-71 would require the City to maintain an inventory of historically significant structures and periodically updated in order to promote awareness of these community resources. Furthermore, as part of Land Use Alternative B, Site 23, the Seven Springs Ranch, would be added to the City's list of Historically Significant Resources, which would further protect historic resources.

Potential impacts from future development on historical architectural resources could lead to: 1) demolition, which by definition results in the material impairment of a resource's ability to convey its significance; 2) inappropriate modification, which may use incompatible materials, designs, or construction techniques in a manner that alters character-defining features; and 3) Inappropriate new construction, which could introduce incompatible new buildings that clash with an established architectural context. While any of these scenarios, especially demolition and alteration, have the potential to change the historic fabric or setting of an architectural resource such that the resource's ability to convey its significance may be materially impaired, implementation of the General Plan policies and strategies identified above, as well as compliance with federal and State laws, as described in Section 4.4.1.1, Regulatory Framework, above, would ensure future development would not be detrimental or injurious to property or improvements in the vicinity and impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>CULT-2</b>	<b>Implementation of Land Use Alternative B would not have the potential to cause substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.</b>
---------------	---

---

Historical and pre-contact archaeological deposits that meet the definition of historical resources under CEQA could be damaged or destroyed by ground-disturbing activities associated with future development allowed under Land Use Alternative B. Should this occur, the ability of the deposits to convey their significance, either as containing information important in prehistory or history, or as possessing traditional or cultural significance to Native American or other descendant communities, would be materially impaired.

Although future development would be likely occur on sites and in areas either already developed, and/or in close proximity to existing residential and residential-serving development, where development would have a lesser impact on historical archeological resources, the potential remains that archaeological deposits could be discovered because this Alternative would result in development on, or within the vicinity of, several identified cultural resources as shown on Figure 4.4-1, and identified in Section 4.4.2.3, Historic Sites Within Project Components, in Chapter 4.4, Cultural Resources, of this Draft EIR. In addition, the City of Cupertino in its entirety has not been systematically surveyed, and much of the land remains unsurveyed. Approximately 25 percent of the land within the city boundary and existing Sphere of Influence (SOI) has been surveyed for cultural resources. Therefore, it is possible that unrecorded Native American prehistoric archaeological sites exist throughout the city that may have not been identified or surveyed, including those that are buried under alluvial or fill soils due to the age of geologic deposits within the city, which have the potential to contain prehistoric archaeological resources. Furthermore, prior to its

## LAND USE ALTERNATIVE B

development, much of the land within Cupertino was used as ranches and/or vineyards. Therefore, there is a potential for significant subsurface historical archaeological features, including hollow-filled features (e.g. privies and wells) and other historic debris.

Although soils throughout the city and any potential historic features have been disturbed by farming operations and grading and trenching for development of existing buildings and structures, future development permitted under this Alternative could still contain subsurface archaeological deposits. Any ground-disturbing activities related to future development permitted under this Alternative have the potential to affect subsurface prehistoric archaeological resources that may be present. Based on the significance criteria identified above, future development permitted under this Alternative would have a significant impact on the environment if these ground-disturbing activities cause a substantial adverse change in the significance of a historical archaeological resource. A substantial adverse change in the significance of an historical archaeological resource would occur from its demolition, destruction, relocation, or alteration such that the significance of the resource would be materially impaired (CEQA Guidelines Section 15064.5(b)(1)).

The General Plan includes a policy and supporting strategies that would protect archaeologically sensitive areas and would provide for the identification of archaeological deposits prior to actions that may disturb such deposits. Policy 2-72, Archaeologically Sensitive Areas, protects archaeologically sensitive areas and would provide for the identification of archaeological deposits prior to actions that may disturb such deposits. Policy 2-72 would require the City to protect archaeologically sensitive areas, through supporting Strategy 1, which would require an investigation for development proposed in areas likely to be archaeologically sensitive, such as along stream courses and in oak groves, to determine if significant archaeological resources may be affected by the project. This strategy also would require appropriate mitigation measures in the project design. In addition, Strategy 2 would require the City to ensure that City, State, and Federal historic preservation laws, regulations, and Codes are enforced, including laws related to archaeological and paleontological resources, to ensure the adequate protection of historic and pre-historic resources. Therefore, compliance of the General Plan policy and strategies above, and with federal and State laws described in Section 4.4.1.1, Regulatory Framework, above, potential impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>CULT-3</b>	<b>Implementation of Land Use Alternative B would not have the potential to directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature.</b>
---------------	---

---

A review of the University of California's Museum of Paleontology's (UCMP) fossil locality database was conducted for the city. No paleontological resources have been identified within the Cultural Resource Sites; however, the presence of Pleistocene deposits that are known to contain fossils indicates that the city could contain paleontological resources.

Consequently, future development permitted under Land Use Alternative B, would have a significant effect on the environment if it would directly or indirectly destroy a unique paleontological resource or site.

## LAND USE ALTERNATIVE B

Although implementation of Land Use Alternative B would not in and of itself result in direct physical development, future development as a result of implementation of this Alternative could result in potentially significant impacts to a unique paleontological resources or site, or unique geologic feature. Policy 2-72, Archaeologically Sensitive Areas, would require the City to protect paleontological sensitive areas, through supporting Strategy 2, which would require the City to ensure that City, State, and Federal historic preservations laws, regulations, and Codes are enforced, including laws related to archaeological and paleontological resources, to ensure the adequate protection of historic and pre-historic resources. Therefore, compliance Policy 2-72 along with compliance with federal and State laws described in Section 4.4.1.1, Regulatory Framework, above, would minimize the potential impact related to directly or indirectly destroying a unique paleontological resource or site relating to construction and other ground-disturbing activities associated with future development, would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>CULT-4</b>	<b>Implementation of Land Use Alternative B would not have the potential to disturb any human remains, including those interred outside of formal cemeteries.</b>
---------------	---

---

Human remains associated with pre-contact archaeological deposits could exist in throughout Cupertino, and could be encountered at the time potential future development occurs. The associated ground-disturbing activities, such as site grading and trenching for utilities, have the potential to disturb human remains interred outside of formal cemeteries. Descendant communities may ascribe religious or cultural significance to such remains, and may view their disturbance as an unmitigable impact. Disturbance of unknown human remains would be a *significant* impact.

However, any human remains encountered during ground-disturbing activities associated with future development permitted under this Alternative would be subject to federal, State, and local regulations, such as the California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and the California Code of Regulations Section 15064.5(e) (CEQA), which state the mandated procedures of conduct following the discovery of human remains.

Moreover, any human remains encountered during ground-disturbing activities associated with future development under implementation of Land Use Alternative B would be subject to federal, State, and local regulations, such as the California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and the CCR Section 15064.5(e) (CEQA), which state the mandated procedures of conduct following the discovery of human remains. According to the provisions in CEQA, if human remains are encountered at the site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The Santa Clara County Coroner shall be notified immediately. The Coroner shall then determine whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner shall notify the NAHC within 24 hours, who will, in turn, notify the person the NAHC identifies as the MLD of any human remains. Further actions shall be determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the

## LAND USE ALTERNATIVE B

remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC. In addition, Policy 2-73, Native American Burials, would require the City to protect Native American burial sites and the supporting strategy would require that upon the discovery of such burials during construction, project applicants shall take action prescribed by State law.

Therefore, with the mandatory regulatory procedures and compliance with the General Plan policy and strategy described above, potential impacts related to the potential discovery or disturbance to any human remains accidentally unearthed during construction activities associated with future development as a result of implementation of Land Use Alternative B would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**CULT-5                      Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to cultural resources.**

---

This EIR takes into account growth projected by future development permitted under this Alternative within the Cupertino city boundary and SOI, in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area Governments (ABAG). Potential future development permitted under this Alternative has the potential to cumulatively impact historical resources. Such impacts could result from more intensive land uses, incompatible site designs that impact the historical integrity of nearby historical buildings and districts, and demolition of historical resources. Further, development within the city boundary also has the potential to adversely affect archaeological resources, paleontological resources, and human remains through their destruction or disturbance. Therefore, before mitigation, development allowed under this Alternative, in combination with other future development in the region, has the potential to cause adverse cumulative impacts to cultural resources due to their destruction or loss of integrity. However, the current and amended General Plan policies and strategies, and mandatory regulation described under Impact CULT-1 through CULT-4, and Section 4.4.1, Regulatory Framework, in Chapter 4.4, Cultural Resources, of this Draft EIR, would avoid most impacts to such resources that would occur from development and land use changes allowed under Land Use Alternative B. Therefore, past, present, and reasonably foreseeable future development in Cupertino is not expected to have a significant effect on cultural resources.

Land Use Alternative B is not anticipated to have a significant impact on cultural resources. Therefore, implementation of this Alternative would result in a *less-than-significant* contribution to cumulative cultural resources impacts.

**Significance Without Mitigation:** Less than significant.

## LAND USE ALTERNATIVE B

### 5.3.7.5 GEOLOGY, SOILS, AND SEISMICITY

---

<b>GEO-1</b>	<b>Implementation of Land Use Alternative B would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving surface rupture along a known active fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; and landslides.</b>
--------------	---

---

To date, only one Alquist-Priolo Earthquake Fault Zone has been mapped within Cupertino, as shown on Figure 4.5-2 in Chapter 4.5, Geology, Soils, and Seismicity, of this Draft EIR, namely, the zone that flanks the San Andreas Fault in the southwestern-most part of the city. However, as shown on Figure 4.5-2, none of the Project Component Locations are located on this fault zone. Protections afforded by the Alquist-Priolo Act, as well as Municipal Code ordinances, as described in Section 4.5.1.1, Regulatory Framework, of Chapter 4.5, Geology, Soils, and Seismicity, of this Draft EIR, that empower the City to require detailed geotechnical reports in areas of suspected geological hazards, suggest that the potential for ground rupture would be mitigated for future development or construction in the city. However, in the event of a large,  $M_w$  6.7 or greater seismic event, much of the city is projected to experience “strong” ground shaking, with the most intense shaking forecast for the northeast part of Cupertino. Based on published studies and maps of the city, the potential for seismically-induced liquefaction appears low and limited to narrow areas that flank natural drainages such as Stevens, Regnart, and Calabazas Creeks. Future development permitted by Land Use Alternative B would be concentrated on sites either developed and/or underutilized, and would not be in proximity to these natural drainages. In contrast, the State-mapped hazards for seismic-induced landslides appear to be extensive in the Foothills that occupy the southwest part of the Project Study Area. Municipal Code ordinances that empower the City to require detailed soils and/or geotechnical reports in areas of suspected geological hazards, would minimize the potential for seismically-induced landsliding for future development or construction in the southwest part of the Project Study Area.

In addition to compliance with the Municipal Code building standards, Land Use Alternative B includes General Plan policies and strategies that minimize risk from seismic hazards. Policy 6-1, Regional Hazard Risk Reduction Planning, would require the City to coordinate with Santa Clara County and local agencies to implement the Multi-Jurisdictional LHMP for Santa Clara County. Strategy 1 would require the City to monitor and evaluate the success of the LHMP, including local strategies provided in the Cupertino Annex. Working with Santa Clara County, ensure that strategies are prioritized and implemented through the Capital Improvement Program and provide adequate budget for on-going programs and department operations. Strategy 2 would require the City to ensure that mitigation actions identified in the LHMP are being incorporated into upcoming City sponsored projects, where appropriate. Strategy 3 would require the City to support Santa Clara County in its role as the lead agency that prepares and updates LHMP. Policy 6-2, Seismic/Geologic Review Process, would require the City to evaluate new development proposals within mapped potential hazard zones using a formal seismic/geologic review process and use Table 6-D, Technical Investigations Required based on Acceptable Risk, to determine the level of review required. Table 6-D applies the land use activity category group provided in Table 6-C, Acceptable Exposure to Risk Related to Various Land Uses, to determine what type of evaluation is required. For example, Group 4, involuntary occupancy facilities such as schools, and high occupancy buildings, such as large office or apartment



**LAND USE ALTERNATIVE B**

buildings, would be required to comply with the CBC, complete a soils and foundation investigation, determine ability of local soil conditions to support structures, determine subsidence potential, faulting hazard, slope stability, and prepare a detailed Soils/Structural evaluation to certify adequacy of normal CBC earthquake regulations or to recommend more stringent measures. Strategy 1 would require any site with a slope exceeding 10 percent to reference the Landslide Hazard Potential Zone maps of the State of California for all required geotechnical and structural analysis. Strategy 2 would require that any residential facility that is being increased more than 50 percent in price or physical size conform to all provisions of the current building code throughout the entire structure. Owners of residential buildings with known structural defects, such as un-reinforced garage openings, “Soft first story” construction, unbolted foundations, or inadequate sheer walls are encouraged to take steps to remedy the problem and bring their buildings up to the current building code. Strategy 3 would require the City to continue to implement geologic review procedure for Geologic Reports required by Chapter 19 of the Municipal Code that incorporates these concerns into the development review process. Policy 6-3, Public Education on Seismic Safety, would require the City to encourage various public education programs to help residents reduce earthquake hazards. Strategy 1 would require developers to record a covenant to tell future residents in high-risk areas about the risk and inform them that more information is in City Hall records. This is in addition to the State requirement that information on the geological report is recorded on the face of subdivision maps. Strategy 2 would require the City to publish and promote emergency preparedness activities and drills. Use the Cupertino Scene and website to provide safety tips that may include identifying and correcting household hazards, knowing how and when to turn off utilities, helping family members protect themselves during and after an earthquake, recommending neighborhood preparation activities, and advising residents to maintain an emergency supply kit containing first-aid supplies, food, drinking water and battery operated radios and flashlight. Strategy 3 would require the City to encourage participation in Community Emergency Response Team (CERT) training. Train neighborhood groups to care for themselves during disasters. Assist in neighborhood drills. Strategy 4 would require the City to actively cooperate with State agencies that oversee facilities for vulnerable populations, to ensure that such facilities conform to all health and safety requirements, including emergency planning, training, exercises and employee education. Strategy 5 would require the City to obtain translated emergency preparedness materials and make them available to appropriate foreign language populations.

In addition, new development in Cupertino would be required to comply with the CBC and the City’s Building Code, which contain criteria and standards that are designed to reduce ground rupture risks to acceptable levels.

Through the implementation of the policies and strategies discussed above, along with compliance with the CBC and City Building Code, as described in Section 4.5.1.1, Regulatory Framework, of Chapter 4.5, Geology, Soils, and Seismicity, the City would mitigate the risks associated with fault rupture, and the impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

## LAND USE ALTERNATIVE B

---

### **GEO-2                    Implementation of Land Use Alternative B would not result in substantial soil erosion or the loss of topsoil.**

---

Implementation of Land Use Alternative B would not result in substantial soil erosion or the loss of topsoil. Substantial soil erosion or loss of topsoil during construction could undermine structures and minor slopes, and this could be a concern during buildout under Land Use Alternative B. However, compliance with existing regulatory requirements, such as implementation of grading erosion control measures as specified in the City of Cupertino's Municipal Code, as described in Section 4.5.1.1, Regulatory Framework, of Chapter 4.5, Geology, Soils, and Seismicity, of this Draft EIR, would reduce impacts from erosion and the loss of topsoil. Specifically, Section 16.08.110, would require the preparation of an Interim Erosion and Sediment Control Plan, either integrated with the site map/grading plan or submitted separately, to the Director of Public Works that calculates the maximum runoff from the site for the 10-year storm event and describes measures to be undertaken to retain sediment on the site, a brief description of the surface runoff and erosion control measures to be implemented, and vegetative measures to be undertaken.

In addition, Land Use Alternative B implements policies and supporting strategies to reduce soil erosion; thereby minimizing impacts related to loss of topsoil. Policy 5-10, Landscaping Near Natural Vegetation, implements the city's Water Efficient Landscaping Ordinance, Environmentally Preferable Procurement Policy, and the Parks & Recreation Green Policies, and would require the City to continue to emphasize drought tolerant and pest-resistant native and non-invasive, non-native, drought tolerant plants and ground covers when landscaping public and private properties near natural vegetation, particularly for control of erosion from disturbance to the natural terrain. Policy 5-19, Reduction of Impervious Surfaces, would require the City to minimize storm water flow and erosion impacts resulting from development. Strategy 1 would require the City to change City codes to include a formula regulating how much paved surface is allowable on each lot. This would include driveways and patios installed at the time of building or remodeling. Strategy 2 would require the City to encourage the use of non-impervious materials for walkways and driveways. If used in a City or quasi-public area, mobility and access for the disabled should always take precedent. Strategy 3 would require the City to minimize impervious surface areas, minimizing directly-connected impervious surfaces, maximizing onsite infiltration and using on-site retaining facilities. Finally, Policy 6-47, Hillside Grading, would require the City to restrict the extent and timing of hillside grading operation to April through October. Require performance bonds during the remaining time to guarantee the repair of any erosion damage. All graded slopes must be planted as soon as practical after grading is complete. Furthermore, the future development permitted by Land Use Alternative B would be concentrated on sites either developed and/or underutilized, where development would result in limited soil erosion or loss of topsoil. Therefore, adherence to existing regulatory requirements in the Municipal Code and implementation of the proposed General Plan policies would ensure that impacts associated with substantial erosion and loss of topsoil during the buildout of the Project Study Area would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

**LAND USE ALTERNATIVE B**

---

**GEO-3                    Implementation of Land Use Alternative B would not result in a significant impact related to development on unstable geologic units and soils or result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.**

---

Implementation of Land Use Alternative B would not result in a significant impact related to development on unstable geologic units and soils or result in on- or off-site landslide, later spreading, subsidence, liquefaction, or collapse. Unstable geologic units are known to be present within the city. The impacts of such unstable materials include, but may not be limited to subsidence where fill material may be highly compressible. Such subsidence has been exacerbated by historical groundwater overdraft. Areas underlain by thick colluvium or poorly engineered fill as well as low-lying areas may also be prone to subsidence. Future development in Cupertino in areas limited to land flanking natural drainages such as Stevens, Regnart, and Calabazas Creeks may be at greater risk for seismically-induced liquefaction. However, the Project Component Locations where new development would occur is not in these areas. The future development permitted by Land Use Alternative B would be concentrated on sites either developed and/or underutilized. Compliance with Municipal Code requirements and General Plan policies outlined under Impact GEO-1 and GEO-2 above, which can require site-specific soils and/or geotechnical studies for land development or construction in areas of potential geologic instability (as shown on the City's geologic hazard maps), would reduce the potential impacts associated with soil instability to a *less-than-significant* level.

**Significance Without Mitigation:** Less than significant.

---

**GEO-4                    Implementation of Land Use Alternative B would not create substantial risks to life or property as a result of its location on expansive soil, as defined Section 1803.5.3 of the California Building Code, creating substantial risks to life or property.**

---

The pattern of expansive soils within the city is such that expansive soils (denoted by soils with high linear extensibility and plasticity index) are most prevalent in the northeast part of Cupertino as shown in Figure 4.5-1 in Chapter 4.5, Geology, Soils, and Seismicity. However, future development in these areas would be subject to the CBC regulations and provisions, as adopted in Chapter 16.04, Building Code, of the City's Municipal Code and enforced by the City during plan review prior to building permit issuance. The CBC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition, and also regulates grading activities, including drainage and erosion control. General Plan Policies 6-1, 6-2 and 6-3, and supporting strategies in the Safety Element outlined in Impact GEO-1 above, require the formal seismic and geologic evaluation of new development proposals that lie within mapped potential hazard zones. Thus, compliance with existing regulations and policies would ensure that the potential future development impacts permitted under Land Use Alternative B would be reduced to a *less-than-significant* level.

**Significance Without Mitigation:** Less than significant.

## LAND USE ALTERNATIVE B

---

**GEO-5                    Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would not result in less than significant cumulative impacts with respect to geology and soils.**

---

This EIR takes into account growth projected by Land Use Alternative B within the Cupertino city boundary and Sphere of Influence (SOI), in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). Potential cumulative geological impacts could arise from a combination of the development of Land Use Alternative B together with future development in the immediate vicinity of the adjoining jurisdictions.

Only one active earthquake fault (i.e. the San Andreas Fault Zone) has been mapped by the State of California within the city, which is approximately 5 miles from Land Use Alternative B Component Locations, the risk of primary fault rupture on occupied buildings is judged low. Furthermore, new development under Land Use Alternative B would be subject to CBC and Municipal Code requirements, as described in Section 4.5.1.1, Regulatory Framework, of Chapter 4.5, Geology, Soils, and Seismicity, of this Draft EIR. Compliance with these building code requirements would, to the maximum extent practicable, reduce cumulative, development-related impacts that relate to seismically-induced ground-shaking, liquefaction, and expansive soils. Similarly, compliance with the General Plan policy and strategies, as listed above in impact discussion GEO-1 of this chapter, as well as the City's Ordinances pertaining to excavation and grading (i.e. Chapter 16.08, Excavations, Grading and Retaining Walls) including implementation of an Interim Erosion Control Plan and various control measures, would minimize the cumulative impacts associated with soil erosion and loss of topsoil to the maximum extent practicable. Therefore, Land Use Alternative B would result in a *less-than-significant* cumulative impact with respect to geology, soils, and seismicity.

**Significance Without Mitigation:** Less than significant.

### 5.3.7.6 GREENHOUSE GAS EMISSIONS

**GHG-1                    Implementation of Land Use Alternative B would not directly or indirectly generate GHG emissions that may have a significant impact on the environment.**

---

Development under Land Use Alternative B would contribute to global climate change through direct and indirect emissions of GHG from transportation sources, energy (natural gas and purchased energy), water use and wastewater generation, waste generation, and other, off-road equipment (e.g. landscape equipment, construction activities).

### Community-Wide GHG Emissions – Land Use Alternative B

BAAQMD has not adopted a 2040 per capita GHG threshold for operation-related GHG emissions. However, a 2040 efficiency target was derived for Land Use Alternative B based on the long-term GHG reduction target for 2050 interpolated from Executive Order S-03-05, which is an 80 percent reduction

**LAND USE ALTERNATIVE B**

from 1990 levels by 2020. This methodology is consistent with CARB's recommendations in the Update to the Scoping Plan.<sup>17</sup> The 2040 efficiency target would be 3.1 MTCO<sub>2</sub>e per service population for the city. The community-wide GHG emissions inventory for the Land Use Alternative B compared to existing conditions is included in Table 5.3-5.

The GHG emissions at 2040 in the City of Cupertino under Land Use Alternative B would decrease by 51 MTCO<sub>2</sub>e compared to existing conditions. As shown in Table 5.3-5, community-wide GHG emissions in the city at 2040 would also meet the 3.1 MTCO<sub>2</sub>e threshold, which is based on the long-term GHG reduction goal of Executive Order S-03-05. Impacts from GHG emissions within the City of Cupertino would be *less than significant* for long-term growth anticipated under Land Use Alternative B.

The General Plan includes policies and strategies that, once adopted, would reduce GHG emissions from development projects to the maximum extent practicable. Within the Community Design Element, Policy 2-2, Connections Between Special Areas, Employment Centers and the Community, would require the City to provide strong connections between the major mixed-use Special Areas, employment centers, and the surrounding community. Supporting strategies would require the City to enhance pedestrian and bicycle connections from the major mixed-use Special Areas and employment centers to surrounding neighborhoods and provide pedestrian and bicycle paths through new and redevelopment projects to enhance public access to and through the development. Policy 2-12, Long Term Growth Boundary, would require the City to allow modification of the long-term growth boundary only in conjunction with a comprehensive review of the City's General Plan. Policy 2-22, Jobs/Housing Balance, would require the City to strive for a more balanced ratio of jobs and housing units. Policy 2-26, Heart of the City Special Area, would require the City to create a positive and memorable image along Stevens Creek Boulevard of mixed-use development; enhanced activity gateways and nodes; and safe and efficient circulation and access for all modes of transportation. Supporting strategies 1 and 2 require the City to maintain the Heart of the City Specific Plan as the primary implementation tool for the City to use for this area and evaluate options on Stevens Creek Boulevard to improve the pedestrian environment by proactively managing speed limits and traffic signal synchronization. Policy 4-5, Pedestrian Access, require the City to create pedestrian access between new subdivisions and school sites. Review existing neighborhood circulation plans to improve safety and access for pedestrians and bicyclists to school sites, including completing accessible network of sidewalks and paths. Supporting strategies require the City to implement the recommendations of the Cupertino Pedestrian Transportation Plan and trail projects, evaluate any safety, security and privacy impacts and mitigations associated with trail development and work with affected neighborhoods in locating trails.

---

<sup>17</sup> California Air Resources Board (CARB), 2014, Proposed First Update to the Climate Change Scoping Plan: Building on the Framework, [http://www.arb.ca.gov/cc/scopingplan/2013\\_update/draft\\_proposed\\_first\\_update.pdf](http://www.arb.ca.gov/cc/scopingplan/2013_update/draft_proposed_first_update.pdf), February

## LAND USE ALTERNATIVE B

TABLE 5.3-5 LAND USE ALTERNATIVE B COMMUNITY GHG EMISSIONS INVENTORY

Category	GHG Emissions (MTCO <sub>2</sub> e/Year)						
	Existing 2013	2040 BAU (Without State and Federal GHG Reductions)	2040 Adjusted BAU (With State and Federal GHG Reductions)	Change from 2013	Percent Change	Change from BAU	Percent Change
Transportation <sup>a</sup>	123,518	153,991	107,015	-16,503	-13%	-46,976	-31%
Residential (Natural Gas and Electricity) <sup>b</sup>	74,579	86,136	77,092	2,513	3%	-9,044	-10%
Nonresidential* (Natural Gas and Electricity) <sup>b</sup>	85,416	121,922	99,092	13,676	16%	-22,830	-19%
City (Natural Gas and Electricity) <sup>b</sup>	1,081	1,351	1,022	-59	-5%	-329	-24%
Waste <sup>c</sup>	7,095	8,871	8,871	1,776	25%	0	0
Water/Wastewater <sup>d</sup>	3,712	3,975	2,862	-850	-23%	-1,113	-28%
Other - Offroad Equipment <sup>e</sup>	14,006	14,890	13,401	-605	-4%	-1,489	-10%
Total Community Emissions	309,406	391,136	309,355	-51	<-1%	-81,781	-21%
Service Population <sup>f</sup>	85,689	107,143		—	—	—	—
MTCO <sub>2</sub> e/Service Population (SP)	3.6	3.7	2.9	—	—	—	—
BAAQMD GHG 2040 Plan-Level Threshold	—	—	3.1	—	—	—	—
Achieves BAAQMD GHG Plan-Level Threshold?	—	—	Yes	—	—	—	—

Notes: Emissions may not total to 100 percent due to rounding. BAU: business as usual; ABAU: adjusted business as usual. Based on GWPs in the IPCC Second Assessment Report.

a. Transportation. VMT is based on data provided by Hexagon based on VTA model for Cupertino and modeled with EMFAC2011-PL for running exhaust emissions using 2035 emission rates (note: 2040 emissions rates are not available). VMT is multiplied by 347 days/year to account for reduced traffic on weekends and holidays.

b. Energy. Based on 3-year average (2012–2010) of energy use provided by Pacific Gas & Electric (PG&E) and forecast based on Land Use Alternative B housing units (residential), employment (non-residential), and service population (City) projections. The nonresidential sector includes direct access customers, county facilities, and other district facilities within the city boundaries. PG&E energy based on PG&E's carbon intensity for 2020. The 2020 emissions rate is estimated by PG&E. It includes reductions from 33 percent RPS, Cap-and-Trade, and other regulatory reductions for HGWP gases such as reductions of SF<sub>6</sub>. Direct access energy based on the eGRID carbon intensity and assumes 33 percent RPS.

c. Waste. Based on CARB Landfill Emissions Tool Version 1\_2013. Waste generation based on 3-year average (2012-2010) waste commitment for the City of Cupertino obtained from CalRecycle and forecast based on the service population increase. Assumes 75 percent of fugitive GHG emissions are captured within the landfill's Landfill Gas Capture System with a landfill gas capture efficiency of 75 percent. The Landfill gas capture efficiency is based on the CARB's LGOP, Version 1.1.

d. Water/Wastewater. Includes fugitive emissions from wastewater processing and energy associated with water/wastewater treatment and conveyance. The net increase in water use was based on the Water Supply Evaluation prepared for Land Use Alternative B.

e. Area Sources – Off-Road Emissions. Generated using OFFROAD2007. Estimated based on population (Landscaping), employment (Light Commercial Equipment), and construction building permits (Construction) for Cupertino as a percentage of Santa Clara County. Annual construction emissions forecasts are assumed to be similar to historic levels. Forecasts for landscaping equipment use are based on Land Use Alternative B population projections, and for light commercial equipment use are based on Land Use Alternative B employment projections. Excludes BAAQMD permitted sources. Daily construction emissions multiplied by 347 days/year to account for reduced/limited construction activity on weekends and holidays. Excludes fugitive emissions from construction sites.

f. Based on: Existing service population of 85,689 people (58,302 residents and 27,387 employees). 2040 service population of 107,143 people (68,051 residents and 39,092 employees).

## LAND USE ALTERNATIVE B

Within the Environmental Resources/Sustainability Element, Policy 5-1, Principles of Sustainability, would require the City to incorporate the principles of sustainability into Cupertino's planning and development system. Supporting strategies include requiring the City to appoint a Task Force or Commission to develop an appropriate comprehensive annual Sustainability and Resource Plan for the City to write and keep current the annual Tactical Plan and measurement of City-wide programs to help achieve the Environmental Resources and Sustainability section of the General Plan; identify and evaluate resources, technologies, products and the lifecycle cost of ownership for each recommended; and work with City staff to evaluate the financial feasibility of the recommendations. The City would be required to encourage community gardens, which provide a more livable environment by controlling physical factors such as temperature, noise, and pollution. In addition, the City is required to adopt and implement energy policies and implementation programs that include the City's planning and regulatory process; conduct a Citywide sustainability inventory in order to identify issues, opportunities and planning alternatives; and prepare and implement a comprehensive sustainability energy plan as a part of the City's General Plan. The supporting energy plan would be designed to include the following:

- Reduction of energy consumption.
- Reduction of fossil fuels.
- Use of renewable energy resources whenever possible.
- Improve City-wide water usage and conservancy.
- Reduce water consumption by the City.
- Promote residential and business water reduction.

Policy 5-3, Conservation and Efficient Use of Energy Resources, would require the City to encourage the maximum feasible conservation and efficient use of electrical power and natural gas resources for new and existing residences, businesses, industrial and public uses. Supporting strategies require the City to do the following:

- Prepare and implement a comprehensive energy management plan for all applicable public facilities, equipment and procurement and construction practices.
- Review and evaluate applicable City codes, ordinances, and procedures for inclusion of local, state and federal policies and standards that promote the conservation and efficient use of energy and for consistency with the goal of sustainability. Change those that will promote energy efficiency without a punitive effect.
- Using life cycle cost analysis, identify City assets for replacement with more energy efficient replacements.
- implement an incentive program to include such items as reduced permit fees for building projects that exceed Title 24 requirements. Promote other incentives from the State, County and Federal Governments for improving energy efficiency by posting information regarding incentive, rebate and tax credit programs on the City's web site. Let's make learning about this easy and help those interested get started!
- Encourage the use of energy cogeneration systems through the provision of an awareness program targeting the larger commercial and industrial users and public facilities.

## LAND USE ALTERNATIVE B

- Ensure designer, developers, applicants and builders meet California Title 24 Energy Efficient Building Standards and encourage architects, building designers and contractors to exceed “Title 24” requirements for new projects through the provision of incentives. Encourage either passive solar heating and/or dark plaster interior with a cover for swimming pools, cabanas and other related accessory uses where solar access is available. Encourage the use of alternative renewable sources where feasible, and develop energy audits or subvention programs.
- Require, as conditions of approval for new and renovated projects, the provision of energy conservation/efficiency applications.
- Encourage alternative, energy efficient transportation modes such as “clean” multi-modal public transit, car and vanpooling, flexible work hours, and pedestrian and bicycle paths.

Policy 5-4, Green Building Design, would require the City to set standards for the design and construction of energy and resource conserving/efficient building (Green Building Design). Supporting strategies require the City to prepare and implement “Green Building” standards for all major private and public projects that ensure reduction in energy consumption for new development through site and building design. The City would be required to participate in and encourage building energy audits, where feasible, for commercial, industrial and city facilities and convey to the business and industrial communities that energy conservation/efficiency is, in the long term, economically beneficial. PG&E also offers energy evaluation tools and services free of charge. In addition, the City would prepare a “Green Buildings” evaluation guide for use by the city staff when reviewing projects, train appropriate staff in the design principles, costs and benefits of energy conservation/efficient buildings and landscape design, conduct and/or participate in “Green Buildings” informational seminars and workshops to include people involved in the design and construction industry, land development, real estate sales, lending institutions, landscaping and design, the building maintenance industry and prospective project applicants, and become a regular feature article in the Cupertino Scene, do media outreach to the Courier and the Guide (San Jose Mercury) tape the Sustainable Building and other conservation courses, or seminars and broadcast them on the City Channel as well, and make them available at the Library. Policy 5-6, Air Pollution Effects of Existing Development, would require the City to minimize the air quality impacts of existing development. Supporting strategies require the City to establish a Citywide public education program regarding the implications of the Clean Air Act and provide information on ways to reduce and control emissions; provide information about carpooling and restricting physical activities on “Spare the Air” high-pollution days, expand the allowable home occupations in residentially zoned properties to reduce the need to commute to work, increase planting of trees on City property and encourage the practice on private property, maintain City use of fuel-efficient and low polluting vehicles, and work with County to monitor and influence improvement of emissions and dust from the Hanson and Stevens Creek Quarries on the West end of the City. Policy 5-7, Use of Open Fires and Fireplaces, would require the City to discourage high pollution fireplace use. Policy 5-28, Interagency Coordination, actively pursue interagency coordination for regional water supply problem solving. Policy 5-29, Coordination of Local Conservation Policies with Regionwide Conservation Policies, would require the City to Coordinate city-wide water conservation efforts with the Santa Clara Valley Water District efforts being conducted on a regional scale. Many of these conservation efforts are outlined in the Santa Clara Valley Water District Drought Plan and Countywide Water Use Reduction program. Policy 5-30, Public Information Effort, would require the City to provide the public information regarding water conservation/efficiency techniques, including how paving and other impervious surfaces



**LAND USE ALTERNATIVE B**

impact runoff. Policy 5-31, Water Use Efficiency, would require the City to promote efficient use of water throughout the City. Policy 5-38, Commercial/Industrial Recycling, would require the City to expand existing commercial and industrial recycling programs to meet and surpass AB939 waste stream reduction goals. Policy 5-39, Residential Recycling, would require the City to streamline the residential curbside recycling program in the next decade. Include all city-wide residential zoning districts in the curbside recycling program. Policy 5-40, On-Site Garbage and Organic Collection Area Dedication, would require the City to modify existing, and require for new developments, on-site waste facility requirements for all multi-family residential, commercial and industrial land uses to have adequate covered area for a combination of garbage, recycling and organic collection. Supporting strategy, Ordinance Revisions, would require the City to revise existing ordinances relative to on-site waste facility requirements for all multi-family residential, commercial and industrial zoning districts to require that a minimum of 50 percent of garbage area be dedicated to recycling. Policy 5-41, Public Education, would require the City to promote the existing public education program regarding the reduction of solid waste disposal and recycling. Supporting strategy, Recycling Program Information, would require the City to use the local television channel, the Cupertino Scene, the Internet and other available media to provide information to the residents about the objectives of the City's recycling program. Policy 5-42, City Recycling and Organic Diversion, would require the City to encourage City staff to recycle and compost at all City facilities. Policy 5-43, Re-distribution of Reusable Materials, would require the City to re-distribute reusable materials, e.g. garage sales, materials exchange through public education, encourage residents and businesses. Policy 5-44, Reuse of Building Materials, would require the City to encourage the recycling and reuse of building materials, including recycling materials generated by the demolition and remodeling of buildings.

Within the Circulation Element, Policy 4-1, City Participation in Regional Transportation Planning, would require the City to participate actively in developing regional approaches to meeting the transportation needs of the residents of the Santa Clara Valley. Work closely with neighboring jurisdictions and agencies responsible for roadways, transit facilities and transit services in Cupertino. Supporting strategies require the City to minimize regional traffic impacts on Cupertino by supporting regional planning programs to manage the jobs-housing balance throughout Santa Clara County and the Silicon Valley; ensure that connections are provided to enable travelers to transition from one mode of transportation to another, e.g. bicycle to bus ;support the expansion of the VTA's regional bus transit system and extension of bus and/or light rail rapid transit into the Stevens Creek and De Anza Special Areas to fulfill the "spoke and wheel" transit system designed to serve all of Santa Clara County. Policy 4-3, Reduced Reliance on the Use of Single-Occupant Vehicles, require the City to promote a general decrease in reliance on private, mostly single-occupant vehicles (SOV) by encouraging attractive alternatives. Supporting strategies require the City to encourage the use of alternatives to the SOV including increased car-pooling, use of public transit, bicycling and walking; encourage TSM programs for employees in both the public and private sectors by including preferred parking for carpools, providing bus passes, encouraging compressed workweeks, and providing incentives and rewards for bicycling and walking; encourage employers to use the internet to reduce commute travel. Encourage schools, particularly at the college and high school levels, to make maximum use of the internet to limit the need to travel to and from the campus; encourage new commercial developments to provide shared office facilities, cafeterias, day-care facilities, lunchrooms, showers, bicycle parking, home offices, shuttle buses to transit facilities and other amenities that encourage the use of transit, bicycling, walking or telecommuting as commute modes to work. Provide pedestrian pathways and orient buildings to the street to encourage pedestrian activity; provide space on appropriate

## LAND USE ALTERNATIVE B

streets for bus turnouts, or safe and accessible bike lanes or pedestrian paths; use the Cupertino Scene and other media to provide educational material on alternatives to the SOV; continue to work with the City Bicycle/Pedestrian Advisory Committee, community groups and residents to eliminate hazards and barriers to bicycle and pedestrian transportation.

### *Applicable Regulations*

- California Global Warming Solutions Act (AB 32)
- Sustainable Communities and Climate Protection Act (SB 375)
- Greenhouse Gas Emission Reduction Targets (Executive Order S-3-05)
- Clean Car Standards – Pavely (AB 1493)
- Renewable Portfolio Standards (SB 1078)
- California Integrated Waste Management Act of 1989 (AB 939)
- California Mandatory Commercial Recycling Law (AB 341)
- California Advanced Clean Cars CARB/ Low-Emission Vehicle Program – LEV III (Title 13 CCR)
- Heavy-Duty Vehicle Greenhouse Gas Emissions Reduction Measure (Title 17 CCR)
- Low Carbon Fuel Standard (Title 17 CCR)
- California Water Conservation in Landscaping Act of 2006 (AB 1881)
- California Water Conservation Act of 2009 (SBX7-7)
- Statewide Retail Provider Emissions Performance Standards (SB 1368).
- Airborne Toxics Control Measure to Limit School Bus Idling and Idling at Schools (13 CCR 2480)
- Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling (13 CCR 2485)
- In-Use Off-Road Diesel Idling Restriction (13 CCR 2449)
- Building Energy Efficiency Standards (Title 24, Part 6)
- California Green Building Code (Title 24, Part 11)
- Appliance Energy Efficiency Standards (Title 20)

The General Plan establishes the framework for future growth and development in Cupertino. A General Plan does not directly result in development without additional approvals. Before any development can occur in the City, it is required to be analyzed for conformance with the General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits. As identified in Table 5.3-5, Land Use Alternative B would achieve the 2035 performance criteria, which would ensure that the City is on a trajectory that is consistent with the statewide GHG reduction goals. Consequently, long-term GHG emissions impacts of Land Use Alternative B are *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**GHG-2            Implementation of Land Use Alternative B would not conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.**

---

The following plans have been adopted and are applicable for development in the City of Cupertino:

*CARB's Scoping Plan*

In accordance with AB 32, CARB developed the Scoping Plan to outline the State's strategy to achieve 1990 level emissions by year 2020. To estimate the reductions necessary, CARB projected statewide 2020 BAU GHG emissions (i.e. GHG emissions in the absence of statewide emission reduction measures). CARB identified that the State as a whole would be required to reduce GHG emissions by 28.5 percent from year 2020 BAU to achieve the targets of AB 32.<sup>18</sup> The revised BAU 2020 forecast shows that the state would have to reduce GHG emissions by 21.6 percent from BAU without implementation of the Pavley GHG emissions standards for passenger vehicles and the 33 percent renewable portfolio standard (RPS) for electricity, or 15.7 percent from the adjusted baseline (i.e. with Pavley and 33 percent RPS).<sup>19</sup>

Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard (LCFS), California Appliance Energy Efficiency regulations; California Building Standards (i.e. CALGreen and the 2008 Building and Energy Efficiency Standards); California Renewable Energy Portfolio standard (33 percent RPS); changes in the corporate average fuel economy standards (e.g. Pavley I and Pavley II); and other measures that would ensure the State is on target to achieve the GHG emissions reduction goals of AB 32. Statewide GHG emissions reduction measures that are being implemented over the next six years would reduce the City's GHG emissions.

As shown in Table 5.3-5, the City would achieve the 2020 target of AB 32 for cities within the San Francisco Bay Area Air Basin (SFBAAB). New residential and non-residential construction in the City would achieve the current building and energy efficiency standards. The new buildings would be constructed in conformance with CALGreen, which would require high-efficiency water fixtures for indoor plumbing and water efficient irrigation systems. Therefore, impacts would be *less than significant*.

*MTC's Plan Bay Area*

To achieve ABAG's/ Metropolitan Transportation Commission (MTC)'s sustainable vision for the Bay Area, the Plan Bay Area land use concept plan for the region concentrates the majority of new population and employment growth in the region in Priority Development Areas (PDAs). PDAs are transit-oriented, infill development opportunity areas within existing communities. Overall, well over two-thirds of all regional growth by 2040 is allocated within PDAs. PDAs are expected to accommodate 80 percent (or over 525,570 units) of new housing and 66 percent (or 744,230) of new jobs.<sup>20</sup> In Cupertino, Plan Bay Area includes the

---

<sup>18</sup> California Air Resources Board (CARB). 2008. October. *Climate Change Proposed Scoping Plan, a Framework for Change*.

<sup>19</sup> California Air Resources Board (CARB), 2012. *Status of Scoping Plan Recommended Measures*, [http://www.arb.ca.gov/cc/scopingplan/status\\_of\\_scoping\\_plan\\_measures.pdf](http://www.arb.ca.gov/cc/scopingplan/status_of_scoping_plan_measures.pdf).

<sup>20</sup> Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG), 2013. *Plan Bay Area: Strategy for a Sustainable Region*, July 18.

## LAND USE ALTERNATIVE B

Santa Clara VTA – City Cores, Corridors & Station Areas PDA.<sup>21</sup> The current and amended General Plan includes the following policies, which would encourage new growth in this Special Area, consistent with Plan Bay Area’s vision.

The General Plan includes policies and strategies that, once adopted, would encourage use of alternative modes of travel, which is also consistent with Plan Bay Area’s vision. Within the Circulation Element, Policy 4-3, Reduced Reliance on the Use of Single-Occupant Vehicles, would require the City to promote a general decrease in reliance on private, mostly single-occupant vehicles (SOV) by encouraging attractive alternatives. Supporting strategies require the City to do the following:

- Encourage the use of alternatives to the SOV including increased car-pooling, use of public transit, bicycling and walking.
- Encourage TSM programs for employees in both the public and private sectors by including preferred parking for carpools, providing bus passes, encouraging compressed workweeks, and providing incentives and rewards for bicycling and walking.
- Encourage employers to use the internet to reduce commute travel. Encourage schools, particularly at the college and high school levels, to make maximum use of the internet to limit the need to travel to and from the campus.
- Encourage new commercial developments to provide shared office facilities, cafeterias, day-care facilities, lunchrooms, showers, bicycle parking, home offices, shuttle buses to transit facilities and other amenities that encourage the use of transit, bicycling, walking or telecommuting as commute modes to work. Provide pedestrian pathways and orient buildings to the street to encourage pedestrian activity.
- Provide space on appropriate streets for bus turnouts, or safe and accessible bike lanes or pedestrian paths.
- Use the Cupertino Scene and other media to provide educational material on alternatives to the SOV.
- Continue to work with the City Bicycle/Pedestrian Advisory Committee, community groups and residents to eliminate hazards and barriers to bicycle and pedestrian transportation.

Policy 4-4, Improve Pedestrian and Bicycle Circulation Throughout Cupertino, would require the City Expand city-wide pedestrian and bicycle circulation in order to provide improved recreation, mobility and safety. Supporting strategies require the City to implement the projects recommended in the Pedestrian Guidelines including consider developing a quarter-mile grid of safe, walk-able sidewalks and paths to provide pedestrian access among residential, shopping, recreation and business locations and work with the School Districts to promote the Safe Route to Schools program. The City is also required to provide additional time for pedestrians to cross streets at appropriate intersections, consider various improvements to roadways to make them more pedestrian friendly and less auto-centric, encourage all public construction and private development projects to submit a Pedestrian/Bicycle Impact Statement to assess the impact of the project on pedestrians and bicycles. The City is required to implement Bicycle Plan, encourage the

---

<sup>21</sup> Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG), 2013. *Plan Bay Area*, <http://geocommons.com/maps/141979>.

## LAND USE ALTERNATIVE B

developers of major new or remodeled buildings to include secure interior and/or fully weather protected bicycle parking, and provide bicycle parking in multi-family residential developments and in commercial districts as required under Section 19.100.040 of the City code. Policy 4-6, Regional Trail Development, would require the City to continue to plan and provide for a comprehensive system of trails and pathways consistent with regional systems. Policy 4-7, Increased Use of Public Transit, would require the City to support and encourage the increased use of public transit. Policy 4-9, Traffic Service and Pedestrians Needs, would require the City to balance the needs of pedestrians with desired traffic service. Policy 4-12, Street Improvement Planning, would require the City to plan street improvements such as curb cuts, sidewalks, bus stop turnouts, bus shelters, light poles, benches and trash containers as an integral part of a project to ensure an enhanced streetscape and the safe movement of people and vehicles with the least possible disruption to the streetscape.

Policy 2-1, Focus Development in Mixed-Use Special Areas, which would encourage new growth in the PDA mixed-use corridor, is consistent with Plan Bay Area's vision. Policy 2-1 focuses new development in major mixed-use corridors in the City by allowing higher intensity development and increased building heights where appropriate in designated corridors, gateways, sub areas and nodes. As identified by the list of policies that encourage use of alternative modes of transportation and Policy 2-1 that focuses new growth in mixed-use areas, Land Use Alternative B is consistent with the objectives of Plan Bay Area for growth within this PDA. Therefore, Land Use Alternative B is consistent with land use concept plan for Cupertino identified in Plan Bay Area. Therefore, impacts would be *less than significant*.

### *Applicable Regulations*

- California Global Warming Solutions Act (AB 32)
- Sustainable Communities and Climate Protection Act (SB 375)
- Greenhouse Gas Emission Reduction Targets (Executive Order S-3-05)
- Clean Car Standards – Pavely (AB 1493)
- Renewable Portfolio Standards (SB 1078)
- California Integrated Waste Management Act of 1989 (AB 939)
- California Mandatory Commercial Recycling Law (AB 341)
- California Advanced Clean Cars CARB/ Low-Emission Vehicle Program – LEV III (Title 13 CCR)
- Heavy-Duty Vehicle Greenhouse Gas Emissions Reduction Measure (Title 17 CCR)
- Low Carbon Fuel Standard (Title 17 CCR)
- California Water Conservation in Landscaping Act of 2006 (AB 1881)
- California Water Conservation Act of 2009 (SBX7-7)
- Statewide Retail Provider Emissions Performance Standards (SB 1368).
- Airborne Toxics Control Measure to Limit School Bus Idling and Idling at Schools (13 CCR 2480)
- Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling (13 CCR 2485)
- In-Use Off-Road Diesel Idling Restriction (13 CCR 2449)
- Building Energy Efficiency Standards (Title 24, Part 6)
- California Green Building Code (Title 24, Part 11)
- Appliance Energy Efficiency Standards (Title 20)

## LAND USE ALTERNATIVE B

Implementation of Land Use Alternative B policies as well as compliance with applicable State standards listed and described above would ensure that consistency with state and regional GHG reduction planning efforts; therefore, this impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>GHG-3</b>	<b>Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to GHG emissions.</b>
--------------	--

---

As described above, GHG emissions related to Land Use Alternative B are not confined to a particular air basin but are dispersed worldwide. Therefore, the analysis in GHG-1 addresses cumulative impacts.

As identified above, the General Plan is a regulatory document that sets the framework for future growth and development. A General Plan does not directly result in development without further approvals. Before any development can occur in the city, it is required to be analyzed for conformance with the General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits. Furthermore, existing federal, State, and local regulations and policies, including the City's draft CAP, described throughout this chapter serve to reduce community-wide GHG emissions. Continued compliance with these regulations and implementation of existing policies, including applicable policies, would reduce impacts. As identified in Impact GHG-1, Table 5.3-5 shows that Land Use Alternative B would achieve the 2035 performance criteria, which would ensure that the City is on a trajectory that is consistent with the statewide GHG reduction goals. Consequently, cumulative GHG emissions impacts of Land Use Alternative B are *less than significant*.

**Significance Without Mitigation:** Less than significant.

### 5.3.7.7 HAZARDS AND HAZARDOUS MATERIALS

---

<b>HAZ-1</b>	<b>Implementation of Land Use Alternative B would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.</b>
--------------	--

---

While commercially-available hazardous materials (e.g. fuels, solvents, paints, and some consumer electronics) would be used at various new construction sites and may generate small amounts of hazardous waste, the waste would be handled in accordance with applicable federal, State, and local laws, policies, and regulations, as described in Section 4.7.1.1, Regulatory Framework, of Chapter 4.7, Hazards and Hazardous Materials, of this Draft EIR. As a general matter, the Land Use Alternative B, has office, commercial and residential land uses and, therefore, would not include manufacturing or research processes that generate substantial quantities of hazardous materials. The SCCFD and City of Cupertino Building Division coordinate the review of building permits to ensure that hazardous materials requirements are met prior to construction, including required separation between hazardous materials and sensitive land uses, and proper hazardous materials storage facilities. Any businesses that transport, generate, use, and/or

**LAND USE ALTERNATIVE B**

dispose of hazardous materials within the Project Study Area would also be subject to existing hazardous materials regulations, such as those implemented by HMCD, and hazardous materials permits from the SCCFD. The SCCFD also conducts inspections for fire safety and hazardous materials management of businesses and multi-family dwellings, in accordance with the City of Cupertino Hazardous Materials Storage Ordinance.

In addition, the General Plan contains the following policies and strategies that, once adopted, would further ensure that new development would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Within the Health and Safety Element, Policy 6-27, Hazardous Materials Storage and Disposal, directs the City to require the proper storage and disposal of hazardous materials to prevent leakage, potential explosions, fire or the release of harmful fumes. Policy 6-28, Proximity of Residents to Hazardous Materials, requires the City to assess future residents' exposure to hazardous materials when new residential development or childcare facilities are proposed in existing industrial and manufacturing areas and does not allow residential development or childcare facilities if such hazardous conditions cannot be mitigated to an acceptable level of risk. Policy 6-29, Electromagnetic Fields, requires the City to consider potential hazards from Electromagnetic Fields in the project review process. Policy 6-30, Alternative Products, requires the City to continue to encourage residents and businesses to use non- and less-hazardous products, especially less toxic pest control products, to slow the generation of new hazardous waste requiring disposal through the county-wide program. Policy 6-31, Household Hazardous Wastes, requires the City to continue to support and facilitate for residences and businesses a convenient opportunity to properly dispose of hazardous waste. Policy 6-32, Hazardous Waste Dumping, requires the City to maintain information channels to the residential and business communities about the illegality and danger of dumping hazardous material and waste in the storm drain system or in creeks.

Compliance, with applicable federal, State, and local laws and regulations regarding handling of these materials, as described in Section 4.7.1.1, Regulatory Framework, of Chapter 4.7, Hazards and Hazardous Materials, and the General Plan policies listed above would ensure the risks associated with release of hazardous materials into the environment from the routine transport, use, storage, or disposal of hazardous materials following construction would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>HAZ-2</b>	<b>Implementation of Land Use Alternative B would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.</b>
--------------	--

---

The proposed Project would facilitate new development, including residential, mixed-use, and commercial uses, within Cupertino. Some of the new development could occur on properties that possibly are contaminated and inactive, undergoing evaluation, and/or undergoing corrective action, as indicated in Table 4.7.1 of Chapter 4.7, Hazards and Hazardous Materials. Construction of new buildings and improvements could have the potential to release potentially hazardous soil-based materials into the environment during site grading and excavation operations. Likewise, demolition of existing structures

## LAND USE ALTERNATIVE B

could potentially result in release of hazardous building materials (e.g. asbestos, lead paint, etc.) into the environment. Use of hazardous materials on newly developed properties after construction could potentially include cleaning solvents, fertilizers, pesticides, and other materials used in the regular maintenance and operation of the proposed uses. Compliance with applicable federal, State, and local laws and regulations regarding handling of these materials described in Section 4.7.1.1, Regulatory Framework, of Chapter 4.7, Hazards and Hazardous Materials, the General Plan policies listed under Impact HAZ-1, and compliance with the Stormwater Pollution Prevention Plan and Best Management Practices required for the proposed Project (see Chapter 4.8, Hydrology and Water Quality, for additional detail), would ensure future development under Land Use Alternative B would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; therefore, impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>HAZ-3</b>	<b>Implementation of Land Use Alternative B would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.</b>
--------------	--

---

Several public and private schools, including preschools, elementary, middle, and high schools, are located within one-quarter mile of known hazardous wastes sites that may be redeveloped as part of Land Use Alternative B. The location of schools in proximity to each Project Component location is described in detail in Chapter 3, Project Description, of this Draft EIR.

The SCCFD and City of Cupertino Building Division coordinate the review of building permits to ensure that hazardous materials use requirements are met prior to construction, including required separation between hazardous materials and sensitive land uses, and proper hazardous materials storage facilities. In addition, the proposed Project could use hazardous materials. Future development under the proposed Project would be required by the HMCD and the City of Cupertino to store, manage, and dispose of the materials in accordance with the Unified Program.

While compliance with existing regulations described in Section 4.7.1.1, Regulatory Framework, of Chapter 4.7, Hazards and Hazardous Materials, along with the General Plan policies listed under Impact HAZ-1 would reduce the potential for school children to be exposed to hazardous materials during both construction and operation from future development permitted under Land Use Alternative B., impacts would be potentially significant.

However, implementation of Mitigation Measures HAZ-4a and HAZ-4b, as discussed in Impact HAZ-4 below, would reduce the potential for school children to be exposed to hazardous materials from future development permitted under Land Use Alternative B to a *less-than-significant* level.

**Significance With Mitigation:** Less than significant.



**LAND USE ALTERNATIVE B**

---

**HAZ-4            Implementation of Land Use Alternative B would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.**

---

As shown on Table 4.7-2, the search of the DTSC’s EnviroStor Database revealed five sites, and the GeoTracker database search revealed 27 LUST sites, on or within close proximity to the Project Component locations. The status of the LUST sites that are listed as “Completed-Case Closed,” indicates that appropriate response actions have been completed to the satisfaction of the San Francisco Bay RWQCB or the Santa Clara Water District and, in recent years, the Santa Clara County DEH, as the local oversight agency. The status of the Hazardous Site Number 23 (Tosco #11220), in the Heart of the City Special Area, a listed LUST site, is “Open-Verification Monitoring,” indicating that remediation phases are essentially completed and a monitoring program is occurring to confirm successful completion of cleanup at the Site. The on-going monitoring at this Hazardous Material Site is currently being reviewed by Santa Clara County DEH with RWQCB oversight.

Out of the 32 Hazardous Materials Sites, the following have a status that indicates additional action is required to address the hazardous materials at these locations. These are described as follows:

- Hazardous Site 1 (Cupertino Village Cleaners), located in the North Vallco Park Special Area, North Vallco Gateway and Study Area 5 (Cupertino Village) is listed as “voluntary cleanup,” which means, in this case, the Site has a confirmed release of tetrachloroethylene (PCE) that has impacted site soil, and the project proponents have requested the DTSC to oversee evaluation, investigation, and/or cleanup activities and have agreed to provide coverage for the DTSC’s costs. Based on the potential human health risk to future tenants of the former dry cleaners tenant space, the DTSC has concluded that remediation (soil excavation or soil vapor extraction [SVE]) would be required at this location.
- Hazardous Site 2 (Anderson Chevrolet Dealership), located in the Heart of the City Special Area and North Crossroads Node, is listed as sites where the DTSC has determined that a Preliminary Endangerment Assessment (PEA) or other evaluation is required.
- Hazardous Site 3 (Four-Phase System), located in the South De Anza Special Area, is listed as undergoing closure.
- Hazardous Site 5 (Acrian Incorporated), located in the Bubb Road Special Area, is listed as sites where the DTSC has determined that a Preliminary Endangerment Assessment (PEA) or other evaluation is required.
- Hazardous Site 13 (PG&E), located in Study Area 3 (PG&E), is a listed as LUST site. Case closure for the Site was issued by the Santa Clara County DEH on June 29, 2005. However, Santa Clara County DEH has determined that residual contamination in soil remains at the Site that could pose an unacceptable risk under certain site development activities such as site grading, excavation, or the installation of water wells. Therefore, the impact of the disturbance of any residual contamination or the installation of water well(s) in the vicinity of the residual contamination must be assessed and appropriate action taken so that there is no significant impact to human health, safety, or the

## LAND USE ALTERNATIVE B

environment. This could necessitate additional sampling, health risk assessment, and mitigation measures.

Because hazardous materials are known to be present in soil, soil gas, and/or groundwater due to past land uses at certain sites that may be redeveloped as part of Land Use Alternative B, the direct contact, inhalation, or ingestion of hazardous materials could potentially cause adverse health effects to construction workers and future site users. The severity of health effects would depend on the contaminant(s), concentration, use of personal protective equipment during construction, and duration of exposure. The disturbance and release of hazardous materials during earthwork activities, if present, could pose a hazard to construction workers, nearby receptors, and the environment and impacts could be potentially *significant*.

### Mitigation Measure

The following mitigation measures are recommended to minimize potential impacts related to sites with known hazardous materials:

**Mitigation Measure HAZ-4a:** Construction at the sites with known contamination shall be conducted under a project-specific Environmental Site Management Plan (ESMP) that is prepared in consultation with the Regional Water Quality Control Board (RWQCB). The purpose of the ESMP is to protect construction workers, the general public, the environment, and future site occupants from subsurface hazardous materials previously identified at the site and to address the possibility of encountering unknown contamination or hazards in the subsurface. The ESMP shall summarize soil and groundwater analytical data collected on the project site during past investigations; identify management options for excavated soil and groundwater, if contaminated media are encountered during deep excavations; and identify monitoring, irrigation, or other wells requiring proper abandonment in compliance with local, State, and federal laws, policies, and regulations.

The ESMP shall include measures for identifying, testing, and managing soil and groundwater suspected of or known to contain hazardous materials. The ESMP shall: 1) provide procedures for evaluating, handling, storing, testing, and disposing of soil and groundwater during project excavation and dewatering activities, respectively; 2) describe required worker health and safety provisions for all workers potentially exposed to hazardous materials in accordance with State and federal worker safety regulations; and 3) designate personnel responsible for implementation of the ESMP.

**Mitigation Measure HAZ-4b:** For those sites with potential residual volatile contamination in soil, gas, or groundwater that are planned for redevelopment with an overlying occupied building, a vapor intrusion assessment shall be performed by a licensed environmental professional. If the results of the vapor intrusion assessment indicate the potential for significant vapor intrusion into an occupied building, project design shall include vapor controls or source removal, as appropriate, in accordance with regulatory agency requirements. Soil vapor mitigations or controls could include passive venting and/or active venting. The vapor intrusion assessment and associated vapor controls or source removal can be incorporated into the ESMP (Mitigation Measure HAZ-4a).

**Significance With Mitigation:** Less than significant.

---

**HAZ-5                    Implementation of Land Use Alternative B would not impair  
implementation of or physically interfere with an adopted emergency  
response plan or emergency evacuation plan.**

---

The City of Cupertino Office of Emergency Services is responsible for coordinating agency response to disasters or other large-scale emergencies in the City of Cupertino with assistance from the Santa Clara County Office of Emergency Services and the SCCFD. The Cupertino Emergency Operations Plan (EOP) establishes policy direction for emergency planning, mitigation, response, and recovery activities within the City. The Cupertino EOP addresses interagency coordination, procedures to maintain communications with county and State emergency response teams, and methods to assess the extent of damage and management of volunteers.

In addition, the General Plan contains policies and strategies that, once adopted, would ensure that new development would not conflict with emergency operations in Cupertino. Within the Health and Safety Element, Policy 6-1, Regional Hazard Risk Reduction Planning, directs the City to coordinate with Santa Clara County and local agencies to implement the Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) for Santa Clara County. This policy also includes three new strategies that would direct the City to enact this Policy. Strategy 1, Monitoring and Budgeting, requires the City to monitor and fund the LHMP program. Strategy 2, Mitigation Incorporation, requires the City to ensure that individual projects and developments incorporate appropriate LHMP mitigation measures. Strategy 3, Hazard Mitigation Plan Amendments and Updates, supports Santa Clara County's efforts as the lead agency for the LHMP. Through Policy 6-1, Regional Hazard Risk Reduction Planning, and its attendant strategies, the City of Cupertino would actively facilitate regional emergency response plans. Policy 6-8, Early Project Review, requires the City to involve the Fire Department in the early design stage of all projects requiring public review to assure Fire Department input and modifications as needed. Policy 6-9, Commercial and Industrial Fire Protection Guidelines, requires the City to coordinate with the Fire Department to develop new guidelines for fire protection for commercial and industrial land uses. Policy 6-10, Fire Prevention and Emergency Preparedness, requires the City to promote fire prevention and emergency preparedness through city-initiated public education programs, through the government television channel, the Internet and the Cupertino Scene. Policy 6-13, Roadway Design, requires the City to involve the Fire Department in the design of public roadways for review and comments. Attempt to ensure that roadways have frequent median breaks for timely access to properties. Policy 6-14, Dead-End Street Access, requires the City to allow the public use of private roadways during an emergency for hillside subdivisions that have dead-end public streets longer than 1,000 feet or find a secondary means of access. Policy 6-15, Hillside Access Routes, directs the city to require new hillside development to have frequent grade breaks in access routes to ensure a timely response from fire personnel. Policy 6-16, Hillside Road Upgrades, directs the city to require new hillside development to upgrade existing access roads to meet Fire Code and City standards. Policy 6-17, Private Residential Electronic Security Gates, requires the City to discourage the use of private residential electronic security gates that act as a barrier to emergency personnel. Policy 6-33, Promote Emergency Preparedness, requires the City to distribute multi-hazard emergency preparedness information for all threats identified in the emergency plan. Information will be provided through Cardio-Pulmonary Resuscitation (CPR), First Aid and Community Emergency Response Team (CERT) training, lectures and seminars on emergency preparedness, publication of monthly safety articles in the Cupertino Scene, posting of information on the Emergency Preparedness website and coordination of video and printed information

## LAND USE ALTERNATIVE B

at the library. Policy 6-38, Emergency Operations Center, requires the City to ensure ongoing training of identified City employees on their functions/responsibilities in the EOC. Policy 6-39, Emergency Public Information, requires the City to maintain an Emergency Public Information program to be used during emergency situations. Policy 6-42, Evacuation Map, requires the City to prepare and update periodically an evacuation map for the flood hazard areas and distribute it to the general public.

Compliance, with applicable federal, State, and local laws and regulations regarding handling of these materials, as described in Section 4.7.1.1, Regulatory Framework, of Chapter 4.7, Hazards and Hazardous Materials, and the General Plan policies listed above would ensure future development under Land Use Alternative B would not interfere with, an adopted emergency response plan or emergency evacuation plan and impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>HAZ-6</b>	<b>Implementation of Land Use Alternative B would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.</b>
--------------	---

---

According to California Department of Forestry and Fire Protection (CalFIRE), there are no very high fire hazard severity zones with the Local Responsibility Areas of Cupertino. Furthermore, in 2009 the City adopted a Wildland Urban Interface Fire Area map, which also identified that there are no high or very high fire risk areas near the overall Study Area. Although this indicated that the wildfire risk in the overall Study Area is low, there are many resources available to address wildland fires should they arise, including the CalFIRE Strategic Plan, the California Fire Code (CFC), and cooperative fire services from SCCFD and CalFIRE, as described in Section 4.7.1.1, Regulatory Framework, in Chapter 4.7, Hazards and Hazardous Materials, of this Draft EIR. Because the locations of the potential future development under the Land Use Alternative B is located in a highly urbanized area at a distance from regional open space areas, they are not subjected to wildland fires.

In addition, the current General Plan contains the following policies that, once adopted, would to further ensure that wildfire hazards would be minimized. Within the Health and Safety Element, Policy 6-1, Regional Hazard Risk Reduction Planning, directs the City to coordinate with Santa Clara County and local agencies to implement the Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) for Santa Clara County. This policy also includes three new strategies that would direct the City to enact this Policy. Strategy 1, Monitoring and Budgeting, would require the City to monitor and fund the LHMP program. Strategy 2, Mitigation Incorporation, ensures that individual projects and developments incorporate appropriate LHMP mitigation measures. Strategy 3, Hazard Mitigation Plan Amendments and Updates, supports Santa Clara County's efforts as the lead agency for the LHMP. Through Policy 6-1, Regional Hazard Risk Reduction Planning and its attendant strategies, the City of Cupertino would comply with regional plans for addressing local hazards, including wildfire. Policy 6-4, Wild Fire Prevention Efforts, would require the City to coordinate wild fire prevention efforts with adjacent jurisdictions. Policy 6-5, County Fire Hazard Reduction, would require the City to encourage the County to put into effect the fire reduction policies of the County Public Safety Element. Policy 6-6, Fuel Management to Reduce Fire

## LAND USE ALTERNATIVE B

Hazard, would require the City to encourage the Midpeninsula Open Space District and the County Parks Department to continue efforts in fuel management to reduce fire hazards. Policy 6-7, Green Fire Breaks, would require the City to encourage the Midpeninsula Open Space District to consider “green” firebreak uses for open space lands. Policy 6-8, Early Project Review, would require the City to involve the Fire Department in the early design stage of all projects requiring public review to assure Fire Department input and modifications as needed. Policy 6-9, Commercial and Industrial Fire Protection Guidelines, would require the City to coordinate with the Fire Department to develop new guidelines for fire protection for commercial and industrial land uses. Policy 6-11, Multi-Story Buildings Fire Risks, would require the City to recognize that multi-story buildings of any land use type increase risks of fire, and ensure that adequate fire protection is built into the design and require on-site fire suppression materials and equipment to ensure the safety of the community. Policy 6-12, Smoke Detectors, directs the City to require smoke detectors in all new residential units, and in all residential units at time of sale or rental, in conformance with State law, and to continue to use the Cupertino Scene to publicize fire hazards correction methods. Strategy 1, Code Amendment, would require the City to adopt an ordinance to incorporate the smoke detector requirement in Chapter 16.04 of the Cupertino Municipal Code.

Compliance with these General Plan policies and strategies, combined with the policies listed above under Impact HAZ-5, would ensure that impacts from wildland hazards would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**HAZ-7**                      **Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to hazards and hazardous materials.**

---

This EIR takes into account growth projected by the proposed Project within the Cupertino city boundary and Sphere of Influence (SOI), in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). This chapter analyzes potential cumulative hazardous impacts that could arise from a combination of the development of Land Use Alternative B together with the regional growth in the immediate vicinity of the Project Study Area.

As discussed previously, development allowed by Land Use Alternative B would not result in significant impacts from the increased use of hazardous household materials and would not increase exposure to potential hazards associated with wildland fires. Land Use Alternative B would not interfere with implementation of emergency response plans. In addition, potential project-level impacts associated with hazards and hazardous materials would be further reduced through compliance with General Plan policies and strategies, other local, regional, State, and federal regulations, and with implementation of Mitigation Measures HAZ-4a and HAZ-4b. Since impacts associated with hazardous materials and wildland fire, are, by their nature, focused on specific sites or areas, the less-than-significant impacts within the Project Study Area from Land Use Alternative B would not contribute to a cumulative increase in hazards in the

## LAND USE ALTERNATIVE B

immediate vicinity of the Project Study Area or throughout the region. Therefore, the potential for cumulative impacts associated with safety and hazards would be *less than significant*.

### 5.3.7.8 HYDROLOGY AND WATER QUALITY

---

<b>HYDRO-1</b>	<b>Implementation of Land Use Alternative B would not violate any water quality standards or waste discharge requirements.</b>
----------------	--

---

Development or redevelopment that could occur under the Land Use Alternative B could affect drainage patterns and increase the overall amount of impervious surfaces, thus creating changes to storm water flows and water quality. Increasing the total area of impervious surfaces can result in a greater potential to introduce pollutants to receiving waters. Urban runoff can carry a variety of pollutants (i.e. oil and grease, metals, sediments, and pesticide residues from roadways, parking lots, rooftops, landscaped areas) and deposit them into an adjacent waterway via the storm drain system. New construction could also result in the degradation of water quality with the clearing and grading of sites, releasing sediment, oil and greases, and other chemicals to nearby water bodies. However, future development permitted by the Land Use Alternative B would be located on underutilized, infill sites, all of which have already been developed and currently have a high percentage of impervious surfaces.

As discussed in Section 4.8.1.1 Regulatory Framework, in Chapter 4.8, Hydrology and Water Quality, of this Draft EIR, water quality in storm water runoff is regulated locally by the Santa Clara Valley Urban Runoff Pollution Prevention Program, which includes the Municipal Regional Storm Water National Pollutant Discharge Elimination System Permit (MRP) C.3 provisions set by the San Francisco Bay RWQCB.

Adherence to these permit conditions would require new development or redevelopment projects to incorporate treatment measures, an agreement to maintain them, and other appropriate source control and site design features that reduce pollutants in runoff to the maximum extent practicable. Many of the requirements involve LID practices such as the use of onsite infiltration that reduce pollutant loading. Incorporation of these measures can even improve on existing conditions.

In addition, future development would be required to comply with the NPDES Permit (Municipal Code Chapter 9.18, Stormwater Pollution Prevention and Watershed Protection) and implement a construction SWPPP that require the incorporation of BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction.

The General Plan includes policies and strategies that, once adopted, protect water quality and reduce potential impacts to water quality as a result of implementation of potential future development in the city. Policy 5-18, Natural Water Bodies and Drainage Systems, directs the City to require that site design respect the natural topography and drainages to the extent practicable to reduce the amount of grading necessary and limit disturbance to natural water bodies and natural drainage systems caused by development including roads, highways and bridges. The supporting Strategy would require the City to encourage volunteer organizations to help restore and clean creek beds in Cupertino to reduce pollution and help return waterways to their natural state. Policy 5-19, Reduction of Impervious Surfaces, would require the City to

**LAND USE ALTERNATIVE B**

minimize storm water flow and erosion impacts resulting from development. Strategy 1 would require the City to include a formula regulating how much paved surface is allowable on each lot. This would include driveways and patios installed at the time of building or remodeling. Strategy 2 would require the City to encourage the use of non-impervious materials for walkways and driveways. If used in a City or quasi-public area, mobility and access for the disabled should always take precedent. Strategy 3 would require the City to minimize impervious surface areas, minimizing directly-connected impervious surfaces, maximizing onsite infiltration and using on-site retaining facilities. Policy 5-20, Pollution and Flow Impacts, states that the City, prior to making land use decisions, estimate increases in pollutant loads and flows resulting from projected future development to avoid surface and groundwater quality impacts. Strategy 1, require incorporation of structural and non-structural Best Management Practices (BMPs) to mitigate the projected increases in pollutant loads and flows. Policy 5-21, Compact Development Away from Sensitive Areas, directs the City that where such measures do not conflict with other municipal purposes or goals, to encourage, via zoning ordinances, compact development located away from creeks, wetlands, and other sensitive areas. Policy 5-22, Storm Drainage Management and Conformance with Watershed-Based Planning, encourage development projects to follow watershed-based planning and zoning by examining the project in the context of the entire watershed area. Strategy 1 would require the City to develop and maintain a Storm Drainage Master Plan and work with other agencies to develop broader Watershed Management Plans to model the City's hydrology. The Storm Drainage Master Plan should identify facilities needed to prevent "10-year" event street flooding and "100-year" event structure flooding. Also identify opportunities to meet water quality protection needs in a cost-effective manner. Policy 5-32, Urban Runoff Pollution Prevention Program, would require the City to support and participate in the SCVURPPP in order to work cooperatively with other cities to improve the quality of storm water runoff discharge into San Francisco Bay. Strategy 1, Post-Construction Urban Runoff Management, would require the City to implement the Post-Construction Urban Runoff Management requirements of the City's Municipal NPDES Permit to reduce urban runoff from project sites. Strategy 2, would require the City to implement the Hydromodification Management requirements of the City's Municipal NPDES Permit to manage runoff flow and volume from project sites. Policy 5-33, Illicit Discharge into Storm Drains and Waterways, would require the City to prohibit the discharge of pollutants and the illicit dumping of wastes into the storm drains, creeks and waterways. The supporting Strategy would require the City to partner with public, private, and non-profit agencies on public outreach and education on the importance of responsible stormwater management. Policy 5-34, Storm Water Runoff, would require the City to investigate opportunities to retain or detain storm runoff on new development. Strategy 1 Would require the City to ensure that private development includes adequate measures to treat stormwater runoff and maximize opportunities to filter, infiltrate, store and reuse or evaporate stormwater runoff onsite. Policy 5-36, Mitigation for Potential Storm Water Impacts, directs the City to require mitigation measures for potential storm water pollutant impacts for projects subject to environmental review. Policy 5-37, Pest-Resistant Landscaping and Design Features, would require the City to encourage the consideration of pest-resistant landscaping and design features, including the landscaping and design of storm water detention and retention facilities proposed in development projects. Other design features that are encouraged include green roofs and onsite treatment of grey water for irrigation.

While implementation of this Alternative would permit new office, commercial and hotel development, and new housing units to meet projected housing demands, as described above, it does not contain any policies

## LAND USE ALTERNATIVE B

that would directly or indirectly result in violations of water quality standards. Therefore, implementation of this alternative would have a *less-than-significant* impact on water quality.

**Significance Without Mitigation:** Less than significant.

---

**HYDRO-2      Implementation of the Land Use Alternative B would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).**

---

Planned future development for this Alternative could result in an increase in impervious surfaces, which would reduce infiltration and could lead to reduced groundwater recharge. However, as previously described, future development permitted by this Alternative would be located on underutilized, infill sites, most of which have already been developed and currently have a high percentage of impervious surfaces. The Applicants for new development and redevelopment would be encouraged to implement site design measures, LID, and BMPs, including infiltration features, that will contribute to groundwater recharge and minimize storm water runoff. As discussed in Impact HYDRO-1, General Plan Policy 5-19, Reduction of Impervious Surfaces, would require minimizing impervious surface areas, minimizing directly connected impervious surfaces, maximizing onsite infiltration and using on-site retaining facilities among other strategies. In addition, given the Project Component locations, future development would not interfere with groundwater recharge that takes place in the McClellan Ponds recharge facility located within the City of Cupertino or the creeks and streams that run through the city.

While buildout of this Alternative could lead to an increased demand for water, which could lead to an increase in groundwater pumping, water supply impacts are discussed in Chapter 4.14, Utilities and Service Systems, of this Draft EIR. As discussed in Chapter 4.14, Utilities and Service Systems, water retailers for the City of Cupertino obtain their water from groundwater wells and purchases from SCVWD. The SCVWD's 2010 Urban Water Management Plan (UWMP) indicates that there is a sufficient supply of water through 2035 even for multiple dry years.<sup>22</sup> In addition, the SCVWD operates and maintains an active groundwater recharge program with 18 major recharge systems, over 70 off-stream ponds with a combined surface area of more than 320 acres, and over 30 local creeks. Runoff is captured in the SCVWD's reservoirs and released into both in-stream and off-stream recharge ponds for percolation into the groundwater basin. In addition, imported water is delivered by the raw water conveyance system to streams and ponds. The use of site design features required by C.3 provisions of the MRP and compliance with the City of Cupertino General Plan policies listed in Impact HYDRO-1 would reduce the impact of increased impervious surfaces on groundwater recharge. Therefore, implementation of this Alternative would have a *less-than-significant* impact with respect to groundwater supplies or groundwater recharge.

**Significance Without Mitigation:** Less than significant.

---

<sup>22</sup> Santa Clara Valley Water District, 2010. *Urban Water Management Plan*.



**LAND USE ALTERNATIVE B**

---

**HYDRO-3      Implementation of the Land Use Alternative B would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion, siltation, or flooding on- or off-site.**

---

Development within the Project Component and the change in land uses will result in an increase in impervious surfaces. This could result in an increase in storm water runoff, higher peak discharges to drainage channels, and the potential to cause erosion or sedimentation in drainage swales and streams. Increased runoff volumes and velocities could create nuisance flooding in areas without adequate drainage facilities. However, none of the future development would require alteration of the course of an existing stream. Most of the future development sites are in infill areas that are already developed or paved and new development on these sites should not create a substantial increase in the amount of impervious surfaces.

All new development and redevelopment projects will be required, pursuant to the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and MRP, to implement construction phase BMPs, post-construction design measures that encourage maximize infiltration in pervious areas, and post-construction source control measures to help keep pollutants out of storm water. In addition, post-construction storm water treatment measures are required for most projects with 10,000 square feet or more of impervious surface and post-construction storm water quantity (flow peak, volume, and duration) controls are required for projects in certain locations with one acre or more of impervious surface, in accordance with the SCVURPPP's Hydromodification Management Plan (HMP). This would minimize the amount of storm water runoff from new development and redevelopment sites within the city.

During construction, project applicants are subject to the NPDES construction permit requirements, including preparation of a SWPPP. In addition, Section 16.08.110, Interim Erosion and Sediment Control Plan, of the City's Municipal Code would require preparation of an Interim Erosion and Sediment Control Plan, either integrated with the site map/grading plan or submitted separately, that calculates the maximum runoff from the site for the ten-year storm event and describes measures to be undertaken to retain sediment on the site, a brief description of the surface runoff and erosion control measures to be implemented, and vegetative measures to be undertaken. These control measures would further reduce the potential for substantial erosion or siltation and would ensure that runoff from the site is protective of the beneficial uses of receiving waters. Once constructed, the requirements for new development or redevelopment would include source control measures and site design measures that address storm water runoff and would reduce the potential for erosion or siltation.

In addition, Provisions C.3 of the MRP require new development and redevelopment projects, meeting certain criteria, to implement storm water treatment measures to contain site runoff, using specific numeric sizing criteria based on volume and flow rate. For hydromodification projects, post-project runoff shall not exceed estimated pre-project rates and durations where the increased storm water discharge rates and durations would result in increased potential for erosion.<sup>23</sup>

---

<sup>23</sup> Santa Clara Valley Urban Runoff Pollution Prevention Program, 2014. Website: [http://www.scvurppp-w2k.com/nd\\_wp.shtml#other](http://www.scvurppp-w2k.com/nd_wp.shtml#other) accessed on May 3, 2014.

## LAND USE ALTERNATIVE B

The General Plan includes policies and strategies that, once adopted, would further prevent soil erosion and reduce impacts to water quality. Policy 5-10, Landscaping Near Natural Vegetation, per the City's Water Efficient Landscaping Ordinance, Environmentally Preferable Procurement Policy, and the Parks & Recreation Green Policies, would require the City to continue to emphasize drought tolerant and pest-resistant native and non-invasive, non-native, drought tolerant plants and ground covers when landscaping public and private properties near natural vegetation, particularly for control of erosion from disturbance to the natural terrain. Policy 5-19, discussed above, would require the City to minimize storm water flow and erosion impacts resulting from development. Policy 5-20, Pollution and Flow Impacts, states that the City, prior to making land use decisions, estimate increases in pollutant loads and flows resulting from projected future development to avoid surface and groundwater quality impacts. Strategy 1, require incorporation of structural and non-structural Best Management Practices (BMPs) to mitigate the projected increases in pollutant loads and flows. In addition Policy 6-47, Hillside Grading, would require the City to restrict the extent and timing of hillside grading operation to April through October. Require performance bonds during the remaining time to guarantee the repair of any erosion damage. All graded slopes must be planted as soon as practical after grading is complete.

With implementation of the erosion and sediment control measures and regulatory provisions to limit runoff for new development and redevelopment sites, and implementation of the General Plan policies and strategies, future development under this Alternative would not result in significant increases in erosion and sedimentation or contribute to on-site or off-site flooding. Therefore, implementation of Land Use Alternative B would have a *less-than-significant* impact with respect to drainage patterns.

---

**HYDRO-4      Implementation of the Land Use Alternative B would create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.**

---

As discussed previously, an increase in impervious surfaces with implementation of this Alternative could result in an increase in storm water runoff that could exceed the capacity of existing or planned storm water drainage systems. Under existing conditions, portions of the City's storm drainage systems are not capable of containing the runoff from 10-year storm events.<sup>24</sup> As shown in Table 4.8-2, in Chapter 4.8, Hydrology and Water Quality, of this Draft EIR, there are existing deficiencies in the Project Component locations that could be exacerbated by potential future development under this Alternative.

In accordance with established City and County requirements, new development and redevelopment projects must be designed such that the storm water runoff generated from the ten-year storm is conveyed in the storm drainage system (underground pipes or open channels) and the storm water runoff generated from the 100-year design storm must be safely conveyed away from the site without creating and/or contributing to downstream or upstream flooding conditions.<sup>25</sup> In addition, the City of Cupertino would require that post-project storm water runoff rates be less than or equal to pre-project values for projects

---

<sup>24</sup> City of Cupertino, 1993. *Storm Drain Master Plan*.

<sup>25</sup> Santa Clara County, 2007. *Drainage Manual*. Adopted August 14, 2007.

## LAND USE ALTERNATIVE B

subject to hydromodification requirements and where storm drain facilities are at or have exceeded system capacities.<sup>26</sup> Therefore, future development associated with this Alternative would not be expected to result in downstream flooding but could exacerbate existing conditions of the storm drain system, which is undersized to convey the 10-year storm event at some locations.

New development and redevelopment within the city would not create substantial additional sources of polluted runoff. During the construction phase, projects would be required to prepare SWPPPs and erosion and sediment control plans, thus limiting the discharge of pollutants from the site. During operation, projects must implement BMPs and LID measures that minimize the amount of storm water runoff and associated pollutants. Additionally, new development or redevelopment projects would be required to pay storm drainage fees pursuant to City Council Resolution No. 12-033 to support expansion and improvements to the existing storm drain system. Also, as discussed in Impact HYDRO-1 and HYDRO-3, the General Plan includes policies and strategies that require the City to minimize storm water flow and erosion impacts resulting from development, Support and participate in the SCVURPPP, implement the Post-Construction Urban Runoff Management requirements of the City's Municipal NPDES Permit to reduce urban runoff from project sites, require mitigation measures for potential storm water pollutant impacts for projects subject to environmental review, and encourage the consideration of design features, including the landscaping and design of storm water detention and retention facilities proposed in development projects. Specifically, Policy 5-22, Storm Drainage Management and Conformance with Watershed-Based Planning, would encourage development projects to follow watershed-based planning and zoning by examining the project in the context of the entire watershed area. By encouraging improved stormwater drainage, including project-practices to prevent runoff, this policy would serve to deploy strategies to decrease runoff and prevent increases to stormwater entering the drainage system.

Within the Environmental Resources Element, Policy 5-22, Storm Drainage Management and Conformance with Watershed-Based Planning, would encourage development projects to follow watershed-based planning and zoning by examining the project in the context of the entire watershed area. Policy 5-32 would incorporate new proposed Strategy 1, which would direct the City to implement the Post-Construction Urban Runoff Management requirements of the City's Municipal NPDES Permit to reduce urban runoff from project sites, and Strategy 2, which would direct the City to implement the Hydromodification Management requirements of the City's Municipal NPDES Permit to manage runoff flow and volume from project sites. Policy 5-32, Urban Runoff Pollution Prevention Program, would require the City to support and participate in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) in order to work cooperatively with other cities to improve the quality of storm water runoff discharge into San Francisco Bay. Strategy 1, Post-Construction Urban Runoff Management, would require the City to implement the Post-Construction Urban Runoff Management requirements of the City's Municipal NPDES Permit to reduce urban runoff from project sites. Strategy 2, Hydromodification Management, would require the City to implement the Hydromodification Management requirements of the City's Municipal NPDES Permit to manage runoff flow and volume from project sites. Policy 5-34, Storm Water Runoff, includes a new strategy that would direct the City to "ensure that private development includes adequate measures to treat stormwater runoff," and to "maximize opportunities to filter, infiltrate, store and reuse or

---

<sup>26</sup> Verbal communication with Fletcher Parsons, BKF and Chad Mosley, City of Cupertino, March 19, 2014.

## LAND USE ALTERNATIVE B

evaporate stormwater runoff onsite.” By encouraging improved stormwater drainage, management, and retention, these policies would serve to prevent or reduce unmanaged runoff that could exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

Implementation of General Plan policies and strategies aimed at reducing storm water and compliance with the mandatory regulation outlined in this discussion would ensure development consistent with this Alternative would not require significant expansions of the existing storm water drainage infrastructure. Therefore, impacts associated with future development runoff would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**HYDRO-5      Implementation of Land Use Alternative B would not otherwise substantially degrade water quality.**

---

Increased runoff from the construction of impermeable surfaces as the Project Component locations are developed could worsen water quality in the storm water runoff. Pollutants commonly associated with construction sites that can impact storm water are sediments, nutrients, trace metals, pesticides, oil, grease, fuels, and miscellaneous construction wastes. Pollutants generated from the proposed land uses of the Project Study Area may include sediment, nutrients, bacteria and viruses, oil and grease, metals, organics, pesticides/herbicides, and trash/debris.

As required by City and County storm water management guidelines, BMPs would be implemented during both construction and operation of this Alternative. These BMPs would control and prevent the release of sediment, debris, and other pollutants into receiving water bodies. Implementation of BMPs during construction would be in accordance with the provisions of the SWPPP, which would minimize the release of sediment, soil, and other pollutants. Operational BMPs would be required to meet MRP requirements, which include site design, source control, and treatment control measures to treat and control runoff before it enters the storm drain system or receiving water bodies.

Additionally, implementation of Policy 5-22 Storm Drainage Management and Conformance with Watershed-Based Planning would direct the City to “identify opportunities to meet water quality protection needs in a cost-effective manner,” which would also serve to prevent degradation of water quality. Policy 5-22, Storm Drainage Management and Conformance with Watershed-Based Planning, would encourage development projects to follow watershed-based planning and zoning by examining the project in the context of the entire watershed area. Policy 5-32, Ground Water Recharge Sites, would incorporate new Strategy 1, which would direct the City to implement the Post-Construction Urban Runoff Management requirements of the City’s Municipal NPDES Permit to reduce urban runoff from project sites, and Strategy 2, which would direct the City to implement the Hydromodification Management requirements of the City’s Municipal NPDES Permit to manage runoff flow and volume from project sites. Policy 5-32, Urban Runoff Pollution Prevention Program, would require the City to support and participate in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) in order to work cooperatively with other cities to improve the quality of storm water runoff discharge into San Francisco Bay. Strategy 1, Post-Construction Urban Runoff Management, would require the City to implement the Post-Construction

## LAND USE ALTERNATIVE B

Urban Runoff Management requirements of the City’s Municipal NPDES Permit to reduce urban runoff from project sites. Strategy 2, Hydromodification Management, would require the City to implement the Hydromodification Management requirements of the City’s Municipal NPDES Permit to manage runoff flow and volume from project sites. Policy 5-34, Storm Water Runoff, includes a new strategy that would direct the City to “ensure that private development includes adequate measures to treat stormwater runoff,” and to “maximize opportunities to filter, infiltrate, store and reuse or evaporate stormwater runoff onsite.” By encouraging improved stormwater drainage, management, and retention, these policies would serve to prevent or reduce unmanaged runoff that could substantially degrade water quality.

With implementation of these BMPs in accordance with City and County requirements, the potential impact on water quality would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**HYDRO-6      Implementation of Land Use Alternative B would not place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place structures that would impede or redirect flood flows within a 100-year flood hazard area.**

---

Implementation of the Land Use Alternative B would not result in the development of residential structures in existing FEMA-designated 100-year floodplains or Special Flood Hazard Areas (SFHAs). As shown on Figure 4.8-4, the areas within Cupertino and the Sphere of Influence that are within the 100-year floodplain are limited and are areas located immediately adjacent to creeks and drainage channels that travel through the city. The Project Components locations relative to the 100-year floodplains are shown on Figure 4.8-4 in Chapter 4.8, Hydrology and Water Quality, of this Draft EIR.

Regnant Creek and Calabasas Creek and their associated 100-year floodplains pass through portions of the South De Anza and the Heart of the City Special Areas, which are proposed to include new housing and/or new development. However, the FEMA floodplain maps state that the 100-year flood would be contained within the channels of these creeks at some of the locations within the Special Areas. Calabasas Creek and its associated 100-year floodplain also pass through the North Vallco Park Special Area. However, no new housing is proposed in the portion of the North Vallco Park Special Area where the 100-year floodplain is located. General Plan and Zoning Ordinance Conformance Sites 39, 44, and 45 are also in areas mapped as including the 100-foot wide 100-year floodplain. However, these sites are proposed to be rezoned as PR (park and recreation) so no new housing or structures would be located in these areas.

As described in Section 4.8.1.2, Existing Conditions, in Chapter 4.8, Hydrology and Water Quality, of this Draft EIR, under the subheading “Waterways,” the creeks that run through Cupertino pose little threat of flooding as a result of effort by the City and SCVWD to modify, restore and improve the flow channels and implement erosion control measures to reduce impacts from flooding.

## LAND USE ALTERNATIVE B

Land Use Alternative B includes General Plan policies and strategies that, once adopted, would ensure potential impacts from flooding would not occur with the implementation of the potential future development. Within the Land Use/Community Design Element Within the Land Use/Community Design Element, Policy 5-49 would require the City to maintain storm drainage infrastructure to reduce flood hazards and meet the needs of 10-year storm events, with developers contributing as necessary to the creation of those systems. This policy would serve to prevent flooding both in general as a result of development on individual sites. Under this policy, the City would plan for potential infrastructure specifically designed to mitigate flood flows, including within the 100-year floodplain. As individual flood control or stormwater system projects are proposed, such projects would undergo project-level environmental review that would evaluate and address potential adverse physical effects. Additionally, within the Health and Safety Element, Policy 6-35 would require the City to protect itself from sea level rise. Strategy 1 under this policy would direct the City to coordinate with other agencies to evaluate the potential effects of ongoing sea level rise in order to determine appropriate actions, and Strategy 2 would require the City to maintain up-to-date flood insurance maps to identify the effects of rising sea levels. This strategy would serve to prevent impacts of increased future flooding due to rising sea levels.

In addition, the City of Cupertino has adopted local standards for construction in floodplain areas,<sup>27</sup> and together with Santa Clara County, there are restrictions on construction within 50 feet of a stream, which includes most of the designated 100-year floodplains within the city.<sup>28</sup> If future development were to be constructed within the 100-year flood zone, it would require the placement of fill to elevate structures above the 100-year floodplain elevation. In order for the development to be considered outside of the floodplain and no longer subject to special flood hazard requirements, the applicant would have to submit an application to FEMA for a Letter of Map Revision – Fill (LOMR-F) after the fill has been placed. After FEMA has revised the FIRM to show that the future development is now outside of the SFHA, the City would no longer be required to apply the minimum NFIP floodplain management standards to structures built on the land and the mandatory flood insurance requirements would no longer apply. However, as part of its floodplain management strategy, to reduce possible loss of life and property in the event of a flood, the City would encourage compliance with as many of the standards as financially feasible.

Construction within SFHAs is governed by the City’s Municipal Code Chapter 16.52 (Prevention of Flood Damage), Section 16.52.040 (General Standards), which sets forth construction requirements for development that would minimize flood hazard risks, including anchoring and flood-proofing; limitations on use for structures below the base flood elevation; use of materials and utility equipment resistant to flood damage; the requirement that electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities be designed and/or located to prevent water from entering or accumulating within the components during flood conditions; and the requirement that all new and replacement water supply and sanitary sewage systems be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from systems into floodwaters.

Because Land Use Alternative B would not include the placement of housing within the 100-year floodplain, would include planning for management of flood flows, and would require any new construction to comply

---

<sup>27</sup> City of Cupertino, Municipal Code Chapter 16.52, Prevention of Flood Damage.

<sup>28</sup> City of Cupertino, Municipal Code, Chapter 9.19, Water Resource Protection.

## LAND USE ALTERNATIVE B

with General Plan policies, the City Municipal Code, and Santa Clara County water course protection requirements, which limit construction within 50 feet of a stream, the potential for flood hazards would be reduced to *less-than-significant* levels.

**Significance Without Mitigation:** Less than significant.

---

**HYDRO-7      Implementation of Land Use Alternative B would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.**

---

According to mapping compiled by ABAG and Office of Emergency Services (OES),<sup>29</sup> as shown on Figure 4.8-5, in Chapter 4.8, Hydrology and Water Quality, of this Draft EIR, portions of Cupertino are within the Stevens Creek Reservoir inundation zone. Specific areas of planned development within the city that could be impacted with flooding in the unlikely event that the dam failed include the Homestead Special Area, North Vallco Park Special Area, Study Areas 1 (Cupertino Inn and Goodyear Tire), 3 (PG&E), 4 (Mirapath), and 5 (Cupertino Village), Housing Element Sites 10 (The Hamptons), 12 (Homestead Lanes and Adjacency), and 17 (Homestead Road – IntraHealth/Office/Tennis Courts), portions of Monta Vista Village Neighborhood and Vallco Park North Special Area; and Other Non-Residential/Mixed-Use Special Areas Sites 3, 6, and 7.

Dam inundation zones are based on the highly unlikely scenario of a total catastrophic dam failure occurring in a very short period of time. Existing state and local regulations address the potential for flood hazards as a result of dam failure. The Stevens Creek Reservoir is under the jurisdiction of the California Department of Water Resources Division of Safety of Dams (DSOD), which conducts annual inspections and reviews all aspects of dam safety. The dam has been assessed for seismic stability and will withstand the maximum credible earthquake. The SCVWD is also planning to implement additional remedial measures to assure the continued safe operation of the dam. Dam owners are also required to maintain EAPs that include procedures for damage assessment and emergency warnings. In addition, the City of Cupertino in conjunction with Santa Clara County addresses the possibility of dam failure in the Local Hazard Mitigation Plan (LHMP), which also provides emergency response actions.

The probability of dam failure is extremely low and the City of Cupertino and Santa Clara County have never been impacted by a major dam failure. Furthermore, the General Plan includes policies and strategies that, once adopted, would be aimed at reducing impacts from dam failure. Policy 6-43, Emergency Response to Dam Failure, would require the City to ensure that Cupertino is prepared to respond to a potential dam failure. Strategy 1 would require the City to maintain a dam emergency and evacuation plan. Strategy 2 would require the City to continue to coordinate dam-related evacuation plans with the City of Sunnyvale to ensure that traffic management between the two cities facilitates life safety.

---

<sup>29</sup> Association of Bay Area Governments, 2003. Dam Inundation Hazard Map for Cupertino, Website [www.abag.ca.gov/cgi-bin/pickdamx.pl](http://www.abag.ca.gov/cgi-bin/pickdamx.pl) (accessed April 9, 2014).

## LAND USE ALTERNATIVE B

Proposed Policy 5-49 would require the City to maintain storm drainage infrastructure to reduce flood hazards and meet the needs of 10-year storm events, with developers contributing as necessary to the creation of those systems. This policy serves to prevent flooding both in general and a result of development on individual sites. Under this policy, the City would plan for potential infrastructure specifically designed to mitigate flood flows, including those that could threaten life or property. As individual flood control or stormwater system projects are proposed, such projects would undergo project-level environmental review that would evaluate and address potential adverse physical effects.

Proposed Policy 6-1 would require the City to coordinate with Santa Clara County and local agencies to implement the Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP). Strategies under this policy would require the City to monitor the program and evaluate its success, to ensure that mitigations from the LHMP are integrated into individual projects, and to support Santa Clara County in its efforts as lead agency for the LHMP. This policy would serve to ensure that the City acts to reduce risks from flooding that could threaten lives or property. Additionally, proposed Policy 6-35 would direct the City to protect itself from sea level rise. Strategy 1 under this policy would require the City to coordinate with other agencies to evaluate the potential effects of ongoing sea level rise in order to determine appropriate actions, and Strategy 2 would direct the City to maintain up-to-date flood insurance maps to identify the effects of rising sea levels. This strategy serves to prevent impacts of increased future flooding due to rising sea levels.

Therefore, implementation of these policies and strategies, adherence to the Joint Stevens Creek Dam Failure Plan together with the very low probability of dam failure and the fact that the dam has been assessed for seismic stability and will withstand the maximum credible earthquake, implementation of the proposed Project would not expose people or structures to a significant risk of loss, injury, or death in the case of dam failure and impacts are considered to be *less than significant*.

---

### **HYDRO-8      Implementation of Land Use Alternative B would not have inundation by seiche, tsunami, or mudflow.**

---

Because the City of Cupertino is more than eight (8) miles south of San Francisco Bay and is more than 100 feet above mean sea level (msl), there is no potential for a tsunami to impact the Project Study Area.<sup>30</sup> There are no large bodies of water within the City of Cupertino that could generate seiches, but the City is located just north of Stevens Creek Reservoir. A seiche could theoretically occur in this reservoir as the result of an earthquake or other disturbance, but the flooding impact would be less than that of the dam inundation zone. Although limited portions of the southern tip of Cupertino are within areas that could result in landslides and debris flows, these areas are primarily open space or very low-density hillside homes. None of the Project Component locations are within ABAG mapped rainfall-induced landslide or earthquake-induced landslide zones. Therefore, impacts due to seiches, tsunamis, or mudflows would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<sup>30</sup> Association of Bay Area Governments (ABAG), 2014. *Interactive Tsunami Inundation Map*. Accessed at: <http://gis.abag.ca.gov/website/Tsunami/index.html> on April 5, 2014.



**LAND USE ALTERNATIVE B**

---

**HYDRO-9      Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to water quality.**

---

This EIR takes into account growth projected by the proposed Project within the Cupertino city boundary and SOI, in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the ABAG. The geographic context used for the cumulative assessment of water quality and hydrology impacts encompasses the six watersheds, which encompass the City of Cupertino. Cumulative impacts can occur when impacts that are significant or less than significant from a proposed project combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area.

As discussed previously, implementation of the Land Use Alternative B would require conformance with State and local policies that would reduce hydrology and water quality impacts to *less-than-significant* levels. When applicable, any additional new development within the city would be subject, on a project-by-project basis, to independent CEQA review as well as policies in the Cupertino General Plan, design guidelines, Zoning Ordinance, and other applicable City requirements that reduce impacts related to hydrology and water quality. More specifically, potential changes related to storm water quality, storm water flows, drainage, impervious surfaces, and flooding would be minimized via the implementation of storm water control measures, retention, infiltration, and LID measures, and review by the City's Public Works Department to integrate measures to reduce potential flooding impacts.

All cumulative projects would be subject to similar permit requirements and would be required to comply with City ordinances and General Plan policies, as well as numerous water quality regulations that control construction related and operational discharge of pollutants in storm water. The water quality regulations implemented by the San Francisco Bay RWQCB take a basin-wide approach and consider water quality impairment in a regional context. For example, the NPDES Construction Permit ties receiving water limitations and basin plan objectives to terms and conditions of the permit, and the MS4 Permit works with all municipalities to manage storm water systems to be collectively protective of water quality. For these reasons, impacts of this Alternative on hydrology and water quality are not cumulatively considerable and the cumulative impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

### 5.3.7.9 LAND USE AND PLANNING

---

**LU-1      Implementation of Land Use Alternative B would not physically divide an established community.**

---

Implementation of the Land Use Alternative B would result in a significant impact if it would lead to new development or physical features that would divide existing communities. The physical division of an established community typically refers to the construction of a physical feature (such as a wall, interstate highway, or railroad tracks) or the removal of a means of access (such as a local road or bridge) that would

## LAND USE ALTERNATIVE B

impair mobility within an existing community, or between a community and outlying areas. An example of a physical feature that would divide an existing community is an airport, roadway, or railroad track through an existing community that could constrain travel from one side of the community to another or impair travel to areas outside of the community.

As described in Section 4.9.1.2, Existing Conditions, in Chapter 4.9, Land Use and Planning, of this Draft EIR, the development proposed as part of Land Use Alternative B would be located on sites either developed and/or underutilized, and/or in close proximity to existing residential and residential-serving development, where future development is currently permitted. Future development under Land Use Alternative B would retain the existing roadway patterns and Land Use Alternative B does not propose any new major roadways or other physical features through existing residential neighborhoods or other communities that would create new barriers in the Project Study Area. New development in currently developed areas would result from increased office, commercial, hotel and residential allocations without dividing any existing communities.

The designation of sites for office, commercial, hotel and higher density residential development would not physically divide any of the areas where Land Use Alternative B is identified, because the vicinity of the Sites would all retain their predominant existing uses for office, commercial, hotel and residential use, and would not require any new roads or other features that would divide a community. Accordingly, impacts would be *less than significant*.

Furthermore, future development under Land Use Alternative B would be required to be consistent with the General Plan polices that promote cohesive and compatible neighborhoods and prevent new development from dividing existing uses where different land uses abut one another.

Within the Land Use and Community Design Element of the General Plan, there are several policies that encourage cohesive development. Policy 2-2, Connections Between Special Areas, Employment Centers and the Community, would require the City to provide strong connections between the mixed-use Special Areas, employment centers and the surrounding community while Policy 2-5, Distinct Neighborhoods, would require the City to plan for neighborhoods that have distinctive edges, an identifiable center and safe pedestrian and bicycle access to surrounding uses. Policy 2-8, Neighborhood Compatibility, would require the City to minimize potential conflicts between residential neighborhoods and more intense developments with adequate buffering setbacks, landscaping, walls, limitations, site design and other appropriate measures, and create zoning requirements or specific plans that reduce incompatibilities between new development and existing residential neighborhoods through various measures..

Policy 2-15, Urban Building Forms, would require the City to concentrate urban building forms in the mixed-use Special Areas which would focus development in the Special Areas and away from existing low density residential neighborhoods, and Policy 2-18, Single-Family Residential Design, would require the City to preserve the character of residential neighborhoods by requiring new development to be compatible with the existing neighborhood, which would allow the City to keep existing neighborhoods intact and not divide them physically with incompatible development.. Policy 2-19, Compatibility of Lot Sizes, would require the City to ensure that zoning, subdivision and lot line adjustment requests related to lot size or lot design consider the need to preserve the existing pattern of lot development which would encourage the

## LAND USE ALTERNATIVE B

development of similar development as opposed to development which would not be compatible with the neighborhood.

Policy 2-30, Monta Vista Village Neighborhood, would require the City to retain and enhance Monta Vista Village as a residential, commercial and industrial area, with adequate pedestrian and bicycle access. Under this policy, the commercial district should serve as a neighborhood commercial center for Monta Vista Village and its adjoining neighborhoods. Mixed-use with residential is encouraged. The industrial area should be retained to provide small-scale light industrial and service industrial opportunities, while remaining compatible with the surrounding residential and commercial uses. Policy 2-26 G, South Vallco Park Gateway, would require the City to retain and enhance South Vallco Park Gateway as a large-scale commercial area that is a regional commercial (including hotel), office and entertainment center with supporting residential development which would also be compatible with Policy 2-1, which would encourage the City to focus development in Special Areas. Policy 2-24, Homestead Special Area, would require the City to create an integrated, mixed-use commercial and housing village along Homestead Road, consisting of three integrated areas. Each area will be master planned, with special attention to the interconnectivity of these areas. The General Plan also identifies a policy to address Big Box Development (Policy 2-46). This policy would require the City to consider approving big box development if it is compatible with the surrounding area in terms of building mass and traffic, and is consistent with the City's economic development goals.

In order to provide easy access to recreation services, thereby creating an integrated community, the General Plan includes Policy 2-84, Park Walking Distance, which would require the City to ensure that each household is within a half-mile walk of a neighborhood park, or community park with neighborhood facilities, and that the route is reasonably free of physical barriers, including streets with heavy traffic. Under this policy, wherever possible, the City shall also provide pedestrian links between parks. When considering locating public and quasi-public activities in commercial or office land use designated areas, the General Plan provides direction by establishing the following criteria in Policy 2-63, Public and Quasi-Public Activities: The proposed project must have similar building forms, population, traffic, noise and infrastructure impacts as the existing land use categories. Additionally, in order to retain continuity of development, under this policy the proposed project must maintain a commercial interface in commercial designations by offering retail activities, creating a storefront appearance or other design or use options that are similar to commercial activities.

The General Plan includes policies regarding the location and operation of New Drive-up Services (Policy 2-35) and Late Evening Entertainment (Policy 2-36) in order to promote orderly development of such uses such that they do not divide the community. Policy 2-35 would require the City to permit new drive-up service facilities for commercial, industrial or institutional use only when adequate circulation, parking, noise control, architecture features, and landscaping are compatible with the visual character of the surrounding uses and residential areas are adequately buffered while Policy 2-36 would require the City to discourage late-evening entertainment activities such as cocktail lounges, recreational facilities and theaters in the major mixed use corridors where they abut low-density residential properties. Under this policy such uses may be considered with conditional use permit review when the entrances and uses are located away from sensitive receptors/uses and appropriate mitigation measures such as adequate planting, policing, parking designated away from sensitive receptors are incorporated.

## LAND USE ALTERNATIVE B

Additionally, policies within the Circulation Element also support the cohesive development of the City. Policy 4-10, Roadway Plans that Complement the Needs of Adjacent Land Use, would require the City to design roadways based on efficient alignments, appropriate number and widths of traffic lanes, inclusion of medians, parking and bicycle lanes and the suitable width and location of sidewalks as needed to support the adjacent properties. Policy 4-2, Defined and Balanced Circulation System, would require the city to balance the roadway system between automobile and pedestrian/bicycle needs. The General Plan encourages designing local streets to satisfy the aesthetic requirements of the area served. In general, the aesthetics of a street will be improved if it can be narrower rather than wider, include significant landscaping with shade trees, and provide safe and convenient places for people to bicycle and walk. Policy 4-14, Limited Street Closures, would require the City to not close streets unless there is a demonstrated safety or over-whelming through traffic problem and there are no acceptable alternatives. The policy recognizes that closures might shift traffic to other local streets, which would move the problem from one neighborhood to another. Finally, Policy 4-16, Transportation Noise, Fumes and Hazards, would require the City to, in addition to limiting through traffic volume on local streets, protect the community from noise, fumes and hazards caused by the City's transportation system. The quarries on Stevens Canyon Road, Stevens Creek Boulevard and Foothill Boulevard are major sources of transportation noise.

In addition, future development would also would be required to comply with Design Standards in the Heart of the City Specific Plan, the Vallco Master Plan, and the Monta Vista Design Guidelines as described in Section 4.9.1.1 ,Regulatory Framework, in Chapter 4.9, Land Use and Planning and the General Plan policies set forth above, all of which would promote cohesive and compatible neighborhoods and prevent new development from dividing existing uses where different land uses abut one another. Therefore, the impacts from implementation of Land Use Alternative B would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**LU-2                      Implementation of Land Use Alternative B would not conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.**

---

The City of Cupertino General Plan is the primary planning document for the City of Cupertino. The proposed amendments are intended to ensure consistency between the General Plan, Housing Element and Zoning Ordinance, and State law. Because the General Plan is the overriding planning document for the City, and because the proposed Project involves amending the General Plan or Zoning to increase consistency, the impact would be *less than significant*.

For a discussion on Land Use Alternative B's consistency with Plan Bay Area as it relates to greenhouse gas emissions, see Section 5.3.7.6, Greenhouse Gas Emissions, above.

For a discussion on Land Use Alternative B's consistency with regional housing projections and Plan Bay Area, see Section 5.3.7.11, Population and Housing, below.

For a discussion on Land Use Alternative B's consistency with the 2002 Cupertino Pedestrian Transportation Plan, see Section 5.3.7.13, Transportation and Traffic, below.

## LAND USE ALTERNATIVE B

As discussed in Section 4.9.1.1, Regulatory Framework, of Chapter 4.9, Land Use and Planning, there are no airports or private airstrips within or in the immediate proximity to the city,<sup>31</sup> and the city is not located within any protected airspace zones defined by the Santa Clara County Airport Land Use Commission (ALUC)<sup>32</sup> and has no heliports listed by the Federal Aviation Administration (FAA);<sup>33</sup> thus, no conflicts with a Comprehensive Land Use Plan for an airport would occur.

The General Plan has several policies in order to ensure that Land Use Alternative B would not conflict with any adopted land use, policy or regulation for the purposes of mitigating an environmental effect. Policy 2-22 would encourage the City to work toward achieving a jobs-housing balance consistent with the Housing Element. Additionally, proposed Policy 5-2, Regional Growth and Transportation Coordination, would direct the City to coordinate with local and regional agencies regarding regional growth and transportation plans and would require the City to ensure that its local plans are consistent with the Regional Transportation Plan (RTPs) and Sustainable Communities Strategy. In addition, Policy 6-1, Regional Hazard Risk Reduction Planning, would require the City to coordinate with Santa Clara County and local agencies to implement the Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP). Strategies under this policy would require the City to monitor the program and evaluate its success, to ensure that mitigations from the LHMP are integrated into individual projects, and to support Santa Clara County in its efforts as lead agency for the LHMP. Together, these policies would serve to ensure that implementation of Land Use Alternative B would be consistent with regional land use, transportation, and hazards mitigation plans.

**Significance Without Mitigation:** Less than significant.

---

**LU-3                      Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would not result in less than significant cumulative impacts with respect to land use and planning.**

---

As discussed in Chapter 4, Environmental Evaluation, of this Draft EIR, this EIR takes into account growth projected by Land Use Alternative B within the Cupertino city boundary and SOI, in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the ABAG. The geographic context for the cumulative land use and planning effects occur from potential future development under the General Plan combined with effects of development on lands adjacent to the city within Los Altos and Sunnyvale to the north, Santa Clara and San Jose to the east, and Saratoga to the south, and the unincorporated areas of Santa Clara County to the west and south, and within the region.

The land use analyses finds that Land Use Alternative B would not divide an established community or conflict with established plans, policies and regulations, or with habitat and conservation plans or policies. Land Use Alternative B would also not create or exacerbate land use conflicts in or outside the City of Cupertino. Land Use Alternative B would be consistent with existing and proposed changes in other local

---

<sup>31</sup> AirNav, <http://www.airnav.com/airports/us/CA>, accessed on August 27, 2013.

<sup>32</sup> Santa Clara County Airport Land-Use Commission, 2011. Comprehensive Land Use Plan, Santa Clara County, Norman Y. Mineta, San Jose International Airport.

<sup>33</sup> Federal Aviation Administration, 2011. Airport Facilities Data. [www.faa.gov/airports/airport\\_safety/airportdata\\_5010/](http://www.faa.gov/airports/airport_safety/airportdata_5010/), accessed August 13, 2013.

## LAND USE ALTERNATIVE B

and regional plans. Development that would be allowed under Land Use Alternative B would not create substantial land use impacts. Development is likely to occur in surrounding cities and in the Santa Clara region as well. However, such development is taking place in already urbanized areas and would not require significant land use changes that would create land use conflicts, nor would they divide communities. Therefore, Land Use Alternative B would not result in a cumulatively considerable contribution to cumulative impacts related to land use changes and impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

### 5.3.7.10 NOISE

---

NOISE-1	<b>Implementation of Land Use Alternative B would not result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.</b>
---------	--

---

Standards for noise generation and exposure in the City of Cupertino are determined primarily through: the Land Use Noise Compatibility Guidelines (which would be continued under the noise portion of the existing Health and Safety Section, maintained as part of Land Use Alternative B); Chapter 10.48, Noise Control, of the Cupertino Municipal Code; as well as by the interior noise standards set by the Title 24 of the State Building Code. Aside from the guidelines for land use noise compatibility, the City of Cupertino has not adopted strict noise reception limits for particular uses, and times of day, and this regulatory approach would continue under Land Use Alternative B. Therefore, there are three subsequent criteria, based on applicable standards and regulations, which may be applied to determine impacts under this significance threshold. Each of these is analyzed in greater detail below.

- **Development of new residential or other noise-sensitive land uses such that those new uses would experience an indoor  $L_{dn}$  exceeding 45 dBA.**

Multiple components of Land Use Alternative B would serve to prevent new residential dwellings, hotels, motels, dormitories, and school classrooms from experiencing interior noise levels in excess of 45 dBA  $L_{dn}$ . Prevention of excessive interior noise levels would be achieved both through adherence to the Land Use Noise Compatibility Standards included in the noise portion of Health and Safety Section of the current General Plan, as well as through the performance of acoustical analysis in noisy areas, which would help determine what, if any, noise attenuating features are necessary to achieve the 45 dBA  $L_{dn}$  interior noise standard. As individual projects are proposed under Land Use Alternative B, project applicants would be required to perform site-level acoustic analysis to demonstrate compliance.

Existing Policy 2-6 (Neighborhood Protection; proposed to be renumbered and renamed Policy 2-8: Neighborhood Compatibility), directs the City to “Protect residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments. with adequate buffering setbacks, landscaping, walls, activity limitations, site design and other appropriate measures.” Policy 6-66 contains provisions that require or encourage construction and other techniques to reduce sound transmission to interior living spaces, consistent with the California Building Code. Proposed Policy 6-63, Exterior Sound Transmission Control for New Single-family Homes, would direct the City to incorporate State

## LAND USE ALTERNATIVE B

building code controls on interior sound transmission in the Municipal Code. Additionally Chapter 10.48, Noise Ordinance, and Title 19, Zoning Ordinance, of the Cupertino Municipal Code contain multiple provisions to limit the generation and reception of excessive noise. Such provisions include, but are not limited to restrictions on construction activity, strict limitations on noise generation at property lines, and performance standards for the permitting of commercial and industrial uses.

Under Land Use Alternative B, in areas where noise levels exceed those that are deemed normally acceptable for a particular land use, development projects would continue to be required to demonstrate—through acoustical studies—that interior noise environments would comply with the 45 dBA  $L_{dn}$  State standard.

Together, these policies and regulations would serve to ensure that land use and development decisions consider and seek to prevent potential noise impacts. Through implementation of these existing or new policies and requirements as part of Land Use Alternative B, the City would ensure compliance with local and State standards for interior noise, and the impact would be *less than significant*.

- **Development of any land use in an area that is characterized by an exterior  $L_{dn}$  which indicates that the establishment of that land use in the area would be “clearly unacceptable,” pursuant to the Land Use Noise Compatibility Guidelines continued under Land Use Alternative B.**

Through adherence to the Land Use Noise Compatibility Guidelines, the City of Cupertino would prohibit the development of particular land uses in areas where the ambient noise level would indicate those land uses would be clearly unacceptable. General Plan Policy 6-49, Land Use Decision Evaluation, would continue to ensure that City land use decisions adhere to the established compatibility guidelines. Through continued implementation of these requirements as part of Land Use Alternative B, the City would ensure compliance with local and State standards for land use compatibility, and the impact would be *less than significant*.

- **Development of a new land use that would result in adjacent properties experiencing short- or long-term ambient noise levels that exceed those regarded as compatible, or which exceed levels permitted under the Chapter 10.48 of the Cupertino Municipal Code.**

Under Land Use Alternative B, existing policies of the current General Plan and provisions of the Cupertino Municipal Code would continue to ensure that new land uses do not contribute to excessive noise at existing sensitive receptors. Under Land Use Alternative B, the following policies would remain applicable to future development: Policies 6-57, Commercial Delivery Areas, and 6-58, Delivery Hours, would continue to ensure that commercial deliveries and delivery areas are regulated to prevent noise impacts to adjacent sensitive land uses. Policy 6-59, Noise Control Techniques, would similarly serve to prevent noise impacts from industrial processes and equipment near homes. Additionally, Policy 2-36, Late-Evening Entertainment Activities, would discourage late night entertainment uses in areas where these uses would abut low-density residential areas, and would only allow the permitting of such uses near low-density residential when it could be demonstrated that adequate mitigations had been undertaken.

## LAND USE ALTERNATIVE B

Additionally, the maintenance and continued enforcement of the Cupertino Municipal Code, including the Noise Ordinance and Zoning Code, would work in tandem with and reinforce the current or amended policies within the General Plan, and any impact arising from violation of applicable local standards would therefore be *less than significant*.

### Site-Specific Discussion

Project Components (Special Areas, Nodes/Gateways, Study Areas, and Housing Element Sites) are geographically large and include a diversity of noise environments. The variation in noise levels (from both land uses and roadways) within each of these areas would be greater than the variation among these areas (e.g. the range between highest and lowest ambient noise levels in different portions of the Bubb Road Special Area would be greater than the difference between the “average” noise levels in the Bubb Road Special Area and any other Special area). For this reason, it is not feasible to discuss site-level noise impacts at the Special Area or Node/Gateway level in the absence of information about specific proposed development projects. Nevertheless, because many of the Study Areas and Housing Sites are located in areas with similar noise environments, it is possible to make generalized conclusions about potential noise impacts in these areas.

#### *Study Areas*

Study Areas may be loosely grouped into two non-exclusive categories: Study Areas along or near major arterials and Study Areas along or near major freeways. As shown in Figure 3-11, Study Area Locations, in Chapter 3, Project Description, of this Draft EIR, Study Areas 7 (Stevens Creek Office Center) and 2 (City Center) fall into the first category, and would experience noise environments dominated by noise along major arterials. Study Areas 1 (Cupertino Inn and Goodyear Tire), 3 (PG&E), 4 (Mirapath) and 5 (Cupertino Village) are in the second category where noise from nearby freeways is likely to dominate the noise environment. Study Area 6 (Vallco Shopping District) would fall into both of these categories, as there are portions of the Study Area that may be more dominated by freeway noise and portions that may be more dominated by noise from major arterials. All Study Areas have the potential to receive some amount of noise from both highways and major arterials. Because all of the Study Areas are at least partly located in close proximity to a major arterial or highway, it is likely that there are portions of all Study Area where development would require special noise-insulating features or construction techniques. Therefore, for individual sites located within all Study Areas, additional project-level acoustical analysis would be necessary to demonstrate conformance with applicable land use compatibility requirements and interior noise standards; per Sections 19.44.050, Site Development Regulations, and 19.116.030, General Regulations, of the Zoning Ordinance, as well as General Plan Policies 6-64, 6-65, and 6-66.

#### *Housing Element Sites*

Similar to the Study Areas, the potential Housing Element Sites may be loosely grouped into two non-exclusive categories: sites along or near major arterials and sites along or near major freeways. As shown in Figure 3-20, Potential Housing Sites, in Chapter 3, Project Description, of this Draft EIR, the following



## LAND USE ALTERNATIVE B

Housing Element Sites fall into the former category, with major arterials being the likely predominant source of noise:

- Housing Element Site 1 (Shan Restaurant)
- Housing Element Site 2 (Arya/Scandinavian Design)
- Housing Element Site 3 (United Furniture/East of East Estates Drive)
- Housing Element Site 14 (Marina Plaza)
- Housing Element Site 15 (Stevens Creek Office Center)

Housing Sites 5 (Glenbrook Apartments), 6 (The Villages Apartments), and 7 (Carl Berg Property), fall into the latter category with freeways being the likely predominant source of noise.

Finally, the following Housing Element Sites are within both categories with portions of the Sites potentially dominated by noise from either freeways or major arterials:

- Housing Element Site 4 (Barry Swenson)
- Housing Element Site 10 (The Hamptons)
- Housing Element Site 11 (Vallco Shopping District except Rosebowl)
- Housing Element Site 12 (Homestead Lanes and Adjacency)
- Housing Element Site 16 (Summerwinds & Granite Rock)
- Housing Element Site 17 (Homestead Road – IntraHealth/Office/Tennis Courts)
- Housing Element Site 18 (The Oaks Shopping Center)
- Housing Element Site 19 (Cypress Building Association & Hall Property)

Although the various Housing Element Sites may be affected in different ways or to different degrees by noise from major arterials and/or freeways, all Housing Element Sites overlap at least partially with the 70 dBA noise contour, even under existing conditions. Roadway noise models generally represent a conservative estimate of ambient noise levels; nevertheless, there is no housing site that could avoid the need for additional site-level measurements and analysis. At a minimum, project-level analysis would need to examine portions of housing sites nearest to major roadways to measure current, 24-hour ambient noise levels and determine appropriate site design and/or construction techniques for noise attenuation.

Despite this need for additional site-level analysis, development on the Housing Element Sites may avoid significant impacts by conforming with requirements for acoustic analysis under the General Plan, including the Land Use Compatibility Guidelines for Community Noise Environments, as well as by achieving subsequent compliance with interior and exterior noise standards through application of any necessary special construction or noise insulation techniques. Impacts would be *less than significant*.

### *General Plan and Zoning Ordinance Conformance Sites*

As described in Chapter 3, Project Description, of this Draft EIR, the proposed land use designation changes within the General Plan and Zoning Ordinance Conformance Sites are intended to ensure consistency between existing land uses and the General Plan land use designations and/or the zoning ordinance. The proposed Amendments do not result in increased development potential in these areas. As is currently the case, future developments would be required to undergo CEQA review in these areas. The General Plan and Zoning Ordinance Conformance Sites would not be subject to new development potential and would

## LAND USE ALTERNATIVE B

therefore neither create new sources of excessive noise, nor result in the development of sensitive land uses that could be exposed to excessive noise. Thus, there would be *no impact* with regards to noise at these locations.

### Summary

Through adherence to the requirements, policies, and strategies adopted or continued under the current or amended General Plan and Cupertino Municipal Code, the City of Cupertino would prevent the development of land uses in areas with inappropriately high ambient noise levels; would ensure that any development of noise-sensitive land uses include the study and adequate mitigation of noise impacts; and would prevent activities or new uses that generate excessive levels of noise at sensitive receptors. Altogether, this would ensure adherence to relevant noise exposure and generation standards, and would prevent noise-sensitive land uses from being exposed to noise exceeding the prescribed standards. Therefore the impact under this criterion would be *less than significant*.

### *Applicable Regulations*

- CCR, Title 24, Building Standards
- Title 21, Subchapter 6, of the CCR
- General Plan: Health and Safety Section, Land Use Section, Circulation Section, and Environmental Resources/Sustainability Section
- Cupertino Municipal Code:
  - Chapter 10.48: Community Noise Control
  - Title 19: Zoning Ordinance
  - Chapter 2.90: Design Review Committee
  - Title 5: Business Licenses and Regulations
  - Title 10: Public Peace, Safety and Morals
  - Title 11: Vehicles and Traffic
  - Title 14: Streets, Sidewalks and Landscaping

**Significance Without Mitigation:** Less than significant.

---

NOISE-2	<b>Implementation of Land Use Alternative B would expose persons to or generate excessive ground-borne vibration or ground-borne noise levels.</b>
---------	--

---

CEQA does not specify quantitative thresholds for what is considered “excessive” vibration or groundborne noise, nor does the City of Cupertino establish such thresholds. For Light Industrial and Industrial Park zones, the City of Cupertino Municipal Code does specify that “nonaudible” vibrations must not be perceptible without instrumentation, but the Code does not set a specific numeric threshold. Since perception of vibrations varies between individuals, it is necessary to establish a quantitative threshold that reflects levels of vibration typically capable of causing perception, annoyance, or damage. Therefore, based on criteria from the FTA, which are regarded as standard practice, a significant impact would occur if:

**LAND USE ALTERNATIVE B**

- Implementation of the Project would result in ongoing exceedance of the criteria for annoyance presented in Table 4.10-3, Human Reaction to Typical Vibration Levels, in Chapter 4.10, Noise, of this Draft EIR.
- Implementation of the Plan would result in vibration exceeding the criteria presented in Table 4.10-3 that could cause buildings architectural damage.

The following discusses potential vibration impacts generated by short-term construction and long-term operations that may occur under implementation of Land Use Alternative B.

**Short-Term Construction-Related Vibration Impacts**

The effect on buildings in the vicinity of a construction site varies depending on soil type, ground strata, and receptor-building construction. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Vibration from construction activities rarely reaches the levels that can damage structures, but groundborne vibration and groundborne noise can reach perceptible and audible levels in buildings that are close to the construction site. Table 5.3-6 lists vibration levels for construction equipment.

**TABLE 5.3-6 GROUNDBORNE VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT**

<b>Equipment</b>	<b>Approximate Velocity Level at 25 Feet (VdB)</b>	<b>Approximate RMS<sup>a</sup> Velocity at 25 Feet (inch/sec)</b>
Pile Driver (Impact) Upper Range	112	1.518
Pile Driver (Impact) Lower Range	104	0.644
Pile Driver (Sonic) Upper Range	105	0.734
Pile Driver (Sonic) Lower Range	93	0.170
Large Bulldozer	87	0.089
Caisson Drilling	87	0.089
Jackhammer	79	0.035
Small Bulldozer	58	0.003
Loaded Trucks	86	0.076
FTA Criteria – Human Annoyance (Daytime)	78 to 90 <sup>b</sup>	—
FTA Criteria – Structural Damage	—	0.2 to 0.5 <sup>c</sup>

a. RMS velocity calculated from vibration level (VdB) using the reference of 1 micro-inch/second.

b. Depending on affected land use. For residential 78 VdB, for offices 84 VdB, workshops 90 VdB.

c. Depending on affected building structure, for timber and masonry buildings 0.2 in/sec, for reinforced-concrete, steel, or timber 0.5 in/sec.

Source: Federal Transit Administration, Transit Noise, and Vibration Impact Assessment, 2006.

## LAND USE ALTERNATIVE B

As shown in Table 5.3-6, vibration generated by construction equipment has the potential to be substantial. Significant vibration impacts may occur from construction activities associated with new development under Land Use Alternative B. Implementation of Land Use Alternative B anticipates an increase in development intensity in certain areas, but specific building locations, site plans, and construction details have not been developed at this time.

Construction would be localized and would occur intermittently for varying periods of time. Because specific, project-level information is not available at this time, it is not possible to quantify the construction vibration impacts at specific sensitive receptors. Grading and demolition activity typically generate the highest vibration levels during construction. Except for pile driving, maximum vibration levels measured at a distance of 25 feet from an individual piece of typical construction equipment do not exceed the thresholds for human annoyance for industrial uses, nor the thresholds for architectural damage.

Methods to reduce vibration during construction would include the use of smaller equipment, use of well-maintained equipment, use of static rollers instead of vibratory rollers, and drilling of piles as opposed to pile driving. Methods to reduce human impacts of vibration from construction include limitations on construction hours and/or guidelines for the positioning of vibration-generating construction equipment.

Overall, vibration impacts related to construction would be short-term, temporary, and generally restricted to the areas in the immediate vicinity of active construction equipment. Construction would be localized and would occur intermittently for varying periods of time. Because specific, project-level information is not available at this time, it is not possible to quantify the construction vibration impacts at specific sensitive receptors.

These policies would thereby serve to ensure that construction activities do not result in sustained levels of vibration that could result in architectural damage or ongoing annoyance. Therefore, implementation of Land Use Alternative B would not result in levels of construction-related groundborne noise or vibration that would exceed the thresholds for annoyance or architectural damage, and the impact would therefore be *less than significant*.

### Long-Term Vibration Impacts

Development under Land Use Alternative B could result in long-term, operations-related vibration impacts to sensitive receptors if sensitive land uses such as residential, educational facilities, hospitals, or places of worship were to be located in close proximity to industrial land uses that could have equipment with the potential to generate significant vibration levels. There are limited areas of Cupertino where residential or other sensitive land uses would interface to a certain degree with light industrial operations under the land use designations implemented as part of Land Use Alternative B. Some prominent examples of such areas include the Monta Vista Village Neighborhood, Bubb Road, and North De Anza Special Areas.

Despite the potential for vibration impacts from the juxtaposition of sensitive land uses and land uses with the potential to generate vibration, appropriate setbacks, buffers, use restrictions, and/or other measures can largely eliminate these impacts. As discussed above, vibration impacts are highly dependent on a variety of localized factors, including geology, soil conditions, and building construction techniques; however, in most cases vibration attenuates relatively rapidly with distance, making setbacks and buffering particularly

## LAND USE ALTERNATIVE B

effective approaches to avoid vibration impacts. Moreover, high levels of vibration are usually associated with heavy industrial uses. The light industrial uses of the sort that would continue to be permitted in Cupertino under Land Use Alternative B are very rarely associated with vibration that is sufficiently intense or sustained so as to cause human discomfort or architectural/structural damage.

Although there are no State or federal regulations to limit perception of vibration by sensitive receptors, Land Use Alternative B would continue or introduce an array of policies that would employ the previously mentioned strategies to prevent vibration impacts. Existing Policy 2-6 (Neighborhood Protection; proposed to be renumbered and renamed Policy 2-8: Neighborhood Compatibility) directs the City to “Protect residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments. with adequate buffering setbacks, landscaping, walls, activity limitations, site design and other appropriate measures.” Policy 6-61, Construction and Maintenance Activities, would require construction contractors to use the best available technology to minimize excessive vibration from construction equipment such as pile drivers, jack hammers, and vibratory rollers. Together, these policies would serve to ensure that land use and development decisions consider and seek to prevent potential vibration impacts.

Additional current or amended General Plan policies, as well as Municipal Code provisions, would also serve to reduce and prevent long-term, operations-related vibration impacts. The current or amended noise portion of the Health and Safety section of the General Plan offers general direction for the City to consider noise and vibration impacts during development decisions, and provides specific policies in respect to these considerations. would require Section 10.48.062, Nighttime deliveries and pickups, of the Municipal code, serves to regulate acceptable freight pickup and delivery times for commercial and industrial land uses. Although aimed at noise compatibility, these restrictions would also serve to reduce the intensity, frequency, and duration of potential vibration from such activities, thereby reducing or preventing perception of vibration at nearby receptors. Additionally, Chapter 19, Zoning, of the Municipal Code contains general restrictions on commercial and industrial uses. In the case of industrial uses, it is prohibited to generate vibration that is perceptible without instruments beyond the boundary of the industrial zone. In the case of commercial uses, permitting of the use is contingent upon that use not emitting excessive vibration. By ensuring general land use compatibility and by requiring, where necessary, approaches to reduce the generation or transmission of vibration, these policies and ordinances would serve to ensure sufficient attenuation of vibration to preclude impacts at sensitive receptors.

Together, these policies and actions would ensure that buildout of land uses under Land Use Alternative B would not result in perception of excessive noise and vibration by sensitive receptors in new developments. These policies and actions would also serve to ensure that new uses developed under Land Use Alternative B would not result in the perception of excessive vibration by individuals living or working in areas of existing sensitive land uses. Through consideration of land use compatibility, project-level review, and requirements for mitigation of noise and vibration, the current or amended policies of the General Plan would prevent or reduce exposure to long-term, operations-related vibration. Therefore, implementation of Land Use Alternative B would not result in levels of long-term operation-related groundborne noise or vibration that would exceed the thresholds for annoyance or architectural damage, and the impact would therefore be *less than significant*.

## LAND USE ALTERNATIVE B

### *Applicable Regulations*

- CCR, Title 24, Building Standards
- General Plan: Health and Safety Section, Land Use Section, Circulation Section, and Environmental Resources/Sustainability Section
- Cupertino Municipal Code:
  - Chapter 10.48: Community Noise Control
  - Title 19: Zoning Ordinance

**Significance Without Mitigation:** Less than significant.

---

<b>NOISE-3</b>	<b>Implementation of Land Use Alternative B would result in a substantial permanent increase in ambient noise levels in the Study Area vicinity above levels existing without the project.</b>
----------------	--

---

Implementation of Land Use Alternative B would have a significant impact if it results in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without Land Use Alternative B. The Municipal Code identifies volume levels and durations that constitute unacceptable noise increases during 2-hour periods; however, the City of Cupertino has not adopted a specific, quantitative threshold for what constitutes a significant permanent increase in ambient noise levels. The smallest increase in loudness perceptible by the human ear is 3 dBA and increases of 5 dBA or greater are easily noticed.<sup>34</sup> However, the implementation of Land Use Alternative B and changes in the ambient noise environment will occur over a period of more than 20 years. Therefore, in the absence of quantitative ambient noise level increase thresholds adopted by the City, a substantial increase in ambient noise levels would be defined as either: a 5 dBA increase, if after the increase the ambient noise level remains in the range of what would be “normally acceptable” at the land use where the noise is being received; or a 3 dBA increase, if after the increase the ambient noise level exceeds the range of what would be “normally acceptable” at the land use where the noise is being received.

### Long-Term Operational Noise

A portion of the substantial permanent increases to ambient noise levels that could result from implementation of Land Use Alternative B would be attributable to ongoing operations on land uses developed under the plan. Residential, open space, and most passive recreational land uses (i.e. trails, rests areas, picnic areas) are generally not associated with substantial permanent increases in ambient noise. In the case of these land uses, very specific sources of noise, such as lawn equipment or social gatherings, would be the most likely source of excessive noise; addressing impacts from these noise sources would be handled on a complaint basis by Cupertino’s noise ordinance. Noise sources associated with residential, open space, and passive recreational land uses are generally not sufficiently frequent or sustained so as to result in permanent substantial increases to ambient noise levels. Instead, substantial permanent increases in ambient noise levels would be most likely to result from development of commercial, industrial, mixed-use, and certain institutional or active recreational land uses (i.e. ball fields, skate-parks, dog parks).

---

<sup>34</sup> Bies, David and Hansen, Colin, 2009, *Engineering Noise Control: Theory and Practice, Fourth Edition*, New York: Spon Press.

**LAND USE ALTERNATIVE B**

The noise portion of the Health and Safety Section of the General Plan contains multiple policies that would serve to prevent or mitigate substantial permanent increase to ambient noise levels from long-term operations. All of the current or amended General Plan policies discussed under Impact NOISE-1 and Impact NOISE-2 would likewise serve to prevent substantial permanent increases to ambient noise levels. Key provisions of these previously discussed policies include, among others: limits on hours of operation, transitional land uses and/or open space buffers, soundwalls, berms, and project level review to ensure compliance with indoor/outdoor noise standards for sensitive uses. Together, these policies would serve to ensure that the development of new land uses under Land Use Alternative B would not result in substantial permanent increases in the ambient noise level in the project vicinity, and the impact in this regard would be *less than significant*.

**Transportation-Related Noise**

As a result of implementation of Land Use Alternative B and ongoing regional growth, it is anticipated that there would be substantial permanent increases to the ambient noise levels throughout Cupertino, and that these increases would primarily result from increases to transportation-related noise, especially that of automobile traffic. Because Cupertino has only one railway with very limited freight service, does not host any airports or heliports, and is not located within two miles of any airports or heliports, increases in ambient noise levels from rail and air traffic are not anticipated. Nevertheless, increases to ambient noise from car and rail traffic would result in substantial permanent increase in ambient noise levels.

Development of land uses under implementation of Land Use Alternative B, as well as development in adjacent communities, would result in an increase in traffic that would cause substantial permanent increases in ambient noise levels in the project vicinity. Table 5.3-7 shows major roadway segments in Cupertino with estimated increases in the ambient noise level at a distance of 100 feet from the roadway centerline.

**TABLE 5.3-7 INCREASES TO AMBIENT NOISE LEVELS ALONG MAJOR ROADWAY SEGMENTS – LAND USE ALTERNATIVE B**

Roadway	Segment	Ambient Noise Level at 100 feet from Roadway Centerline CNEL dBA		
		Existing Conditions	2040 Conditions	Increase (dBA)
Homestead Rd	From City Boundary to SR 85	65.0	66.3	1.3
	From SR 85 to N Stelling Rd	67.8	69.4	1.6
	From N Stelling Rd to N De Anza Blvd	69.6	70.7	1.1
	From N De Anza Blvd to N Blaney Ave	68.7	70.8	2.1
	From N Blaney Ave to N Wolfe Rd	68.9	70.9	2.0
	From N Wolfe Rd to N Tantau Ave	69.1	71.2	2.1
	From N Tantau Ave to City Boundary	68.9	71	2.1
Pruneridge Ave	From N Wolfe Rd to N Tantau Ave	63.1	64.4	1.3
	From N Tantau Ave to Lawrence Expwy	63.6	69.5	<b>5.9</b>

**LAND USE ALTERNATIVE B**

**TABLE 5.3-7 INCREASES TO AMBIENT NOISE LEVELS ALONG MAJOR ROADWAY SEGMENTS – LAND USE ALTERNATIVE B**

Roadway	Segment	Ambient Noise Level at 100 feet from Roadway Centerline CNEL dBA		
		Existing Conditions	2040 Conditions	Increase (dBA)
I-280	From City Boundary to Foothill Blvd	81.2	81.9	0.7
	From Foothill Blvd to SR 85	82.2	82.8	0.6
	From SR 85 to N Stelling Rd	81.8	82.1	0.3
	From N Stelling Rd to N De Anza Blvd	81.8	82.1	0.3
	From N De Anza Blvd to N Blaney Ave	81.8	82	0.2
	From N Blaney Ave to N Wolfe Rd	81.8	82	0.2
	From N Wolfe Rd to N Tantau Ave	81.9	82.2	0.3
	From N Tantau Ave to I-280	81.9	82.2	0.3
	From I-280 to Lawrence Expwy	80.2	82.2	2.0
Stevens Creek Blvd	From City Boundary to Foothill Blvd	60.0	61.7	1.7
	From Foothill Blvd to Bubb Rd	67.3	68.5	1.2
	From Bubb Rd to SR 85	70.1	71.4	1.3
	From SR 85 N Stelling Rd	70.4	71	0.6
	From N Stelling Rd to N De Anza Blvd	69.2	71	1.8
Stevens Creek Blvd	From N De Anza Blvd to N Blaney Ave	68.9	71.4	2.5
	From N Blaney Ave to N Wolfe Rd	68.8	71.6	2.8
	From N Wolfe Rd to N Tantau Ave	70.6	72	1.4
	From S Tantau Ave to I-280	70.9	72	1.1
	From I-280 to Lawrence Expwy	70.6	72.6	2.0
McClellan Rd	From Foothill Blvd/Stevens Canyon Rd to Bubb Rd	60.8	63.2	2.4
	From Bubb Rd to SR 85	63.3	64.3	1.0
	From SR 85 to S Stelling Rd	64.0	65	1.0
	From S Stelling Rd to S De Anza Blvd	64.6	65	0.4
Bollinger Rd	From S De Anza Blvd to S Blaney Ave	67.6	69.8	2.2
	From S Blaney Ave to Miller Ave	65.1	67.4	2.3
	From Miller Ave to S Tantau Ave	64.4	68.2	<b>3.8</b>
	From S Tantau Ave to Lawrence Expwy	68.9	71.1	2.2
Rainbow Dr	From Bubb Rd to S Stelling Rd	58.9	61.7	2.8
	From S Stelling Rd to S De Anza Blvd	65.5	65.9	0.4
Prospect Rd	From S Stelling Rd to S De Anza Blvd	65.1	65.9	0.8



**LAND USE ALTERNATIVE B**

**TABLE 5.3-7 INCREASES TO AMBIENT NOISE LEVELS ALONG MAJOR ROADWAY SEGMENTS – LAND USE ALTERNATIVE B**

Roadway	Segment	Ambient Noise Level at 100 feet from Roadway Centerline CNEL dBA		
		Existing Conditions	2040 Conditions	Increase (dBA)
Foothill Blvd	From City Boundary to I-280	71.7	74.7	3.0
	From I-280 to Stevens Creek Blvd	70.6	71	0.4
	From McClellan Rd to Stevens Creek Blvd	65.2	65.9	0.7
Stevens Canyon Rd	From City Boundary to McClellan Rd	61.8	63.5	1.7
Bubb Rd	From Stevens Creek Blvd to McClellan Rd	67.6	68.9	1.3
	From Rainbow Dr to McClellan Rd	62.5	63	0.5
SR 85	From City Boundary to Homestead Rd	80.8	80.9	0.1
SR 85	From Homestead Rd to I-280	80.8	80.7	-0.1
	From I-280 to Stevens Creek Blvd	81.4	81.8	0.4
	From Stevens Creek Blvd to McClellan Rd	80.7	80.6	-0.1
	From McClellan Rd to S Stelling Rd	80.7	80.6	-0.1
	From S Stelling Rd to S De Anza Blvd	80.7	80.6	-0.1
	From S De Anza Blvd to Prospect Rd	80.5	80.5	0.0
Hollenbeck Ave (N. Stelling Rd)	From City Boundary to Homestead Rd	60.0	59.8	-0.2
N Stelling Rd	From Homestead Rd to I-280	63.2	66.2	3.0
	From I-280 to Stevens Creek Blvd	63.1	66.1	3.0
S Stelling Rd	From Stevens Creek Blvd to McClellan Rd	61.7	68.9	7.2
	From McClellan Rd to SR 85	59.0	63.2	4.2
	From SR 85 to Rainbow Dr	58.8	62.7	3.9
	From Rainbow Dr to Prospect Rd	59.7	61.4	1.7
N De Anza Blvd	From City Boundary to Homestead Rd	73.1	73.5	0.4
	From Homestead Rd to I-280	74.5	74.6	0.1
	From I-280 to Stevens Creek Blvd	72.9	73.8	0.9
S De Anza Blvd	From Stevens Creek Blvd to McClellan Rd	71.9	73.2	1.3
	From McClellan Rd to Bollinger Rd	72.0	73.5	1.5
	From Bollinger Rd to SR 85	71.7	72.6	0.9
	From SR 85 to Rainbow Dr	72.2	73.7	1.5
	From Rainbow Dr to Prospect Rd	72.5	72.7	0.2
	From Homestead Rd to I-280	60.8	63.5	2.7
N Blaney Ave	From I-280 to Stevens Creek Blvd	61.0	62.8	1.8

**LAND USE ALTERNATIVE B**

**TABLE 5.3-7 INCREASES TO AMBIENT NOISE LEVELS ALONG MAJOR ROADWAY SEGMENTS – LAND USE ALTERNATIVE B**

Roadway	Segment	Ambient Noise Level at 100 feet from Roadway Centerline CNEL dBA		
		Existing Conditions	2040 Conditions	Increase (dBA)
S Blaney Ave	From Stevens Creek Blvd to Bollinger Rd	55.7	56.8	1.1
	From Bollinger Rd to Prospect Rd	59.1	60.3	1.2
N Wolfe Rd	From City Boundary to Homestead Rd	67.6	70.7	<b>3.1</b>
	From Homestead Rd to Pruneridge Ave	69.7	71.4	1.7
	From Pruneridge Ave to I-280	70.2	72.1	1.9
	From I-280 to Stevens Creek Blvd	68.3	71	2.7
Miller Ave	From Stevens Creek Blvd to Bollinger Rd	65.5	69.2	<b>3.7</b>
	From Bollinger Rd to Boundary	65.4	66.9	1.5
N Tantau Ave	From Homestead Rd to Pruneridge Ave	47.4	64.6	<b>17.2</b>
	From Pruneridge Ave to I-280	50.3	61.9	<b>11.6</b>
	From I-280 to Stevens Creek Blvd	61.2	64.4	<b>3.2</b>
S Tantau Ave	From Stevens Creek Blvd to Bollinger Rd	58.7	58.5	-0.2
	From Pruneridge Ave to Stevens Creek Blvd	75.4	77.1	1.7
Lawrence Expwy	From Stevens Creek Blvd to I-280	74.9	77.2	2.3
	From I-280 to Bollinger Rd	75.5	77.5	2.0

**Bold** numbers indicate increases in CNEL which would constitute substantial permanent increase in ambient noise level.

Source: Hexagon Transportation Consultants, Inc., 2014; PlaceWorks, 2014.

As discussed above, increases greater than 5.0 dBA would automatically constitute a substantial permanent increase to the ambient noise level, Therefore an increase would be readily noticeable. Increases greater than 3.0 dBA would be considered substantive and permanent if the resulting CNEL would exceed that which is considered normally acceptable for the receiving land use. The ambient noise level increases shown in Table 5.3-7 and the future 2040 Noise Contours in Figure 5.3-1 demonstrate that there would be multiple major road segments that would experience substantial permanent increases in ambient noise levels, including at sensitive receiving land uses.

The General Plan contains numerous policies to address the reception of excessive roadway noise at existing sensitive land uses, which would be continued under Land Use Alternative B. For instance, Policy 6-51, Stricter State Noise Laws, would direct the City to continue enforcement of existing street laws regarding vehicle noise, and to support enactment of stricter State standards. Policy 6-53, Traffic Calming Solutions to Street Noise, directs the City to explore traffic calming approaches for residential streets. Policies 6-54 through 6-56 direct the City to use a combination of restrictions and street improvements to reduce noise from trucks. Altogether, these policies would serve to reduce noise from vehicles at the source and to otherwise shield sensitive uses from excessive noise.

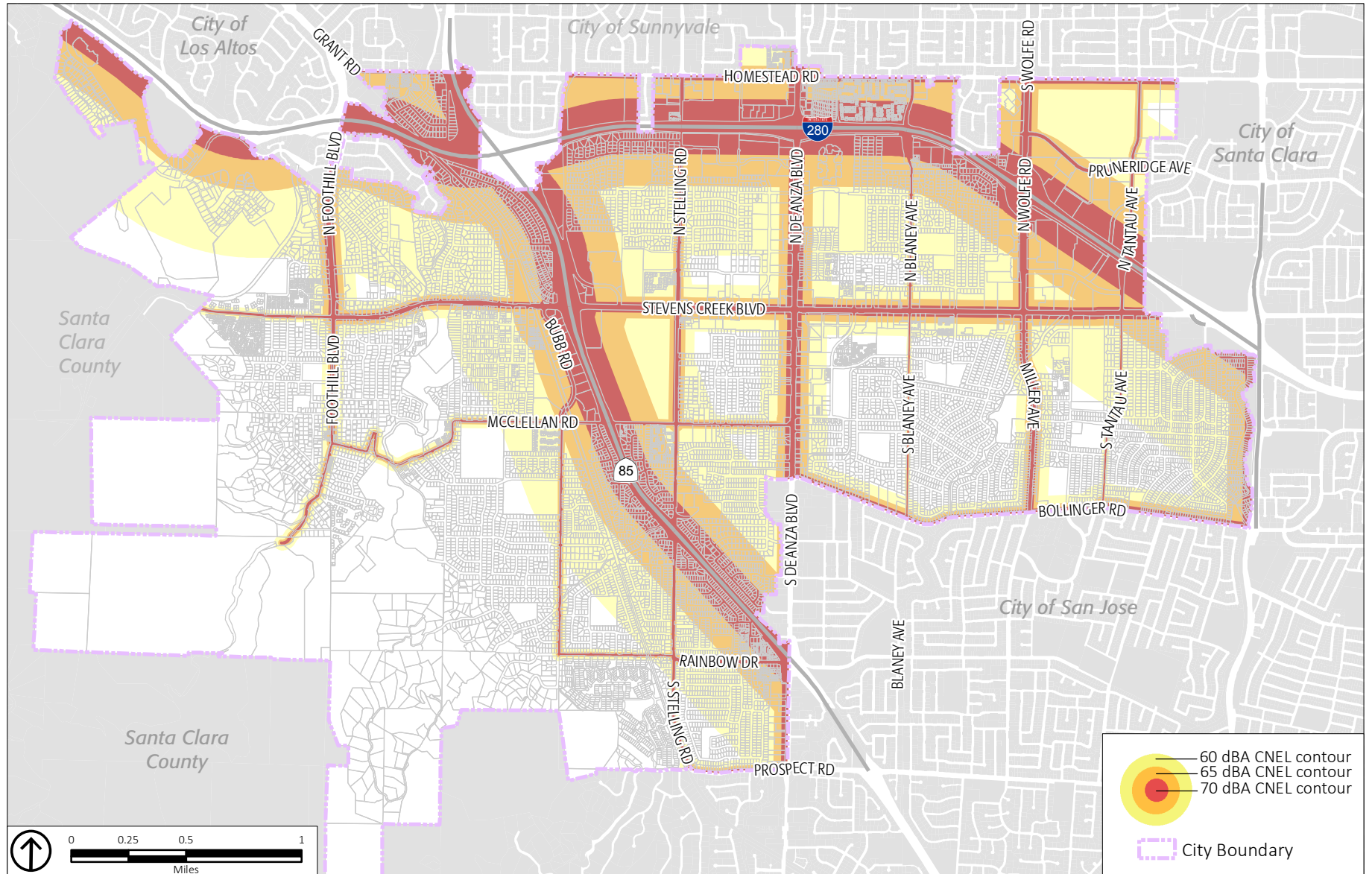


Figure 5.3-1  
2040 Noise Contours – Land Use Alternative B

## LAND USE ALTERNATIVE B

Although these policies could in certain cases reduce or prevent significant increases in ambient noise at sensitive land uses under implementation of Land Use Alternative B, the measures described in these policies would not be universally feasible, and some of the most effective noise-attenuation measures, including sound walls and berms, would be infeasible or inappropriate in a majority of locations where sensitive land uses already exist. Factors which would render these mitigations infeasible include but are not limited to cost, aesthetic considerations, and negative impacts to pedestrian and bicycle connectivity. Therefore, even after the application of relevant, feasible regulations and General Plan policies, the impact to ambient noise levels would remain *significant*.

### *Applicable Regulations*

- CCR, Title 24, Building Standards
- General Plan: Health and Safety Section, Land Use Section, Circulation Section, and Environmental Resources/Sustainability Section
- Cupertino Municipal Code:
  - Chapter 10.48: Community Noise Control
  - Title 19: Zoning Ordinance
  - Chapter 2.90: Design Review Committee
  - Title 5 Business Licenses and Regulations
  - Title 10: Public Peace, Safety and Morals
  - Title 11 Vehicles and Traffic
  - Title 14: Streets, Sidewalks and Landscaping

## Mitigation Measures

The following mitigation measures were considered, but as described below, were found to be infeasible.

### *Technological Advances for Noise-Generating Vehicles and Machinery*

Most urban noise results from the use of machinery or vehicles, including manufacturing equipment, HVAC units, automobiles, motorcycles, trains, and aircraft, among others. The implementation of improved technologies for the prevention or muffling of noise from these sources could theoretically prevent substantial increases to ambient noise levels; however, this approach would be infeasible as much of this implementation is beyond the jurisdiction of the City.

Beyond currently-accepted State and industry standards and best practices, developing and/or requiring novel technological improvements for noise-generating vehicles and machinery would not be affordable, scientifically plausible, or within the City's jurisdiction. Therefore, this potential mitigation measure is regarded as infeasible.

### *Universal Use of Noise-Attenuating Features*

The universal use of noise attenuating features, such as rubberized asphalt, soundwalls, berms, and improved building sound-insulation, could prevent transmission of excessive noise to the outdoor and

## LAND USE ALTERNATIVE B

indoor areas of sensitive land uses and/or could prevent projected increases in ambient noise levels; however, this approach would be infeasible.

Rubberized asphalt reduces tire-pavement noise and, when new, achieves a reduction of approximately 4 dBA when compared to normal pavement surfaces.<sup>35</sup> However, the noise reduction properties degrade over time, and the noise reduction would not be sufficient to reduce noise impacts in many areas of Cupertino. In many cases, aesthetic concerns, costs, physical constraints, or other issues would prevent the universal implementation of adequate noise-attenuating features. In addition to their expense, soundwalls often block views and are regarded as unsightly. Moreover, the construction of soundwalls can result in reduced pedestrian and vehicle connectivity, which would contravene other goals of the General Plan and have negative social, economic, and even environmental consequences. Although improved building construction and insulation beyond that which is required by California Title 24 and the current General Plan could further reduce indoor exposure to excessive noise, substantial outdoor increases to ambient noise levels would remain. Therefore, this potential mitigation measure is regarded as infeasible.

For this noise impact, there is no feasible mitigation for preventing substantial increases in ambient noise levels, since all conceivable mitigations would be economically impractical, scientifically unachievable, outside the City's jurisdiction, and/or inconsistent with City planning goals and objectives. Impacts would remain significant and unavoidable because no feasible mitigation measures are available to mitigate noise impacts to a less than significant level, resulting in a *significant and unavoidable* impact.

**Significance With Mitigation:** Significant and Unavoidable.

---

NOISE-4	<b>Implementation of Land Use Alternative B would result in a substantial temporary or periodic increase in ambient noise levels in the Study Area vicinity above levels existing without the project.</b>
---------	--

---

Implementation of Land Use Alternative B would have a significant impact if it results in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without this Alternative.

Noise from construction equipment and various construction-related activities is frequently a cause of temporary or periodic increases in ambient noise levels. Table 5.3-8, below, shows typical noise levels generated by commonly-used pieces of construction equipment. Although the current or amended policies of the General Plan and the provisions of the noise ordinance would serve to prevent or reduce noise generation from construction equipment, it is likely that in certain cases these and other available methods to reduce noise would be inadequate to prevent a significant impact.

---

<sup>35</sup> Sacramento County, Department of Environmental Review and Assessment, 1999, *Report of the Status of Rubberized Asphalt Traffic Noise Reduction in Sacramento County*.

## LAND USE ALTERNATIVE B

**TABLE 5.3-8 CONSTRUCTION EQUIPMENT NOISE EMISSION LEVELS**

Construction Equipment	Typical Noise Level (dBA) at 50 Feet	Construction Equipment	Typical Noise Level (dBA) at 50 Feet
Air Compressor	81	Pile-Driver (Impact)	101
Backhoe	80	Pile-Driver (Sonic)	96
Ballast Equalizer	82	Pneumatic Tool	85
Ballast Tamper	83	Pump	76
Compactor	82	Rail Saw	90
Concrete Mixer	85	Rock Drill	98
Concrete Pump	71	Roller	74
Concrete Vibrator	76	Saw	76
Crane, Derrick	88	Scarifier	83
Crane, Mobile	83	Scraper	89
Dozer	85	Shovel	82
Generator	81	Spike Driver	77
Grader	85	Tie Cutter	84
Impact Wrench	85	Tie Handler	80
Jack Hammer	88	Tie Inserter	85
Loader	85	Truck	88
Paver	89		

Source: Federal Transit Administration, Transit Noise, and Vibration Impact Assessment, 2006.

By restricting hours of construction and directing the City to review project noise impacts as part of the planning and permitting processes, the current or amended policies of the General Plan would serve to reduce temporary or periodic increases to ambient noise. The Noise Portion of the Health and Safety Section of the General Plan directs the City to consider project-level noise impacts as part of the environmental evaluation and approval process for individual development proposals. Specifically, Policies 6-61 and 6-62 of the General Plan, respectively, direct the City to limit the hours for construction activities (with limited exceptions for urgent or emergency maintenance work) and to regulate construction and maintenance activities, such as through requirements for up-to-date construction equipment. Through continued implementation of these current or new policies, Land Use Alternative B would serve to minimize temporary or periodic impacts to ambient noise levels from construction activities.

## LAND USE ALTERNATIVE B

Section 10.48.053, Grading, Construction and Demolition, of the Cupertino Municipal Code, also serves to regulate noise from construction and related activities in Cupertino. Subsection A places an 87 dBA limit on noise levels from construction equipment at a distance of 25 feet, as well as an 80 dBA limit on noise levels at nearby properties. Additionally, Subsections C and D limit construction activities to weekdays, non-holidays, and daytime hours, with limited exceptions. The noise chapter thus limits construction activities to 7:00 a.m. to 8:00 p.m. on weekdays, and 9:00 a.m. to 6:00 p.m. on weekends. However, the ordinance allows exceptions under Sections 10.48.030 and 10.48.031, which allow construction outside of these hours, under certain conditions. However, these are used in very special circumstances such as emergencies or when are unavoidable as a result of necessary construction techniques. Subsection E places additional restrictions on the use of helicopters for construction purposes, including noticing requirements.

Although it is possible that certain construction activities may in some cases, lead to substantial temporary or periodic increases to ambient noise levels, the current and proposed policies and regulations included under Land Use Alternative B and the Municipal Code would serve to reduce these impacts. With appropriate noise reduction and shielding measures, temporary or periodic increases to the ambient noise level that could be substantially reduced. The policies of the General Plan and regulations of the Municipal Code, would thereby reduce the impacts from temporary or periodic increases to ambient noise levels, and the impact would be *less than significant*.

### *Applicable Regulations*

- CCR, Title 24, Building Standards
- General Plan: Health and Safety Section, Land Use Section, Circulation Section, and Environmental Resources/Sustainability Section
- Cupertino Municipal Code:
  - Chapter 10.48: Community Noise Control
  - Title 19: Zoning Ordinance

**Significance Without Mitigation:** Less than significant.

---

**NOISE-5                      Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would result in significant cumulative impacts with respect to noise.**

---

The analysis of Land Use Alternative B, discussed above, addresses cumulative impacts in regard to noise, as well as groundborne noise and vibration. Although multiple simultaneous nearby noise sources may, in combination, result in higher overall noise levels, this effect is captured and accounted for by the ambient noise level metrics which form the basis of the Thresholds of Significance for noise analysis. Any measurement of sound or ambient noise, whether for the purpose of evaluating land use compatibility, establishing compliance with exterior and interior noise standards, or determining point-source violations of a noise ordinance, necessarily will incorporate noise from all other nearby perceptible sources.

Additionally, although noise attenuation is influenced by a variety of topographical, meteorological, and other factors, noise levels decrease relatively rapidly with distance, and vibration impacts decrease even

## LAND USE ALTERNATIVE B

more rapidly. Therefore, site-level cumulative noise or vibration impacts across city boundaries occur only infrequently. The City of Cupertino directly interfaces with other incorporated communities and similarly urbanized areas, which makes cross-border cumulative noise and vibration impacts possible. Nevertheless, given the General Plan policies and Municipal Code requirements discussed above, it is unlikely that operations-related noise would, in combination with noise sources from adjacent cities, result in cumulative noise impacts. Additionally, because any noise measurements taken in conjunction with General Plan policies or Municipal Code requirements would necessarily account for noises received from outside the boundaries of the City of Cupertino, the ongoing implementation of these policies and regulations under Land Use Alternative B would serve to prevent site-based cumulative noise impacts.

Similarly, the noise contours and traffic-related noise levels developed for Land Use Alternative B include and account for regional travel patterns as they affect traffic levels in Cupertino. Noise contours were based upon both existing and projected future traffic volumes that incorporate cumulative regional effects and trends. Existing noise contours were derived from traffic volumes based on counts of current traffic, and these traffic counts inherently include cumulative traffic, as generated by regional trips. In regard to future noise, projected noise contours were determined using projected 2040 traffic volumes; these data account for growth both within Cupertino under Land Use Alternative B, as well as anticipated regional growth. The future noise modeling which served as the foundation for the overall Project analysis was therefore based on future, cumulative conditions.

Impacts NOISE-3 and NOISE-4 therefore encompass and address cumulative noise impacts from implementation of Land Use Alternative B. As discussed under Impact NOISE-3, even after the application of pertinent policies and action of the General Plan Amendments, as well as all feasible mitigation measures considered but determined to be infeasible described above under Impact NOISE-3, these impacts would remain *significant and unavoidable*.

### 5.3.7.11 POPULATION AND HOUSING

---

<b>POP-1</b>	<b>Implementation of Land Use Alternative B would not induce substantial unexpected population growth, or growth for which inadequate planning has occurred, either directly or indirectly.</b>
--------------	---

---

Land Use Alternative B would result in a significant impact related to population growth if it would lead to substantial unplanned growth, either directly or indirectly. The Land Use Alternative B does not specifically propose any new development or redevelopment, and therefore would not result in direct growth; however, implementation of Land Use Alternative B would facilitate growth in the Project Study Area through 2040, and as such would have indirect effects related to growth. Potential impacts stemming from the indirect inducement of unplanned population growth are discussed below in relation to both local and regional planning efforts.

#### Local Planning

The developable area of Cupertino is already largely built out and the Project Study Area is well served by utility and transportation infrastructure. Future housing development and redevelopment under Land Use



**LAND USE ALTERNATIVE B**

Alternative B would be infill development and would be concentrated on the sites identified in Section 3.7.4, Housing Element Sites, of Chapter 3, Project Description, of this Draft EIR. While Land Use Alternative B would require infrastructure improvements to correct existing deficiencies, these would be made to accommodate the proposed new development and would not accommodate additional growth beyond that need.

The General Plan includes policies and strategies that, once adopted, would serve to accommodate future growth through 2040. Within the Land Use and Community Design Element, Policy 2-1, Focus Development in Mixed-Use Special Areas, would require the City to, in the mixed-use Special Areas where office, commercial and residential uses are allowed, focus higher intensity development and increased building heights where appropriate in designated corridors, gateways and nodes. Policy 2-17, Multi-Family Residential Design, would require the City to maintain a superior living environment for multi-family dwellings. Strategy 1, Relationship to Street, directs the City to relate building entrances to the street, utilizing porches or stoops. Strategy 2, Provision of Outdoor Areas, would require the City to provide outdoor areas, both passive and active, and generous landscaping to enhance the surroundings for multi-family residents. Allow public access to the common outdoor areas whenever possible. Policy 2-22, Jobs/Housing Balance, would require the City to strive for a more balanced ratio of jobs and housing units. Strategy 1, Housing and Mixed-Use, would require the City to strive to achieve a balanced jobs/housing ratio based on the policies and strategies contained in the Housing Element. Strategy 2, Housing Impact on Local Schools, recognizes that since the quality of Cupertino schools (elementary and high school) is a primary asset of the City, care shall be taken to ensure any new housing will not adversely impact these systems.

Within the proposed Public Utilities, Infrastructure and Services Element, Policy 7-4, New Development Public Infrastructure Requirements, would require the City to require new development to provide adequate public facilities or pay its fair share of the cost for public facilities needed to provide services to accommodate growth without adversely impacting current service levels. Strategy 1, Design Capacity, would require the City to ensure that public facilities and infrastructure are designed and constructed to meet ultimate capacity needs to avoid the need for future upsizing. For facilities subject to incremental upsizing, initial design shall include adequate land area and any other elements not easily expanded in the future. Infrastructure and facility planning should discourage over-sizing of infrastructure which could contribute to growth beyond what was anticipated in the General Plan. Strategy 2, Utility Undergrounding, would require the City to require undergrounding of all new publicly owned utility lines. Encourage undergrounding of all privately owned utility lines in new developments. Work with electricity and telecommunications providers to underground existing overhead lines. Policy 5-2, Regional Growth and Transportation Coordination, would require the City to “coordinate with regional and local agencies to prepare updates to regional growth plans and strategies.” Strategy 1 under this policy would direct the City to maintain local plans and strategies that are consistent with regional transportation and housing plans. Policy 7-3, Sewer Tributary Lines, would require the City to recognize that new high discharge users in the Vallco, Stevens Creek Boulevard and Blaney Avenue areas will require private developers to pay for the upgrading of tributary lines. Strategy 1, Cost Estimates, would require the City to develop preliminary cost estimates for the upgrading of the sewer tributary lines to discuss with prospective developers.

## LAND USE ALTERNATIVE B

Within the Housing Element, Policy 1, Provision of Adequate Capacity for New Construction Need, would require the City to designate sufficient land at appropriate densities to accommodate Cupertino's Regional Housing Needs Allocation (RHNA) of 1,064 units for the 2014-2022 RHNA planning period. Policy 2, Housing Densities, would require the City to provide a full range of densities for ownership and rental housing. Policy 3, Mixed Use Development, would require the City to encourage mixed-use development near transportation facilities and employment centers. Policy 4, Housing Mitigation, would require the City to ensure that all new developments—including market-rate residential developments—help mitigate project-related impact on affordable housing needs. Policy 5, Range of Housing Types, would require the City to encourage the development of diverse housing stock that provides a range of housing types (including smaller, moderate cost housing) and affordability levels. Emphasize the provision of housing for lower- and moderate-income households and also households with wage earners who provide essential public services (e.g. school district employees, municipal and public safety employees, etc.). Policy 6, Development of Affordable Housing and Housing for Persons with Special Needs, would require the City to maintain and/or adopt appropriate land use regulations and other development tools to encourage the development of affordable housing. Make every reasonable effort to disperse units throughout the community but not at the expense of undermining the fundamental goal of providing affordable units. Policy 7, Housing Rehabilitation, would require the City to pursue and/or provide funding for the acquisition/rehabilitation of housing that is affordable to very low-, low-, and moderate-income households. Actively support and assist non-profit and for-profit developers in producing affordable units. Policy 8, Maintenance and Repair, would require the City to assist lower-income homeowners and rental property owners in maintaining and repairing their housing units. Policy 9, Conservation of Housing Stock, would require the City to preserve the existing inventory of affordable housing units that are at risk of converting to market-rate housing. Policy 10, Energy and Water Conservation, would require the City to encourage energy and water conservation in all existing and new residential development. Policy 11, Lower Income and Special Needs Households, would require the City to support organizations that provide services to lower income households and special need households in the City, such as the homeless, elderly, disabled and single parent households. Policy 12, Housing Discrimination, would require the City to work to eliminate on a citywide basis all unlawful discrimination in housing with respect to age, race, sex, sexual orientation, marital or familial status, ethnic background, medical condition, or other arbitrary factors, so that all persons can obtain decent housing.

The City currently has the capacity to accommodate 1,895 housing units. Implementation of these General Plan policies would ensure that local planning is adequate to accommodate future growth in Cupertino.

### Regional Planning

As described above, ABAG and MTC have responsibility for regional planning initiatives in the nine-county Bay Area, which includes Cupertino. ABAG and MTC have developed regional growth forecasts for the Bay Area as a whole and for constituent jurisdictions. Table 5.3-9 below shows population, housing, and job growth projections for Cupertino that are included in the regional forecasts. Land Use Alternative B would be considered to induce substantial growth if the estimated buildout resulting from future development that is permitted under the Land Use Alternative B would exceed these regional growth projections for Cupertino. Land Use Alternative B's 2040 buildout estimates are shown in Table 5.3-1.

**LAND USE ALTERNATIVE B**

**TABLE 5.3-9 LAND USE ALTERNATIVE B ESTIMATED POPULATION, HOUSEHOLD, AND EMPLOYMENT**

	Land Use Alternative B	2013	2040	Growth Rate Percent
Population	9,749	58,302	68,051	17%
Households	3,361	21,399	24,715	15%
Jobs	11,705 <sup>c</sup>	27,387	39,092	43%

a. Percent are rounded to the nearest whole number.

b. Population is calculated by 3,316 units times 2.94 persons per household, which is the ABAG 2040 estimated generation rate.

c. Jobs are calculated applying the City's generation rates as follows; 2,540,231 square feet of office allocation divided by 300 square feet equals 8,467 jobs; 1,343,670 square feet of commercial allocation divided by 450 square feet equals 2,986 jobs; and 839 hotel rooms at .3 jobs per room equals 252 jobs for a total of 11,705 jobs.

Source: Association of Bay Area Governments, *Plan Bay Area, Projections 2013*, Subregional Study Area Table, Santa Clara County and the City of Cupertino, 2014.

As shown in Table 5.3-9, implementation of Land Use Alternative B would result in a total of 3,361 new households in the city for a total of 24,715 households for the buildout horizon year 2040. Assuming the new dwelling units permitted under Land Use Alternative B would have the average 2.94 persons per household size as applied in ABAG Projections 2013, population in the city could increase by 9,749 residents for a total of 68,051 residents by 2040. By comparison, ABAG anticipates 3,861 new households and 12,961 new residents in Cupertino, for a total of 24,180 households and 71,700 residents by 2040.<sup>36</sup> While Land Use Alternative B would result in 3,649 fewer residents and 535 more units, the rate of growth under the Land Use Alternative B and estimated by ABAG would be less for population growth (i.e. 17 percent compared to 22 percent) and household growth (15 compared to 19 percent). Consequently, the additional housing units resulting from implementation of Land Use Alternative B would not substantially exceed regional projections.

With respect to jobs, ABAG projects an increase of 7,040 jobs for a total of 33,260 jobs in 2040. As shown in Table 5.3-9, when applying the City's job generation rates for office, commercial, and hotel development, buildout of the Land Use Alternative B could result in as many as 11,705 additional jobs for a total of 39,029 jobs in 2040, which would exceed the regional job projections by 5,769 jobs, which represents a 16 percent rate increase (43 percent compared to 27 percent).<sup>37</sup>

The General Plan includes policies and strategies that, once adopted, would be consistent with goals and objectives identified in the Plan Bay Area, would ensure potential development under Land Use Alternative B, would not induce substantial unexpected population growth, or growth for which inadequate planning has occurred, either directly or indirectly. Within the Land Use/Community Design Element, Policy 2-2, Connections Between Special Areas, Employment Centers and the Community, would require the City to provide strong connections between the mixed-use Special Areas, employment centers and the surrounding community. Policy 2-15, Urban Building Forms, would require the City to concentrate urban building forms in the mixed-use Special Areas. Policy 2-24, Homestead Special Area, would require the City to

<sup>36</sup> Association of Bay Area Governments, *Plan Bay Area, Projections 2013*, Subregional Study Area Table, Santa Clara County.

<sup>37</sup> Office (300 square feet per job); Commercial (450 square feet per job); Hotel (.3 jobs per room).

## LAND USE ALTERNATIVE B

create an integrated, mixed-use commercial and housing village within the Homestead Special Area, consisting of three integrated areas. Each area will be master planned, with special attention to the interconnectivity of these areas. Additionally, this corridor will continue to be a predominantly mixed-use area with residential uses and a series of commercial centers. Homestead Road provides new pedestrian crossings at the major intersections. Policy 2-24.B, Stelling Gateway, would require the City to Maintain and enhance the Stelling Gateway as a medium density, mixed-use commercial and housing district that will provide community identity and activity along Homestead Road. Policy 2-25, North Vallco Park Special Area, would require the City to retain the North Vallco Park Special Area as an employment area of predominately office and light industrial activities, with neighborhood commercial uses and ancillary uses including hotels and retail uses. Additionally, this policy would require the City to maintain the existing residential uses. Policy 2-25.A, North Vallco Gateway, would require the City to maintain and enhance the North Vallco Gateway with uses that support major office developments within the City including hotels and commercial uses. Existing residential development would also be maintained. Policy 2-26, Heart of the City Special Area, would require the City to create a positive and memorable image along Stevens Creek Boulevard of mixed-use development; enhanced activity gateways and nodes; and safe and efficient circulation and access for all modes of transportation. Policy 2-26.B, Oaks Gateway, would require the City to create an active, mixed-use shopping and residential gateway at one of the primary entrances to Cupertino. Policy 2-26.D, Crossroads Area, would require the City to create an active, pedestrian-oriented shopping district along Stevens Creek Boulevard, between De Anza Boulevard and Stelling Road, where commercial and roadway design encourage pedestrian activity. Policy 2-26.E, City Center Node, would require the City to maintain and enhance City Center Node as a moderate-scale, medium density, mixed use district that will provide community identity and activity and will support retail uses in the Crossroads Area. Policy 2-26.G, South Vallco Park Gateway, would require the City to retain and enhance South Vallco Park Gateway as a large-scale commercial area that is a regional commercial (including hotel), office and entertainment center with supporting residential development. Policy 2-27, North De Anza Special Area, would require the City to maintain and enhance the North De Anza Special Area as a regional employment center with supporting commercial and residential land uses. Policy 2-28, South De Anza Special Area, would require the City to maintain and enhance the South De Anza Special Area as a mixed-use corridor.

Growth under Land Use Alternative B would come incrementally over a period of approximately 26 years, and would be guided by a policy framework in Land Use Alternative B that is generally consistent with many of the principal goals and objectives established in regional planning initiatives for the Bay Area. As discussed above, one of the key concepts of Plan Bay Area is the idea of focusing future growth into PDAs (transit-oriented, infill development opportunity areas within existing communities), which are expected to host the majority of future development. The PDAs in Cupertino are located along Stevens Creek Boulevard between State Route 85 and the City of Santa Clara, and along De Anza Boulevard between Stevens Creek Boulevard and the City of Sunnyvale. As shown in Figure 4.11-1 in Chapter 4.11, Population and Housing, of this Draft EIR, the PDAs coincide with the Heart of the City, Homestead, South De Anza, and North De Anza Major Mixed-Use Special Areas, Study Area 1 (Cupertino Inn and Goodyear Tire), Study Area 2 (City Center), Study Area 6 (Vallco Shopping District), Study Area 7 (Stevens Creek Office Center), as well as potential the following Housing Element Sites:

- Housing Element Site 1 (Shan Restaurant)
- Housing Element Site 2 (Arya/Scandinavian Design)
- Housing Element Site 3 (United Furniture/East of East Estates Drive)

**LAND USE ALTERNATIVE B**

- Housing Element Site 4 (Barry Swenson)
- Housing Element Site 5 (Glenbrook Apartments)
- Housing Element Site 11 (Vallco Shopping District except Rosebowl)
- Housing Element Site 13 (Loree Shopping Center)
- Housing Element Site 14 (Marina Plaza)
- Housing Element Site 15 (Stevens Creek Office Center)
- Housing Element Site 18 (The Oaks Shopping Center)
- Housing Element Site 19 (Cypress Building Association & Hall Property)

Therefore, growth anticipated under this Alternative would not exceed regional growth projections for Cupertino and this additional growth would be consistent with the regional planning objectives established for the Bay Area. Further, this additional growth would come incrementally over a period of approximately 26 years and a policy framework is in place to ensure adequate planning occurs to accommodate it. As a result, impacts to population growth associated with potential future development under this Alternative would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**POP-2                      Implementation of Land Use Alternative B would not displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere.**

---

Implementation of Land Use Alternative B would include General Plan land use designation, Zoning designation, and development standard amendments on 11 of the 19 Housing Element Sites as follows:

- Housing Element Site 7 (Carl Berg Property): Height would increase from 45 feet to 60 feet. No changes to density, General Plan land use or Zoning designations.
- Housing Element Site 10 (The Hamptons): Height would increase from 60 feet to 75 feet. Density would increase from 25 dwelling units per acre (du/ac) to 65 du/ac. The General Plan land use designation would be changed from High Density (20-35 dwelling unit per gross acre [DU/Gr. Ac]) to High Density (Greater than 35 DU/Gr. Ac) and the Zoning designation would be changed from Planned Development with Residential (P(Res) - 70) to P(Res).
- Housing Element Site 11 (Vallco Shopping District except Rosebowl): Height would increase from 60 feet to 110 feet in the area bounded by I-280 to the north, Vallco Parkway to the south, and Perimeter Road to the east if future development includes a retail component and provides community benefits. There will be no change to residential density. The General Plan land use designation would be changed from Commercial/Residential (C/R) to Commercial/Office/Residential (C/O/R) and the Zoning designation would be changed from Planned Development with Regional Shopping (P(Regional Shopping)) to Planned Development with Regional Shopping, Professional Office, and Residential (P(Regional Shopping, OP, Res)) to allow for professional offices and residential uses.
- Housing Element Site 12 (Homestead Lanes and Adjacency): No changes to height, residential density, or General Plan land use designations. Height allowances would remain at 45 feet on the east side of

## LAND USE ALTERNATIVE B

Stelling Road, however, in addition, 60 feet would be allowed with retail development. The Zoning designation would be changed from Planned Development with General Commercial, Recreation and Entertainment (P(CG, Rec, Ent)) to Planned Development with General Commercial and Residential (P(CG, Res)) to allow for residential uses.

- Housing Element Site 14 (Marina Plaza): Height would increase from 45 feet to 60 feet with a retail component. Density would increase from 25 du/ac to 35 du/ac. No changes to General Plan land use or Zoning designations.
- Housing Element Site 15 (Stevens Creek Office Center): Height would increase from 45 feet to 60 feet with a retail component. Density would increase from 25 du/ac to 35 du/ac. Zoning Designation would be changed to General Commercial, Professional Office and Residential (P(CG, OP, Res)). No changes to General Plan designation.
- Housing Element Site 16 (Summerwinds and Granite Rock): Density would increase from 15 du/ac to 25 du/ac. Zoning designation would change from Planned Development with General Commercial and Residential (P(CG, Res 5-15)) to Planned Development with General Commercial and Residential (P(CG, Res)) to allow for residential uses. No changes to height or General Plan land use designation.
- Housing Element Site 17 (Homestead Road – IntraHealth/Office/Tennis Courts): Height would increase from 30 feet to 45 feet or 60 feet with a retail component. Density would increase from 15 du/ac to 35 du/ac. Zoning designation would be changed from Planned Development with General Commercial (P(CG)) to Planned Development with General Commercial and Residential (P(CG, Res)) to allow for residential uses. No changes to General Plan land use designation.
- Housing Element Site 18 (The Oaks Shopping Center): Height would increase from 45 feet to 60 feet with a retail component. Density would increase from 25 du/ac to 35 du/ac. Zoning designation would be changed from zoned Planned Development with General Commercial and Professional Office (P(CG, OP)) to Planned Development with General Commercial, Residential, and Professional Office (P(CG, Res, OP)) to allow for future mixed-use development including residential uses.

In addition to the 820 existing dwelling units on Housing Site 10 (The Hamptons), Housing Elements Site 5 (Glenbrook Apartments) and Site 6 (The Villages Apartments) have 517 and 468 existing dwelling units, respectively. However, Sites 5 and 6 are anticipated to be infill sites, therefore, no demolition of existing residential units would occur at these locations. However, potential future development under Land Use Alternative B at Housing Element Site 10 could result in the temporary loss of 820 residential units. If this Site were to be redeveloped, the existing units may need to be demolished in order to redevelop the sites at their proposed maximum capacity. Nevertheless, the resulting redevelopment at this site would provide a net increase of 342 units. Furthermore, where applicable, Housing Element Program 17 addresses the potential loss of rental housing and displacement of lower and moderate income households due to new development. Under this Program, the City may consider adopting new or amending existing policies/ordinances to mitigate the potential displacement impacts. Options to be considered may include, but not limited to a tenant relocation assistance ordinance, or requirement to include additional below-market-rate units to make up the affordable units lost. Accordingly, the proposed General Plan land use designation, Zoning designation and development standard amendments on the Housing Element Sites listed

**LAND USE ALTERNATIVE B**

above would not result in the displacement of housing necessitating the construction of replacement housing elsewhere.

Implementation of Land Use Alternative B would result in a net increase of housing units (3,361 units compared to 1,895 units) under the Land Use Alternative B. Therefore, construction of replacement housing elsewhere would not be necessary and the impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**POP-3                      Implementation of Land Use Alternative B would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.**

---

As described under Impact POP-2 above, potential future development potential Housing Elements Site 5 (Glenbrook Apartments), Site 6 (The Villages Apartments), and Housing Site 10 (The Hamptons) could involve the demolition and replacement of existing housing units, which could result in the temporary displacement of some residents, but this would not result in displacement of substantial numbers of people and housing necessitating more replacement housing than is already planned. For the remainder of the Housing Element Sites 1 through 4, 7, 10 through 19, described in Chapter 3, Project Description, of this Draft EIR, no displacement would occur because the increase in housing would be accomplished by constructing infill units on portions of the Housing Element Sites that are not currently developed with housing. For Housing Element Sites 10, redevelopment of the site at its proposed maximum capacity would require demolishing existing units and would require the occupants to move while the new residential project is under construction; however, there would be a net increase in the number of housing units in Cupertino (3,361 units compared to 1,895 units). Additionally, based on an average household size of 2.94 persons per household, the proposed net increase of 342 housing units from redevelopment on Housing Element Site 10 would accommodate approximately 1,006 new residents in the city.

Furthermore, where applicable, Housing Element Program 17 addresses the potential loss of rental housing and displacement of lower and moderate income households due to new development. Under this Program, the City may consider adopting new or amending existing policies/ordinances to mitigate the potential displacement impacts. Options to be considered may include, but not limited to a tenant relocation assistance ordinance, or requirement to include additional below-market-rate units to make up the affordable units lost. Therefore, not only is Land Use Alternative B anticipated to result in an increase in residential units (3,361 units compared to 1,895 units), but also, should some types of individual development projects be permitted under the Land Use Alternative B that would potentially displace people, provisions of the Housing Element Program 17 would serve to minimize impacts. Therefore, the construction of replacement housing elsewhere would not be warranted and the impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

## LAND USE ALTERNATIVE B

---

**POP-4**                    **Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to population and housing.**

---

This EIR takes into account growth projected by Land Use Alternative B within the Cupertino city boundary and SOI, in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by ABAG. Impacts from cumulative growth are considered in the context of their consistency with regional planning efforts. As described above, Land Use Alternative B would not induce a substantial amount of growth or require the construction of replacement housing elsewhere. Cumulative growth would be consistent with regional planning efforts. Thus, when considered along with Land Use Alternative B, which, as described in the above sections, would not exceed regional growth projections, cumulative growth would not displace substantial numbers of people or housing or exceed planned levels of growth and cumulative impacts, would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

### 5.3.7.12 PUBLIC SERVICES AND RECREATION

#### Fire Protection Services

---

**PS-1**                    **Implementation of Land Use Alternative B would not result in the provision of or need for new or physically altered fire protection facilities, the construction or operation of which could cause significant environmental impacts.**

---

Future development permitted under this Alternative would result in 5,571 additional residents and up to 5206 new jobs, which would result in an increase in the number of would require fire protection, and emergency medical services. Subsequently, the expansion or construction of new or physically altered fire protection facilities, which could result in significant environmental impacts, could be required. However, development would occur incrementally throughout the 26-year buildout horizon, therefore, not resulting in potential impacts to fire protection services in the immediate future or all at one time. Further, under this Alternative, commercial space and residential development allocation would not be replenished; therefore, this Alternative would not result in additional would require service beyond what has currently been accounted for with respect to potential future commercial and residential development.

Additionally, compliance with Subsections 105.1.4 (Construction permit fees) and 105.1.5 (Operational permit fees) under Section 16.40.065, Permits, of the Municipal Code, as described in Section 4.12.1.1, Environmental Setting, in Chapter 4.12, Public Services and Recreation, in this Draft EIR, would require future development to undergo plan review and approval by the Santa Clara County Fire District (SCCFD) to ensure that future projects comply with State, and local fire codes, as well as ensure adequate safety features are incorporated into building design to minimize risk of fire.



## LAND USE ALTERNATIVE B

The General Plan includes policies and strategies that, once adopted, would ensure adequate fire protection services are available for the residents of Cupertino. Within the Health and Safety Element, Policy 6-4, Wild Fire Prevention Efforts, would require the City to coordinate wild fire prevention efforts with adjacent jurisdictions. Policy 6-8, Early Project Review, would require the City to involve the Fire Department in the early design stage of all projects requiring public review to assure Fire Department input and modifications as needed. Policy 6-9, Commercial and Industrial Fire Protection Guidelines, would require the City to coordinate with the Fire Department to develop new guidelines for fire protection for commercial and industrial land uses. Policy 6-11, Multi-Story Buildings Fire Risks, would require the City to recognize that multi-story buildings of any land use type increase risks of fire, and to ensure that adequate fire protection is built into the design and require on-site fire suppression materials and equipment to ensure the safety of the community. Policy 6-12, Smoke Detectors, would require the City to require smoke detectors in all new residential units and in all residential units at the time of sale or rental, in conformance with State law, and to continue to use the Cupertino Scene to publicize fire hazards correction methods. Strategy 1, Code Amendment, would require the City to adopt an ordinance to incorporate the smoke detector requirement in Chapter 16.04 of the Cupertino Municipal Code. Policy 6-13, Roadway Design, would require the City to involve the Fire Department in the design and review of public roadways for review and comments, and to attempt to ensure that roadways have frequent median breaks for timely access to properties. Policy 6-15, Hillside Access Routes, would require the City to require new hillside development to have frequent grade breaks in access routes to ensure a timely response from fire personnel. Policy 6-16, Hillside Road Upgrades, would require the City to require new hillside development to upgrade existing access roads to meet Fire Code and City standards. Policy 6-20, Growth Cooperation, would require the City to encourage cooperation between water utility companies and the Fire Department in order to keep water systems in pace with growth and firefighting service needs. Policy 6-21, Fire Fighting Upgrades Needs, would require the City to encourage water providers to consider Fire Department firefighting needs when upgrading public water systems.

Future development would also be required to comply with the City's Fire Code per Chapter 16.40 (Fire Code), including compliance with the permit processes, emergency access, hazardous material handling, and fire protection systems, including automatic sprinkler systems, fire extinguishers, and fire alarms. Further, future development would be required to comply with the City-adopted 2010 California Fire Code (CFC) and 2009 International Fire Code. Consequently, compliance with the State and local regulations, in conjunction with compliance with the above listed General Plan policies, would ensure that potential impacts under this Alternative remain *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**PS-2                      Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to fire protection service.**

---

Implementation of Land Use Alternative B would facilitate new development, including residential, mixed-use, and commercial, within Cupertino, which could result in the provision of or need for new or physically altered fire protection facilities, the construction or operation of which could cause a significant

## LAND USE ALTERNATIVE B

environmental impact, in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecasted by the ABAG. However, under this Alternative, commercial space and residential development allocation would not be replenished.

Cumulative impacts are considered in the context of the growth from development under this Alternative within the city combined with the estimated growth in the service area of the SCCFD, which includes the cities of Campbell, Los Altos, Monte Sereno, Saratoga, and towns of Los Altos Hills and Los Gatos. A significant cumulative environmental impact would result if this cumulative growth would exceed the ability of SCCFD to adequately serve their service area, thereby requiring construction of new facilities or modification of existing facilities.

Implementation of Land Use Alternative B is unlikely to create a need for new or physically altered facilities in order for the SCCFD to provide fire protection services to its service area because compliance with State and local laws, as described in Section 4.12.1.1, Environmental Setting, in Chapter 4.12, Public Services and Recreation, of this Draft EIR, as well as the General Plan policies listed above in impact discussion PS-1, would ensure that fire protection services are adequate as future development is proposed as a result of implementation of Land Use Alternative B. Therefore, the cumulative impact on the provision of fire services would likewise be *less than significant*.

**Significance Without Mitigation:** Less than significant.

### Police Protection Services

---

<b>PS-3</b>	<b>Implementation of Land Use Alternative B would not result in the provision of or need for new or physically altered police protection facilities, the construction or operation of which could cause significant environmental impacts.</b>
-------------	--

---

Similar to Impact PS-1, future development permitted under this Alternative would result in 5,571 additional residents and up to 5206 new jobs, which would result in an increase in the number of would require police protection. Subsequently, the expansion or construction of new or physically altered fire protection facilities, which could result in significant environmental impacts, could be required. However, development would occur incrementally throughout the 26-year buildout horizon, therefore, not resulting in potential impacts to fire protection services in the immediate future or all at one time. Further, under this Alternative, commercial space and residential development allocation would not be replenished; therefore, this Alternative would not result in additional would require service beyond what has currently been accounted for with respect to potential future commercial and residential development.

## LAND USE ALTERNATIVE B

However, the West Valley Patrol Division has confirmed that future development under the General Plan would not result in the need for expansion or addition of facilities.<sup>38</sup> Moreover, growth proposed under Land Use Alternative B would occur incrementally over the 26-year horizon of the General Plan.

Additionally, if future expansion of the police station were necessary, the project would be subject to the provisions of CEQA, which would require that all potentially significant impacts be mitigated to a less-than-significant level, when feasible.

Further, the Sheriff's Office has confirmed that while the standard service contract is based upon a set number of hours for deputies and reserve deputies, buildout under the General Plan throughout the 26-year horizon under Land Use Alternative B would not substantially result in an increase in the number of contracted hours as a result of potential increase in would require police protection services.<sup>39</sup> Hence, the same would be true for future development under Alternative B.

The General Plan includes policies and strategies that, once adopted, would ensure adequate police protection services are available for the residents of Cupertino. Within the Health and Safety Element, Policy 6-22, Neighborhood Awareness Programs, would require the City to continue to support the Neighborhood Watch Program and others similar programs intended to help neighborhoods prevent crime through social interaction. Policy 6-24, Crime Prevention in Building Design, would require the City to consider the relationship between building design and crime prevention in reviewing all developments. Policy 6-25, Fiscal Impacts, would require the City to recognize fiscal impacts to the County Sheriff and City of Cupertino when approving various land use mixes. Policy 6-26, Pre-hearing Review, would require the City to continue to request County Sheriff review and comment on development applications for security and public safety measures.

Based on confirmation by the Sheriff's Office, along with compliance with the General Plan policies listed above, a *less-than-significant* impact would occur with respect to the need for new or physically altered police protection facilities.

**Significance Without Mitigation:** Less than significant.

---

**PS-4                      Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to police protection service.**

---

This EIR takes into account growth projected by Land Use Alternative B within the Cupertino city boundary and Sphere of Influence (SOI), in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). Cumulative impacts are considered in the context of the growth from development under Land Use Alternative B within the city, combined with the estimated growth in the service areas of the Santa Clara

---

<sup>38</sup> Personal communications between Ricky Caperton (PlaceWorks) and Captain Ken Binder, Division Commander, West Valley Patrol, April 11, 2014.

<sup>39</sup> Personal communications between Ricky Caperton (PlaceWorks) and Captain Ken Binder, Division Commander, West Valley Patrol, April 11, 2014.

## LAND USE ALTERNATIVE B

County Sheriff's Department, including the cities of Los Altos Hills, Saratoga, and unincorporated areas of Santa Clara County. A significant cumulative environmental impact would result if this cumulative growth would exceed the ability of Sheriff's Department to adequately serve the vicinity, thereby requiring construction of new facilities or modification of existing facilities.

Since police protection services in Cupertino are provided through a MOU between the City of Cupertino and the Santa Clara County Sheriff's Office, changes and growth anticipated under Land Use Alternative B would not have any cumulative impact beyond Cupertino's SOI. Moreover, the Sheriff's Office has confirmed that in conjunction with the growth anticipated under Land Use Alternative B and subsequently, this Alternative, new or physically altered facilities would not be needed.<sup>40</sup> Further, it is unlikely that implementation of the Land Use Alternative B would significantly increase the degree or incidence of need for mutual aid from neighboring agencies because anticipated growth under the General Plan would occur incrementally throughout the 26-year buildout horizon. Additionally, compliance with the existing General Plan policies listed under Impact PS-3 would require the City to recognize fiscal impacts to the County Sheriff and City of Cupertino when approving various land use mixes and to continue to request County Sheriff review and comment on development applications for security and public safety measures. Therefore, implementation of Land Use Alternative B would have a *less-than-significant* cumulative effect with respect to police protection services.

**Significance Without Mitigation:** Less than significant.

## School Services

---

<b>PS-5</b>	<b>Implementation of Land Use Alternative B would not result in the provision of or need for new or physically altered school facilities, the construction or operation of which could cause significant environmental impacts.</b>
-------------	---

---

This section reviews the need for existing school facilities to accommodate any increases in public school enrollment due to Land Use Alternative B. However, the California State Legislature, under Senate Bill 50 (SB 50), has determined that payment of school impact fees shall be deemed to provide full and complete school facilities mitigation. All new developments proposed pursuant to the adoption of Land Use Alternative B will be required to pay the school impact fees adopted by each school district, and this requirement is considered to fully mitigate the impacts of the Land Use Alternative B on school facilities.

### *Cupertino Union School District*

The Land Use Alternative B would generate approximately 3,361 housing units in Cupertino; thus the CUSD would experience additional students in elementary schools and middle school. With student enrollment already exceeding CUSD's capacity, the additional students would exacerbate the CUSD's capacity. In order to accommodate new students, the CUSD needs to either expand existing facilities or

---

<sup>40</sup> Personal communications between Ricky Caperton (PlaceWorks) and Captain Ken Binder, Division Commander, West Valley Patrol, April 11, 2014.

## LAND USE ALTERNATIVE B

construct new schools. However, Cupertino does not have sufficient locations for new school facilities to accommodate the increased enrollment expected. However, the CUSD would receive approximately \$9.1 million in development impact fees from Land Use Alternative B, which would mitigate the impacts from Land Use Alternative B per SB 50. The impact to the CUSD would be *less than significant*.

### *Fremont Unified High School District*

With the estimated increase new housing units to Cupertino, the FUHSD would experience increase students by 2040. Although current student enrollment almost equals to its capacity, the additional students would increase the capacity deficit for the FUHSD. However, the FUHSD has been modernizing its facilities with additional classroom and cafeterias to continuously address the capacity deficit issue, and additional development impact fee of \$6 million would ameliorate the capacity problem. The impact to the FUHSD would be *less than significant*.

### *Santa Clara Unified School District*

With new housing units with Land Use Alternative B, the expected growth in student enrollment for the SCUSD would increase. Although increase enrollment would add stress to the school in the SCUSD, development impact fees for Land Use Alternative B would mitigate the impact to the SCUSD facilities; therefore, the impacts to the SCUSD would be *less than significant*.

Furthermore, the General Plan includes policies and strategies that, once adopted, would preserve and support Cupertino's excellent public education system by partnering with local school districts and De Anza College to improve school facilities and infrastructure. Policy 2-7, Neighborhood Street Planning, would require the City to develop pedestrian-friendly street environments in each neighborhood that help create neighborhood identity, improve safety, increase opportunities for social interaction and connections to shopping, schools, recreation and other destinations. Supporting Strategy 2, Public Facilities, would require the City to evaluate existing and planned public facilities, such as schools and parks, to improve pedestrian access. Strategy 2, Public Facilities, would require the City to evaluate existing and planned public facilities, such as schools and parks, to improve pedestrian access. Policy 2-22, Jobs/Housing Balance, would require the City to strive for a more balanced ratio of jobs and housing units. Supporting Strategy 1, Housing and Mixed-Use, would require the City to strive to achieve a balanced jobs/housing ratio based on the policies and strategies contained in the Housing Element. Strategy 2, Housing Impact on Local Schools, recognizes that the quality of Cupertino schools (elementary and high school) is a primary asset of the City and directs the City to ensure that any new housing pays the statutorily mandated impact fees to mitigate any adverse impact to these systems. Policy 2-61, Planning for Schools, would require the City to recognize the financial impact of increased development on the school districts' ability to provide staff and facilities. Work with the districts to assure that the continued excellence of school services can be provided prior to granting approval for new development. Policy 2-93, School Playing Fields, would require the City to preserve school playing fields for school and community recreational uses. Strategy 1, School Expansion, would require the City to encourage schools to meet their expansion needs by building upward instead of outward into recreation fields. Strategy 2, School Parking Lots, would require the City to encourage schools to seek alternate parking or transportation solutions, rather than building new parking lots that infringe on playing fields.

## LAND USE ALTERNATIVE B

Therefore, with the mandatory payment of developer impact fees pursuant to SB 50 together with implementation of the General Plan policies and strategies that support the schools within Cupertino, impacts to the CUSD, FUHSD and SCUSD would be less than significant.

**Significance Without Mitigation:** Less than significant.

---

**PS-6                      Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would not result in cumulative impacts with respect to schools.**

---

Regional growth resulting from past, present, and reasonably foreseeable projects would result in increased demand for additional school facilities within all three school districts serving the City of Cupertino. Almost all of the schools in Cupertino experiences capacity deficits, and additional student enrollment would exacerbate the current capacity issue. Similar to development in Cupertino, the schools are expected to receive development impact fees from other development outside of Cupertino, which would mitigate the current and future capacity issues, which would help expand their facilities to accommodate future students. Therefore, Land Use Alternative B would have a *less-than-significant* impact on school facilities.

**Significance Without Mitigation:** Less than significant.

## Libraries

---

**PS-7                      Implementation of Land Use Alternative B would not result in the provision of or need for new or physically altered library facilities, the construction or operation of which could cause significant environmental impacts.**

---

Implementation of Land Use Alternative B could potentially add approximately 9,749 new residents to Cupertino by 2040, which would increase the demand for library services and facilities in Cupertino. Although Land Use Alternative B would result in an increase in employees throughout Cupertino as well, only residents within Santa Clara County can apply for a library card; therefore, the following analysis considers expected population increases, and not employment generation as a result of implementation of Land Use Alternative B.<sup>41</sup> Therefore, expected increases in employees in the city need not be further considered.

While an overall increase in residents is expected, growth under Land Use Alternative B would occur incrementally throughout the 26-year horizon; therefore, potential impacts resulting from increased demand for library services would not occur in the immediate future. It was confirmed that the existing 75 employees, as well as existing library facilities, would be sufficient to accommodate increased demand for

---

<sup>41</sup> Santa Clara County Library District, Santa Clara County Library District website, <http://www.scccl.org/about/joining/eligibility>, accessed April 8, 2014.

## LAND USE ALTERNATIVE B

library services, and no expansions would be required.<sup>42</sup> Additionally, the General Plan policies listed below would ensure that the City maintains an adequate level of library services to serve the residents of the city. Moreover, the Santa Clara County Library Strategic Plan (2008) also aims to ensure adequate library facilities are provided to sufficiently meet the demands of the City through the identification of goals and objectives, such as increasing the library's technology and increasing access to the library's physical space.

The General Plan includes policies and strategies that, once adopted, would ensure adequate library services are available for the residents of Cupertino. Within the Land Use/Community Design Element Policy 2-58, Library Service Level, would require the City to recognize that if the community desires a higher level of library service, cooperation between the County of Santa Clara and City of Cupertino in expanding library services and facilities is required. Policy 2-59, Library Planning, would require the City to integrate and coordinate any public library facility planning into all applicable General Plan policies, such as transportation, pedestrian and bike trails. Policy 2-60, Improving Library Service, would require the City to encourage the library to continue to incorporate new technology to enhance service levels within the library system. Additionally, under this policy the City is required to encourage the continued evolution of library collections and services to meet the needs of Cupertino residents of all ages, its richly diverse population and its local businesses.

The only facility deficiency identified by library staff is a lack of parking; however, communication with library staff has indicated that there is the potential for an expansion of public meeting space and the parking lot currently under consideration.<sup>43</sup>

In summary, the library has adequate capacity to accommodate the growth over the 26-year horizon of Land Use Alternative B and the expansion of existing library facilities or the construction of new facilities would not be required; therefore, impacts related to the provision of new or physically altered library facilities would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**PS-8                      Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to libraries.**

---

This EIR takes into account growth projected by Land Use Alternative B within the Cupertino city boundary and Sphere of Influence (SOI), in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). Cumulative impacts are considered in the context of the growth from development under Land Use Alternative B within the city combined with the estimated growth in the service areas of the SCCLD, which includes all unincorporated portions of Santa Clara County in addition to the incorporated portions of

---

<sup>42</sup> Personal communications between Ricky Caperton (PlaceWorks) and Derek Wolfgram, Deputy County Librarian for Community Libraries, April 4, 2014.

<sup>43</sup> Personal communications between Ricky Caperton (PlaceWorks) and Derek Wolfgram, Deputy County Librarian for Community Libraries, April 4, 2014.

## LAND USE ALTERNATIVE B

Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Milpitas, Monte Sereno, Morgan Hill, and Saratoga.<sup>44</sup> A significant cumulative environmental impact would result if this cumulative growth would exceed the ability of SCCLD to adequately serve the service area, thereby requiring construction of new facilities or modification of existing facilities.

Under this Alternative, there would be an increase to population as a result of future development allowed under Land Use Alternative B; however, the Santa Clara County Library Strategic Plan (2008), described in more detail in Section 4.12.5.1, Environmental Setting, of Chapter 4.12, Public Services and Recreation, of this Draft EIR, accounts for the entire SCCLD service area and provides a basis for analyzing the most efficient allocation of funds both for the district as a whole as well as among the different libraries in the SCCLD service area. This would not only allow for adequate funding to satisfy demand at the Cupertino library, but also, it would ensure that surrounding libraries are adequate to fulfill demand which in turn would reduce the demand at the Cupertino library by reducing deficiencies at surrounding facilities. As a result, implementation of Land Use Alternative B would result in a *less-than-significant* cumulative impact associated with libraries.

**Significance Without Mitigation:** Less than significant.

## Parks and Recreation

---

**PS-9                      Implementation of Land Use Alternative B would not increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur, or be accelerated.**

---

The City of Cupertino has an adopted parkland dedication standard of three acres of parkland for every 1,000 residents. Under Land Use Alternative B, the City would retain this standard. As shown in Table 4.12-7, in Chapter 4.12, Public Services and Recreation, there is a total of approximately 156 acres of parkland in Cupertino, or approximately 2.7 acres per 1,000 residents, based on an existing population of 58,302. Therefore, the City does not currently meet its adopted standard established under Policy 2-83, Park Acreage, in the General Plan.

The adoption of Land Use Alternative B could bring as many as 9,749 new residents to the city by 2040; therefore, increasing use of existing parkland, which could accelerate the physical deterioration of existing facilities. In order to comply with the proposed City standard of parkland, buildout of Land Use Alternative B would be required to provide 29 acres.<sup>45</sup> Although the City does not currently meet its adopted standard of providing three acres of parkland per 1,000 residents, future development under Land Use Alternative B would be required to meet the proposed standard. Therefore, while the addition of 9,749 new residents would require up to 29.2 acres of additional parkland, future development under Land Use Alternative B

---

<sup>44</sup> Santa Clara Library District, Santa Clara Library District website, <http://www.sccl.org/about/joining/eligibility>, accessed April 8, 2014.

<sup>45</sup> Acreage was calculated by multiplying the projected number of persons by the required acreage percentage. For example, 3 acres of City park per 1,000 persons is equivalent to .003 and  $.003 \times 9,749 = 29.2$ .



## LAND USE ALTERNATIVE B

would comply with Municipal Code regulations. Chapter 14.05, Park Maintenance Fee, would require developers to pay impact fees to maintain existing parks and recreation facilities and Chapter 18.24, Dedications and Reservations, would require residential developments to dedicate parklands or pay in-lieu fees to accommodate and offset their fair share of impacts to parklands. Further, future development would also be required to comply with applicable General Plan policies that, once adopted, would ensure adequate neighborhood, regional park, or other recreational facilities are available for the residents of Cupertino. Within the Land Use/Community Design Element, Policy 2-83, Park Acreage, would require the City to require the provision of parkland equal to a minimum of three acres for each 1,000 residents. Policy 2-84, Park Walking Distance, would require the City to ensure that each household is within a half-mile walk of a neighborhood park, or community park with neighborhood facilities, and that the route is reasonably free of physical barriers, including streets with heavy traffic. Additionally, under this policy wherever possible, the City must provide pedestrian links between parks.

Overall, Land Use Alternative B would result in development allocation increases throughout the city that would increase population, and subsequently the demand to parks and recreation facilities throughout the city. However, because buildout would occur incrementally throughout the 26-year horizon, and future development would be subject to comply with the Municipal Code Chapters 14.05 and 18.24, and the General Plan policies listed above that would ensure that future development provide their fair-share of parks to help meet the City's target of three acres per 1,000 residents, impacts would be *less than significant*.

---

**PS-10                      Implementation of Land Use Alternative B would not include or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.**

---

As discussed above in impact discussion PS-9, the City currently does not meet its adopted standard of providing three acres of parkland per 1,000 residents, and because Land Use Alternative B at buildout would add 9,749 residents to the City of Cupertino over the next 26 years, an increase in demand for existing parklands and recreation facilities would occur. Additionally, Policy 2-83, Park Acreage, would retain current park acreage provision requirements at three acres per 1,000 residents. This would increase the need for park areas, and the provision of such park areas could have adverse physical effects on the environment. Because future development would be required to comply General Plan Policies 2-74, Heritage Trees, and 2-75, Public Arts, as described in impact discussion PS-9 above, as well as other regulations described in Section 4.12.5.1, Environmental Setting, future development as a result of implementation of Land Use Alternative B could require or result in the construction or expansion of recreational facilities that could have an adverse physical effect on the environment. Similarly, Policies 2-78, Future Use of Blackberry Farm, 2-78.A, Master Planning Efforts for Parks, and 2-79, Recreational Opportunities for All Users Including Special Needs, would direct the City to conduct citywide planning for parks and to improve park access for underserved populations. Together these policies would also contribute to the potential creation of new parks that could have adverse physical effects. Additionally, Strategy 5, Flexibility in Standards, under Policy 2-82, Open Space and Trail Linkages, could result in the creation of new trails or open space areas in new developments under Land Use Alternative B, and the creation of such facilities could likewise have adverse physical effects on the environment.

## LAND USE ALTERNATIVE B

However, as future parks are proposed, they would be subject to project-level environmental review to identify potential impacts and mitigation measure to ensure that potential impacts would be reduced to a less-than-significant level with regards to the future construction or expansion of recreational facilities as a result of implementation of Land Use Alternative B; therefore, potential impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**PS-11**                    **Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to parks and recreational facilities.**

---

This EIR takes into account growth projected by Land Use Alternative B within the Cupertino city boundary and Sphere of Influence (SOI), in combination with impacts from projected growth in the rest of Santa Clara County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG). The geographic scope for this discussion includes park and recreation facilities within the city boundary, as well as Santa Clara County, and the Midpeninsula Regional Open Space District. As described above, the City would require subdivision development to fund park improvements and dedicate land through compliance with Municipal Code Chapter 14.05, Park Maintenance Fee, and Chapter 18.24, Dedications and Reservations, which would help to ensure the provision of adequate parklands in compliance with the City standard of providing three acres per 1,000 residents.

Implementation of Land Use Alternative B would allow for development to occur, which would cumulatively increase the demand for park and recreational services in the city; however, compliance with the City's Municipal Code, along with the policies listed above in impact discussion PS-9, would ensure that adequate parklands and recreational facilities are provided through in-lieu fees, maintenance fees, or parkland dedication in order to meet the City standards, which would mitigate potential impacts that future development would have on park and recreation services in the city.

Further, potential future impacts to Santa Clara Parks, as well as the Midpeninsula Regional Open Space District, would be mitigated through the contribution of property taxes to ensure facilities at these locations are adequately maintained and sufficient to accommodate growth associated with implementation of Land Use Alternative B.

Overall, this Alternative would not contribute to any potential cumulative impacts to park and cumulative impacts to park and recreational services would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

**LAND USE ALTERNATIVE B**

**5.3.7.13 TRANSPORTATION AND TRAFFIC**

**TRAF-1 Implementation of Land Use Alternative B would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.**

This impact discussion focuses on vehicular transportation. Impacts related to other modes of transportation are discussed under Impact TRAF-5 below.

**Intersection Levels of Service**

This section describes the traffic conditions that would result with the addition of the trips generated by the development included in Land Use Alternative B on the local roadway network, compared to traffic conditions with the 2040 No Project scenario. The roadway network is assumed to be the same as under the 2040 No Project scenario.

The results of the level of service analysis under Land Use Alternative B scenario compared to the 2040 No Project scenario are presented in Table 5.3-10. The results show that, of the 41 study intersections, 29 intersections would operate at an acceptable level of service under Land Use Alternative B, and twelve (12) intersections would operate at an unacceptable level of service during the AM peak hour, the PM peak hour, or both peak hours.

**TABLE 5.3-10 LAND USE ALTERNATIVE B INTERSECTION LEVELS OF SERVICE TABLE**

Study Inter-section	Intersection	LOS Standard	Peak Hour	No Project		Land Use Alternative B			
				Avg. Delay	LOS	Avg. Delay	LOS	Change in Crit. V/C	Change in Crit. Delay
1	SR 85 SB Ramps and Stevens Creek Boulevard <sup>a</sup>	D	AM	29.2	C	31.1	C	0.095	3.3
			PM	29.1	C	31.0	C	0.073	2.6
2	SR 85 NB Ramps and Stevens Creek Boulevard <sup>a</sup>	D	AM	51.1	D-	<b>60.2</b>	<b>E</b>	0.057	16.1
			PM	20.9	C+	20.9	C+	0.080	1.4
3	Stelling Road and Stevens Creek Boulevard <sup>a</sup>	E+	AM	46.2	D	47.2	D	0.040	-1.0
			PM	52.9	D-	<b>84.1</b>	<b>F</b>	0.219	63.9
4	Sunnyvale-Saratoga Road and Fremont Avenue <sup>b</sup>	E	AM	42.8	D	43.7	D	0.034	1.6
			PM	52.5	D-	60.1	E	0.059	13.0
5	Sunnyvale-Saratoga Road/De Anza Boulevard and Homestead Road <sup>a</sup>	D	AM	51.2	D-	<b>82.1</b>	<b>F</b>	0.188	54.7
			PM	<b>66.1</b>	<b>E</b>	<b>159.8</b>	<b>F</b>	0.427	188.7
6	De Anza Boulevard and	D	AM	46.4	D	<b>83.2</b>	<b>F</b>	0.294	127.0

## LAND USE ALTERNATIVE B

TABLE 5.3-10 LAND USE ALTERNATIVE B INTERSECTION LEVELS OF SERVICE TABLE

Study Intersection	Intersection	LOS Standard	No Project			Land Use Alternative B			
			Peak Hour	Avg. Delay	LOS	Avg. Delay	LOS	Change in Crit. V/C	Change in Crit. Delay
7	I-280 NB Ramp <sup>a</sup>	D	PM	71.7	E	136.9	F	0.506	221.9
			AM	47.0	D	83.8	F	0.251	102.0
8	De Anza Boulevard and I-280 SB Ramp <sup>a</sup>	D	PM	35.3	D+	85.1	F	0.452	193.8
			AM	45.8	D	50.3	D	0.050	5.7
9	De Anza Boulevard and Stevens Creek Boulevard <sup>a</sup>	E+	PM	76.2	E-	144.2	F	0.402	169.3
			AM	33.0	C-	35.4	D+	0.068	3.2
10	De Anza Boulevard and McClellan Road/Pacifica Drive	D	PM	70.7	E	94.3	F	0.102	36.1
			AM	44.0	D	47.1	D	0.037	4.7
11	De Anza Boulevard and Bollinger Road <sup>a</sup>	E+	PM	25.1	C	22.9	C+	0.019	-1.2
			AM	32.9	C-	35.1	D+	0.054	2.6
12	De Anza Boulevard and SR 85 NB Ramp <sup>a</sup>	D	PM	16.4	B	22.6	C+	0.091	10.2
			AM	23.9	C	25.3	C	0.040	2.1
13	De Anza Boulevard and SR 85 SB Ramp <sup>a</sup>	D	PM	22.2	C+	25.9	C	0.102	6.9
			AM	34.9	C-	43.9	D	0.142	12.9
14	Blaney Avenue and Homestead Road	D	PM	16.4	B	21.5	C+	0.150	6.4
			AM	47.6	D	47.8	D	0.010	0.4
15	\Wolfe Road and El Camino Real (SR 82) <sup>b</sup>	E	PM	51.8	D-	52.8	D-	0.022	1.0
			AM	45.8	D	46.9	D	0.016	0.8
16	Wolfe Road and Fremont Avenue <sup>c</sup>	E	PM	51.8	D-	56.0	E+	0.033	3.1
			AM	36.3	D+	38.3	D+	0.050	2.4
17	Wolfe Road and Homestead Road	D	PM	51.9	D-	96.9	F	0.198	66.5
			AM	17.0	B	20.6	C+	0.077	4.7
18	Wolfe Road and Pruneridge Avenue	D	PM	26.9	C	36.8	D+	0.074	13.8
			AM	88.3	F	104.9	F	0.067	29.2
19	Wolfe Road and I-280 NB Ramp <sup>a</sup>	D	PM	36.5	D+	55.8	E+	0.094	35.8
			AM	38.9	D+	49.8	D	0.056	20.5
20	Wolfe Road and I-280 SB Ramp <sup>a</sup>	D	PM	24.7	C	27.8	C	0.011	1.8
			AM	26.4	C	28.0	C	0.045	1.4
21	Wolfe Road and Vallco Pkwy	D	PM	51.2	D-	42.6	D	-0.067	-18.6
			AM	46.5	D	46.5	D	0.013	0.4
22	Wolfe Road/Miller Avenue and Stevens Creek Boulevard <sup>a</sup>	D	PM	72.2	E	49.8	D	-0.119	-32.2
			AM	42.0	D	42.2	D	0.008	0.4
23	Miller Avenue and Bollinger Road <sup>g</sup>	D	PM	44.2	D	46.1	D	0.020	3.2
			AM	26.6	C	24.3	C	0.070	-0.9
24	Finch Avenue and Stevens Creek Boulevard	D	PM	41.8	D	41.0	D	-0.085	-2.5

**LAND USE ALTERNATIVE B**

**TABLE 5.3-10 LAND USE ALTERNATIVE B INTERSECTION LEVELS OF SERVICE TABLE**

Study Intersection	Intersection	LOS Standard	Peak Hour	No Project		Land Use Alternative B			
				Avg. Delay	LOS	Avg. Delay	LOS	Change in Crit. V/C	Change in Crit. Delay
24	North Tantau Avenue/Quail Avenue and Homestead Road	D	AM	49.6	D	<b>56.9</b>	<b>E+</b>	0.064	11.3
			PM	43.6	D	48.1	D	0.052	6.4
25	North Tantau Avenue and Pruneridge Avenue	D	AM	29.2	C	30.1	C	0.022	0.6
			PM	16.6	B	16.8	B	0.010	0.4
26	North Tantau Avenue and Vallco Pkwy	D	AM	29.2	C	29.8	C	0.004	0.4
			PM	34.6	C-	35.7	D+	0.009	1.0
27	Tantau Avenue and Stevens Creek Boulevard	D	AM	47.4	D	50.3	D	0.058	4.0
			PM	<b>56.8</b>	<b>E+</b>	<b>64.0</b>	<b>E</b>	0.042	11.0
28	Lawrence Expressway and Homestead Road <sup>d</sup>	E	AM	59.0	E+	61.4	E	0.014	4.0
			PM	58.0	E+	64.4	E	0.024	7.6
29	I-280 SB Ramp and Stevens Creek Boulevard <sup>e</sup>	E	AM	34.8	C-	44.1	D	0.063	14.6
			PM	<b>84.9</b>	<b>F</b>	<b>80.6</b>	<b>F</b>	-0.024	-10.0
30	Agilent Tech Driveway and Stevens Creek Boulevard <sup>f</sup>	D	AM	52.9	D-	<b>65.9</b>	<b>E</b>	0.045	16.5
			PM	29.8	C	30.1	C	-0.021	-0.1
31	Lawrence Expressway SB Ramp and Stevens Creek Boulevard <sup>d</sup>	E	AM	72.8	E	<b>90.6</b>	<b>F</b>	0.058	24.0
			PM	29.9	C	29.8	C	-0.030	-1.3
32	Lawrence Expressway NB Ramp and Stevens Creek Boulevard <sup>d</sup>	E	AM	53.9	D-	69.2	E	0.058	19.1
			PM	30.1	C	29.7	C	0.008	0.6
33	Lawrence Expressway and Calvert Drive/I-280 SB Ramp <sup>d</sup>	E	AM	48.6	D	49.2	D	0.004	0.8
			PM	50.6	D	50.1	D	-0.002	-0.5
34	Lawrence Expressway and Bollinger Road/Moorpark Avenue <sup>d</sup>	E	AM	60.5	E	61.1	E	0.003	0.9
			PM	46.0	D	45.5	D	-0.012	0.1
35	De Anza Boulevard and Rainbow Drive (south)	D	AM	20.2	C+	19.7	B-	0.023	-0.3
			PM	19.2	B-	18.8	B-	0.048	0.1
36	Bubb Road/Peninsula Boulevard and Stevens Creek Boulevard	D	AM	31.0	C	31.3	C	0.079	1.3
			PM	31.1	C	33.2	C-	0.080	2.0
37	North Stelling Road/Hollenbeck Avenue and Homestead Road	D	AM	38.5	D+	39.8	D	0.060	4.3
			PM	43.6	D	44.4	D	0.035	2.8
38	Blaney Avenue and Stevens Creek Boulevard	D	AM	34.1	C-	37.8	D+	0.117	6.3
			PM	40.0	D	37.8	D+	0.009	4.2
39	Foothill Boulevard and Stevens Creek Boulevard	D	AM	48.7	D	49.2	D	0.011	1.8
			PM	25.2	C	26.6	C	0.026	1.8
40	Stelling Road and McClellan Road	D	AM	32.1	C-	32.2	C-	0.000	0.0
			PM	35.6	D+	35.8	D+	0.002	0.4

## LAND USE ALTERNATIVE B

TABLE 5.3-10 LAND USE ALTERNATIVE B INTERSECTION LEVELS OF SERVICE TABLE

Study Intersection	Intersection	LOS Standard	Peak Hour	No Project		Land Use Alternative B			
				Avg. Delay	LOS	Avg. Delay	LOS	Change in Crit. V/C	Change in Crit. Delay
41	Wolfe Road and Apple Campus Access <sup>h</sup>	D	AM	18.9	B-	21.3	C+	0.049	5.4
			PM	36.8	D+	44.1	D	0.060	8.4

Notes: **Bold and underlined** indicates a substandard level of service

**Bold, underlined, and shaded in gray** indicates a significant project impact

- This is a CMP intersection within the City of Cupertino. Cupertino applies its own standard of LOS D to CMP intersections.
- This is a CMP intersection within the City of Sunnyvale. The CMP's standard of LOS E applies.
- The City of Sunnyvale is the controlling jurisdiction for the intersection.
- This is a CMP intersection on a County Expressway. The CMP and County's standard of LOS E applies.
- This is a CMP intersection within the City of Santa Clara. The CMP's standard of LOS applies.
- The City of Santa Clara is the controlling jurisdiction for the intersection.
- The City of San Jose is the controlling jurisdiction for the intersection.
- This is a future intersection.

As shown in Table 5.3-10, six (6) of the eleven (11) intersections that would operate at an unacceptable level of service for at least one (1) peak hour under Land Use Alternative B were also predicted to operate at an unacceptable level of service under the No Project scenario. The Wolfe Road/Miller Avenue and Stevens Creek Boulevard (#21) intersection would operate at an unacceptable level of service for at least one peak hour under the No Project scenario improved from unacceptable to acceptable levels of service: LOS E to LOS D – PM Peak Hour.

The intersections that would operate at an unacceptable level of service are bolded and underlined in Table 5.3-10. All other study intersections would continue to operate at acceptable levels of service under Land Use Alternative B conditions. The level-of-service calculation sheets are included in Appendix G, Transportation and Traffic Data, of this Draft EIR.

Based on applying the significance criteria for traffic impacts discussed in Section 4.13.5, Thresholds of Significance, in Chapter 4.13, Transportation and Traffic, of this Draft EIR, there would be a significant impact at twelve (12) of the study intersections under Land Use Alternative B during one or both peak hours, as highlighted in the Table 4.13-10, Proposed Project Intersection Levels of Service Table, of Chapter 4.13, Transportation and Traffic, of this Draft EIR.

The following twelve (12) intersections would experience a *significant* impact under Land Use Alternative B traffic conditions:

- SR 85 Northbound Ramps and Stevens Creek Boulevard (#2): LOS E – AM Peak Hour
- Stelling Road and Stevens Creek Boulevard (#3): LOS F – PM Peak Hour
- Sunnyvale-Saratoga Road/De Anza Boulevard and Homestead Road (#5): LOS E- and F – AM and PM Peak Hours, respectively
- De Anza Boulevard and I-280 Northbound Ramp (#6): LOS F – AM and PM Peak Hours
- De Anza Boulevard and I-280 Southbound Ramp (#7): LOS F – AM and PM Peak Hours
- De Anza Boulevard and Stevens Creek Boulevard (#8): LOS F – PM Peak Hour
- De Anza Boulevard and McClellan Road/Pacifica Drive (#9): LOS F – PM Peak Hour
- Wolfe Road and Homestead Road (#16): LOS E – PM Peak Hour

## LAND USE ALTERNATIVE B

- Wolfe Road and I-280 Northbound Ramp (#18): LOS F – AM Peak Hour
- North Tantau Avenue/Quail Avenue and Homestead Road (#24): LOS E – AM Peak Hour
- Stevens Creek Boulevard and Tantau Avenue (#27): LOS E – PM Peak Hour
- Lawrence Expressway Southbound Ramp and Stevens Creek Boulevard (#31): LOS F – AM Peak Hour

### Mitigation Measures

**Mitigation Measure TRAF-1:** The City of Cupertino shall commit to preparing and implementing a Traffic Mitigation Fee Program to guarantee funding for roadway and infrastructure improvements that are necessary to mitigate impacts from future projects based on the then current City standards. As part of the preparation of the Traffic Mitigation Fee Program, the City shall also commit to preparing a "nexus" study that will serve as the basis for requiring development impact fees under AB 1600 legislation, as codified by California Code Government Section 66000 et seq., to support implementation of the proposed Project. The established procedures under AB 1600 require that a "reasonable relationship" or nexus exist between the traffic improvements and facilities required to mitigate the traffic impacts of new development pursuant to the proposed Project. The following examples of traffic improvements and facilities would reduce impacts to acceptable level of service standards and these, among other improvements, could be included in the development impact fees nexus study:

- **SR 85 Northbound Ramps and Stevens Creek Boulevard (#2):** An exclusive left-turn lane for the northbound leg of the intersection (freeway off-ramp) at the intersection of SR 85 and Stevens Creek Boulevard would result in one left-turn lane, one all-movement lane, and one right turn lane. The additional lane could be added within the existing Caltrans right-of-way.
- **Stelling Road and Stevens Creek Boulevard (#3):** The addition of a second exclusive left-turn lane for the eastbound leg of the intersection from Stevens Creek Boulevard to northbound Stelling Road, which could be accomplished by reworking the median. Right turns would share the bike lane.
- **Sunnyvale-Saratoga Road/De Anza Boulevard and Homestead Road (#5):** Widen De Anza Boulevard to four lanes in each direction or the installation of triple left-turn lanes.
- **De Anza Boulevard and I-280 Northbound Ramp (#6):** Restriping of De Anza Boulevard in the southbound direction to provide room for right turn vehicles to be separated from through traffic may be required. The bike lane would be maintained, and right turns would occur from the bike lane. The right turns would continue to be controlled by the signal and would need to yield to pedestrians. Painting a bike box at the front of the lane to provide space for bikes wait at red lights may enhance the bicycle experience.
- **De Anza Boulevard and Stevens Creek Boulevard (#8):** Restripe westbound Stevens Creek Boulevard to provide room for right turn vehicles to be separated from through vehicles may be required. The right turn vehicles will share the bike lane and will still be controlled by the traffic signal. Paint a bike box at the front of the lane to provide bikes a place to wait at red lights. The pedestrian crossings will not be affected may enhance the bicycling experience.

## LAND USE ALTERNATIVE B

- **De Anza Boulevard and McClellan Road/Pacifica Drive (#9):** Realign the intersection that is currently offset resulting in inefficient signal timing such that the McClellan Road and Pacifica Drive legs are across from each other may be required. In addition, double left turn lanes may be required to be added to De Anza Boulevard with sections of double lanes on McClellan Road and Pacifica Drive to receive the double left turn lanes. These improvements will require the acquisition of right-of-way and demolition of existing commercial buildings. However, some existing right-of-way could be abandoned, which would reduce the net right-of-way take.
- **Wolfe Road and Homestead Road (#16):** The addition of a third southbound through lane to the southbound approach of the intersection of Wolfe Road and Homestead Road may be required, as well as the addition of a southbound exclusive right-turn lane. Three southbound receiving lanes on the south side of the intersection currently exist. An additional westbound through lane for a total of three through-movement lanes, an additional receiving lane on Homestead westbound to receive the additional through lane, as well as the addition of a westbound exclusive right-turn lane may be required. This will require widening Homestead Road. An additional eastbound through lane for a total of three through-movement lanes, an additional receiving lane on Homestead eastbound to receive the additional through lane, as well as the addition of an eastbound exclusive left-turn lane for a total of two left-turn lanes may be required. These improvements will require the acquisition of right-of-way and demolition of parking areas.
- **Wolfe Road and I-280 Northbound Ramp (#18):** An additional northbound through lane for a total of three through-movement lanes may be required. This will require widening the Wolfe Road overcrossing. The lane needs to be extended north of the interchange so that there are a continuous three lanes northbound. Right-of-way acquisition may be required. In addition to widening the overcrossing, the City may wish to pursue a redesign of the interchange to go from a partial cloverleaf design to a diamond design. This could help with heavy volumes in the right lane, which contributes to the level-of-service deficiency.
- **North Tantau Avenue/Quail Avenue and Homestead Road (#24):** Restriping of the southbound leg of the intersection (Quail Avenue) to provide a separate left turn lane may be required. This will require the removal of on-street parking near the intersection. The level-of-service calculations show that with implementation of these improvements, the intersection would operate at an acceptable LOS D.
- **Tantau Avenue and Stevens Creek Boulevard (#27):** The addition of a separate left-turn lane to northbound Tantau Avenue may be required. Right-of-way acquisition and demolition of existing commercial buildings would be required.
- **Lawrence Expressway Southbound Ramp and Stevens Creek Boulevard (CMP, County)(#31):** The addition of a second right-turn lane for the southbound leg of the intersection at the Lawrence Expressway Southbound Ramp and Stevens Creek Boulevard may be required. Both lanes would need to be controlled by the signal, and disallow right turns on red. Right-of-way acquisition may be required.

The fees shall be assessed when there is new construction, an increase in square footage in an existing building, or the conversion of existing square footage to a more intensive use. The fees collected shall be



## LAND USE ALTERNATIVE B

applied toward circulation improvements and right-of-way acquisition. The fees shall be calculated by multiplying the proposed square footage, dwelling unit, or hotel room by the appropriate rate. Traffic mitigation fees shall be included with any other applicable fees payable at the time the building permit is issued. The City shall use the traffic mitigation fees to fund construction (or to recoup fees advanced to fund construction) of the transportation improvements identified above, among other things that at the time of potential future development may be warranted to mitigate traffic impacts.

While implementation of Mitigation Measure TRAF-1 would secure a funding mechanism for future roadway and infrastructure improvements that are necessary to mitigate impacts from future projects based on then current standards, impacts would remain *significant and unavoidable*, because the City cannot guarantee improvements at these intersections at this time. This is in part because the nexus study has yet to be prepared and because some of the impacted intersections are under the jurisdictions of the Cities of Sunnyvale and Santa Clara and Caltrans. Specifically, the following intersections are outside the jurisdiction of Cupertino:

- SR 85 Northbound Ramps and Stevens Creek Boulevard (#2)
- De Anza Boulevard and I-280 Northbound Ramp (#6)
- Wolfe Road and Homestead Road (#16)
- Wolfe Road and I-280 Northbound Ramp (#18)
- North Tantau Avenue/Quail Avenue and Homestead Road (#24)
- Lawrence Expressway Southbound Ramp and Stevens Creek Boulevard (CMP, County)(#31)

However, the City of Cupertino will continue to cooperate with these jurisdictions to identify improvements that would reduce or minimize the impacts to intersections and roadways as a result of implementation of future development projects in Cupertino.

**Significance with Mitigation:** Significant and Unavoidable.

### Roadway Segments Average Daily Traffic Volumes

In order to better characterize the conditions on Cupertino's arterials and major collectors, 33 roadway segments were selected for evaluation under 2040 conditions. Figure 4.13-1, Study Intersections and Roadway Segments, in Section 4.13.1, Study Intersections and Roadway Segments, of Chapter 4.13, Transportation and Traffic, of this Draft EIR, showed each roadway segment number, and Figure 4.13-6, Roadway Segments Volumes, in Section 4.13.4, Existing Conditions and Environmental Setting, of Chapter 4.13, Transportation and Traffic, of this Draft EIR, graphically illustrated the existing traffic volumes on these roadway segments, rounded to the nearest thousand.

Table 5.3-11 presents the existing 24-hour traffic volume data (Average Daily Traffic, or ADT) for each roadway segment, as well as ADT under No Project conditions, and under Land Use Alternative B conditions.

## LAND USE ALTERNATIVE B

**TABLE 5.3-11 AVERAGE DAILY TRAFFIC ON SELECTED ROADWAY SEGMENTS – LAND USE ALTERNATIVE B**

Segment #	Location	Existing ADT	2040 Forecast Volume	
			No Project	Land Use Alt B
1	Foothill Blvd north of Stevens Creek Blvd	20,878	24,183	24,031
2	Stevens Creek Blvd east of Crescent Rd	29,371	34,689	33,814
3	Bubb Rd south of Stevens Creek Blvd	13,339	16,436	17,978
4	Stevens Creek Blvd west of Stelling Rd	30,587	30,404	32,052
5	Stelling Rd south of Stevens Creek Blvd	14,710	29,485	30,142
6	Stelling Rd north of Stevens Creek Blvd	17,493	23,644	25,721
7	Stevens Creek Blvd east of Stelling Rd	28,730	39,569	40,978
8	Homestead Rd east of Ontario Dr	18,357	20,246	25,047
9	De Anza Blvd south of Bollinger Rd	36,756	46,073	47,715
10	De Anza Blvd south of Stevens Creek Blvd	43,216	52,030	54,074
11	De Anza Blvd north of Stevens Creek Blvd	42,455	53,221	54,141
12	De Anza Blvd south of Homestead Rd	52,676	53,666	54,647
13	Sunnyvale-Saratoga Rd north of Homestead Rd	42,246	47,833	46,412
14	Bollinger Rd east of De Anza Blvd	15,877	20,202	20,610
15	Stevens Creek Blvd east of De Anza Blvd	30,779	41,803	44,739
16	Homestead Rd east of De Anza Blvd	24,876	35,070	36,398
17	Blaney Ave north of Stevens Creek Blvd	6,294	8,677	8,254
18	Stevens Creek Blvd east of Blaney Ave	30,348	42,549	46,704
19	Homestead Rd east of Blaney Ave	22,895	32,807	34,453
20	Miller Ave south of Stevens Creek Blvd	17,379	26,621	28,941
21	Wolfe Rd north of Vallco Pkwy	34,200	45,606	47,194
22	Wolfe Rd south of Homestead Rd	31,751	41,655	42,505
23	Wolfe Rd north of Homestead Rd	18,825	31,744	33,314
24	Vallco Parkway east of Wolfe Rd	2,917	3,947	9,824
25	Homestead Rd east of Wolfe Rd	10,481	21,456	22,483
26	Tantau Ave north of Vallco Pkwy	6,839	9,708	10,681
27	Stevens Creek Blvd east of Tantau Ave	27,515	32,208	36,136
28	Bollinger Rd east of Johnson Ave	11,164	23,374	24,079
29	Lawrence Expy north of Bollinger Rd	23,577	42,606	46,337
30	Lawrence Expy south of Pruneridge Ave	69,249	87,142	98,404
31	Stevens Creek Blvd west of Tantau Ave	25,476	34,543	36,485

**LAND USE ALTERNATIVE B**

**TABLE 5.3-11 AVERAGE DAILY TRAFFIC ON SELECTED ROADWAY SEGMENTS – LAND USE ALTERNATIVE B**

Segment #	Location	Existing ADT	2040 Forecast Volume	
			No Project	Land Use Alt B
32	Wolfe Rd south of I-280 NB Ramps (over I-280)	36,190	44,547	46,795
33	Homestead Rd west of Stelling Rd	16,990	22,541	23,596

Source: Tube counts conducted on Wed, Sept. 18, 2013. Hexagon Transportation Consultants, Inc.

Cupertino does not have level of service analysis methodologies, standards, or thresholds of significance for roadway segments. Therefore, the ADT projections for the future scenarios are presented for informational purposes. Any project impacts to traffic operations are fully captured by the intersection analysis.

**Freeway Levels of Service**

Ten (10) freeway segments were selected for analysis under 2040 conditions. As described in Section 4.13.5, Thresholds of Significance, of Chapter 4.13, Transportation and Traffic, of this Draft EIR, the addition of project traffic causes a traffic impact on a CMP freeway segment when:

- The level of service of the freeway segment is LOS F under existing conditions, and
- The number of new trips added by the project is more than one percent of the freeway capacity.

Table 5.3-12 presents the daily capacity of both the mixed-flow lanes and the High Occupancy Vehicle (HOV) lanes on each of the study freeway segments. Since daily LOS is not available for freeway segments, the lowest of the two peak-hour LOS levels, as reported in VTA’s 2012 CMP Monitoring Study, is also shown.

Table 5.3-12 presents the number of additional trips that would be generated under the proposed Land Use Alternative B conditions in comparison with the number of trips projected under the 2040 No Project conditions in both the mixed-flow lanes and the High Occupancy Vehicle (HOV) lane on each of the study freeway segments. Table 5.3-12 also indicates the percentage of capacity that the projected number of additional trips represents. If there is a percentage increase greater than 1 percent and the existing LOS is shown as F, then there would be a significant impact.

None of the HOV lane segments would be significantly impacted under this Alternative. However, under Land Use Alternative B conditions, the following four (4) mixed-lane freeway segments would be significantly impacted:

- SR 85 Southbound between I-280 and Stevens Creek Boulevard
- I-280 Eastbound between Lawrence Expressway and Saratoga Avenue
- I-280 Westbound between Saratoga Avenue and Lawrence Expressway
- I-280 Westbound between De Anza Boulevard and SR 85

**LAND USE ALTERNATIVE B**

**TABLE 5.3-12 FREEWAY SEGMENT IMPACT ANALYSIS UNDER LAND USE ALTERNATIVE B**

Fwy	Segment	Direction	Mixed-Flow Lane							HOV Lane						
			# of Lanes	Daily Capacity (vehicle)	Existing LOS <sup>a</sup>	Project Trips	% Capacity	Impact?	# of Lanes	Capacity (vph)	Daily Capacity (vehicle)	Existing LOS <sup>a</sup>	Project Trips	% Capacity	Impact?	
SR 85	Saratoga Ave	to De Anza Blvd	NB	2	44,000	E	195	0.4%	No	1	1,650	16,500	E	24	0.1%	No
SR 85	De Anza Blvd	to Stevens Creek Blvd	NB	2	44,000	F	202	0.5%	No	1	1,650	16,500	E	27	0.2%	No
SR 85	Stevens Creek Blvd	to I-280	NB	2	44,000	C	392	0.9%	No	1	1,650	16,500	D	60	0.4%	No
SR 85	I-280	to W. Homestead Rd	NB	2	44,000	F	344	0.8%	No	1	1,650	16,500	F	43	0.3%	No
SR 85	W. Homestead Rd	to I-280	SB	2	44,000	C	-1,708	-3.9%	No	1	1,650	16,500	B	48	0.3%	No
SR 85	I-280	to Stevens Creek Blvd	SB	3	69,000	F	1,747	2.5%	<b>Yes</b>	1	1,650	16,500	D	121	0.7%	No
SR 85	Stevens Creek Blvd	to De Anza Blvd	SB	2	44,000	F	-82	-0.2%	No	1	1,650	16,500	D	41	0.2%	No
SR 85	De Anza Blvd	to Saratoga Ave	SB	2	44,000	F	-246	-0.6%	No	1	1,650	16,500	C	2	0.0%	No
I-280	Magdalena Ave	to Foothill Expwy	EB	3	69,000	D	-1,217	-1.8%	No	1	1,650	16,500	B	-38	-0.2%	No
I-280	Foothill Expwy	to SR 85	EB	3	69,000	D	-1,176	-1.7%	No	1	1,650	16,500	C	-73	-0.4%	No
I-280	SR 85	to De Anza Blvd	EB	3	69,000	E	181	0.3%	No	1	1,650	16,500	C	5	0.0%	No
I-280	De Anza Blvd	to Wolfe Rd	EB	3	69,000	E	387	0.6%	No	1	1,650	16,500	D	142	0.9%	No
I-280	Wolfe Rd	to Lawrence Expwy	EB	3	69,000	D	753	1.1%	No	1	1,650	16,500	C	131	0.8%	No
I-280	Lawrence Expwy	to Saratoga Ave	EB	3	69,000	F	853	1.2%	<b>Yes</b>	1	1,650	16,500	D	32	0.2%	No
I-280	Saratoga Ave	to Lawrence Expwy	WB	3	69,000	F	986	1.4%	<b>Yes</b>	1	1,650	16,500	E	-28	-0.2%	No
I-280	Lawrence Expwy	to Wolfe Rd	WB	3	69,000	F	-3,272	-4.7%	No	1	1,650	16,500	E	-21	-0.1%	No
I-280	Wolfe Rd	to De Anza Blvd	WB	3	69,000	F	456	0.7%	No	1	1,650	16,500	F	33	0.2%	No
I-280	De Anza Blvd	to SR 85	WB	3	69,000	F	798	1.2%	<b>Yes</b>	1	1,650	16,500	F	100	0.6%	No
I-280	SR 85	to Foothill Expwy	WB	3	69,000	F	-394	-0.6%	No	1	1,650	16,500	F	-83	-0.5%	No
I-280	Foothill Expwy	to Magdalena Ave	WB	3	69,000	D	396	0.6%	No	1	1,650	16,500	D	-33	-0.2%	No

Note: **Bold Yes** indicates a significant project impact.

Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2012.

**LAND USE ALTERNATIVE B**

**Mitigation Measures**

Even with implementation of Mitigation Measure TRAF-1, which includes preparing and implementing a Traffic Mitigation Fee Program to guarantee funding for roadway and infrastructure improvements that are necessary to mitigate impacts from future projects based on the then current City standards, the impacts would be *significant and unavoidable*.

**Significance Without Mitigation:** Significant and unavoidable.

**Vehicle Miles Traveled with Land Use Alternative B**

As described above under Section 4.13.2.1, Regulatory Setting, of Chapter 4.13, Traffic and Transportation, the VTA countywide travel demand model is used to help evaluate cumulative transportation impacts of local land use decisions on the CMP system. Therefore, the daily (24-hour) VMT were tabulated with Land Use Alternative B using the Santa Clara VTA countywide travel demand model with refined land use estimates for the City of Cupertino. The VMT estimates in the VTA model are sensitive to changes in land use. Generally, land uses that reflect a more balanced jobs-housing ratio in the VTA model result in lower per capita VMT.

The total daily VMT and the VMT per capita are presented in Table 5.3-13. As shown in the table, VMT per capita is forecast to increase to 10.2 miles per service population per day in 2040 with this Alternative, compared to 10.5 miles per service population per day in 2013 under existing conditions. As discussed in the Air Quality discussion above, daily VMT in the Project Study Area would increase at a slower rate (22.3 percent) between 2013 and 2040 than would the service population of the Project Study Area (25.0 percent). A slight decrease such as this could be indicative of increased development of both households and jobs, with potentially higher rates of increases in jobs (than households) in a relatively jobs-rich area, providing opportunities for increases in average trip lengths.

**TABLE 5.3-13 VMT PER CAPITA**

	2000-2020 General Plan	Land Use Alternative B
Daily VMT	997,145	1,097,596
Household Units	23,294	24,715
Total Population	63,873	68,051
Total Jobs	30,848	39,092
VMT Per Capita	<b>10.5</b>	<b>10.2</b>

Source: Association of Bay Area Government (ABAG) Projections 2013; Hexagon Transportation Consultants. 2014.

The VMT by trip orientation is presented in Table 5.3-14. As shown in the table for Land Use Alternative B, much of the VMT is oriented to internal-external trip making. However, there is not an overwhelming

## LAND USE ALTERNATIVE B

imbalance of internal-external trip making over external-internal trip making for Land Use Alternative B compared to the current General Plan or compared to the Project.

**TABLE 5.3-14 VMT BY TRIP ORIENTATION**

Trip Orientation	2000-2020 General Plan	2000-2020 General Plan VMT Proportions	Land Use Alternative B	Project VMT Proportions
Total Cupertino VMT <sup>a</sup>	997,145	100%	1,097,596	100%
Internal-External VMT <sup>b</sup>	540,670	54%	608,058	55%
External-Internal VMT <sup>c</sup>	413,479	42%	439,508	40%
Internal-External VMT <sup>d</sup>	42,996	4%	50,030	5%

Notes: Estimate of 2030 VMT is based on the current Comprehensive Plan and on preliminary land use projections.

a. Trips with one trip end outside Cupertino were counted as one trip-end, whereas trips with both ends in Cupertino were counted as two trip-ends.

b. "Internal-External" VMT refers to VMT generated by trips associated with a home base in Cupertino and a work or non-work destination outside Cupertino.

c. "External-Internal" VMT refers to VMT generated by trips associated with a home base outside Cupertino and a work or non-work destination in Cupertino.

d. "Internal-Internal" VMT refers to VMT generated by trips associated with a home base in Cupertino and a work or non-work destination in Cupertino.

Source: Hexagon Transportation Consultants. 2014.

As discussed in Section 4.13.2.1, Regulatory Setting, of Chapter 4.13, Transportation and Traffic, SB 743 requires impacts to transportation network performance to be viewed through a filter that promotes the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. Some alternative metrics were identified in SB 743 including VMT, which can help identify how projects (land development and infrastructure) influence accessibility (i.e. access to places and people) and even emissions, but they do not provide information about how the transportation network performs or functions with respect to efficiency or user experience. Accessibility is an important planning objective in many communities, including Cupertino, but so is travel time or delay experienced by users. SB 743 does not prevent a city or county from continuing to analyze delay or LOS as part of other plans (i.e. the general plan), studies, or on-going network monitoring, but once the new CEQA Guidelines are implemented, which is estimated to be following the certification and adoption by the Secretary for Resources of the final draft of changes to CEQA Guidelines by OPR on July 1, 2014, these metrics may no longer constitute the sole basis for CEQA impacts.

While Cupertino does not currently have VMT analysis methodologies, standards, or thresholds of significance, this analysis has been provided for informational purposes only. However, because future growth under the proposed Project would come incrementally over approximately 26 years and would be guided by a policy framework that is generally consistent with many of the principal goals and objectives established in regional planning initiatives for the Bay Area, this additional growth would be consistent with the regional planning objectives established for the Bay Area, which concentrates new development within infill sites and within PDAs.

---

## LAND USE ALTERNATIVE B

---

**TRAF-2**            **Implementation of Land Use Alternative B would conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.**

---

### CMP Impacts

Of the 41 study intersections included in this EIR document, 21 are included in Santa Clara County's Congestion Management Program (CMP). Impact TRAF-1, which presents the results of the impact analysis under 2040 No Project Conditions and Land Use Alternative B on all of the study intersections, includes the 21 CMP intersections. Land Use Alternative B resulted in *significant* impacts to the following eight (8) CMP intersections during at least one of the peak hours:

- SR 85 Northbound Ramps and Stevens Creek Boulevard (#2)
- Stelling Road and Stevens Creek Boulevard (#3)
- Saratoga-Sunnyvale Road/De Anza Boulevard and Homestead Road (#5)
- De Anza Boulevard and I-280 Northbound Ramps (#6)
- De Anza Boulevard and I-280 Southbound Ramps (#7)
- De Anza Boulevard and Stevens Creek Boulevard (#8)
- Wolfe Road and I-280 Northbound Ramp (#18)
- Lawrence Expressway Southbound Ramp and Stevens Creek Boulevard (#31)

### Mitigation Measures

Mitigation for these impacts is described above in the Impact TRAF-1, and as discussed, even with implementation of Mitigation Measures TRAF-1, which includes preparing and implementing a Traffic Mitigation Fee Program to guarantee funding for roadway and infrastructure improvements that are necessary to mitigate impacts from future projects based on the then current City standards, the impacts to these CMP intersections would be *significant and unavoidable*.

**Significance With Mitigation:** Significant and unavoidable.

---

**TRAF-3**            **Implementation of Land Use Alternative B would not substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersection) or incompatible uses (e.g. farm equipment).**

---

Since Land Use Alternative B represents a program-level planning effort, it does not directly address project-level design features or building specifications; however, the General Plan includes policies and strategies that, once adopted, would reduce potential hazards due to roadway design or incompatible uses. Policy 4-10, Roadway Plans that Complement the Needs of Adjacent Land Use, would require that roadway plans complement the needs of adjacent land uses; under this policy, the City would be required to adopt road improvement standards for rural, semi-rural, urban, and suburban roads. Policy 4-10 would require the City to survey intersections to ensure their operation is efficient and promotes the safety of pedestrians

## LAND USE ALTERNATIVE B

and bicyclists. Policy 6-13, Roadway Design, would require the City to involve the Fire Department in the design of public roadways. Policy 6-16, Hillside Road Upgrades, would “require new hillside development to upgrade existing access roads to meet Fire Code and City standards.” Policy 4-11, Curb Cuts, would direct developments to minimize the number of resulting curb cuts, thereby reducing potential for vehicle conflicts. Policy 4-12, Street Improvement Planning, would require streetscape planning to be “an integral part of a project to ensure an enhanced streetscape and the safe movement of people and vehicles,” and Policy 4-13, Safe Parking Lots, would “require parking lots that are safe for pedestrians.” Policy 6-56, Road Improvements to Reduce Truck Impacts, directs the City to consider road improvements to reduce the impact from trucks. Finally, Strategy 3, Community Protection, of Policy 4-16, Transportation Noise, Fumes and Hazards, would require protecting the community from the effects of the transportation system, by enforcing laws related to dangerous and abusive driving, among other requirements.

Future development under the Land Use Alternative B would increase in both residential and commercial land uses. As these land uses develop, construction and modifications of new and existing roadways would be necessary to support the growth. As with current practice, the improvements would be designed and reviewed in accordance to the City of Cupertino Standard Details, which are promulgated and administered by the City Engineering Department. Additionally, incompatible uses would be discouraged by the General Plan. Therefore, the impact of Land Use Alternative B would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>TRAF-4</b>	<b>Implementation of Land Use Alternative B would not result in inadequate emergency access.</b>
---------------	--

---

Because Land Use Alternative B is a program-level planning effort, it does not directly address project-level design features or building specifications; however, the General Plan includes policies that, once adopted, would ensure efficient circulation and adequate access are provided in the city, which would help facilitate emergency response. Policy 6-8, Early Project Review, directs the City to “involve the Fire Department in early design stages of projects requiring public review.” Policy 6-9, Commercial and Industrial Fire Protection Guidelines, would require the City to coordinate with the Fire Department to develop new guidelines for fire protection for commercial and industrial land uses. Policy 6-10, Fire Prevention and Emergency Preparedness, would require the City to promote fire prevention and emergency preparedness through city-initiated public education programs, through the government television channel, the Internet and the Cupertino Scene. Policy 6-13, Roadway Design, would require the City to involve the Fire Department in the design of public roadways and directs the City to ensure that frequent median breaks are used to provide “timely access.” Additionally, Policy 6-14, Dead-End Street Access, allows the use of private roadways during emergency responses in hillside subdivisions where dead-end streets impair access. Policy 6-15, Hillside Access Routes, directs the city to require new hillside development to have frequent grade breaks in access routes to ensure a timely response from fire personnel. Policy 6-16, Hillside Road Upgrades, directs the city to require new hillside development to upgrade existing access roads to meet Fire Code and City standards. Finally, Policy 6-17, Private Residential Electronic Security Gates, discourages the use of private residential electronic security gates to help ensure timely emergency access to these areas.



## LAND USE ALTERNATIVE B

Any new streets or developments that would result from implementation of Land Use Alternative B would be subject to City engineering standards and the General Plan policies described above.

Ongoing implementation of the General Plan policies and the City's engineering standards would ensure that adequate emergency access is provided in Cupertino. Therefore, impacts associated with the implementation of Land Use Alternative B would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**TRAF-5      Implementation of Land Use Alternative B would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.**

---

Both the Valley Transportation Plan 2040, enacted by the Valley Transportation Authority, and Plan Bay Area: Strategies for a Sustainable Region, the 2040 Regional Transportation Plan enacted by the MTC in 2013, contain strategies designed to support alternative modes of transportation, including walking, bicycling, and public transit. Additionally, the City of Cupertino's Pedestrian Transportation Guidelines and Cupertino Bicycle Transportation Plan identify and prioritize improvements to enhance the pedestrian and bicycle environment.

Additionally, the General Plan includes policies and strategies that, once adopted, would ensure adequate public transit, bicycle, and pedestrian facilities are available to the residents of Cupertino. Within the Land Use/Community Design Element, Policy 2-26, Heart of the City Special Area, and supporting strategies, require the City to create a positive and memorable image along Stevens Creek Boulevard of mixed-use development; enhanced activity gateways and nodes; and safe and efficient circulation and access for all modes of transportation. Within the Circulation Element, Policy 4-3, Reduced Reliance on the Use of Single-Occupant Vehicles, would require the City to promote the use of alternative forms of transportation instead of single-occupancy vehicles (SOVs) by encouraging attractive alternatives. Supportive strategies under this policy encourage new developments to include facilities supportive of walking, biking, and transit use, as well as providing street space for bus turnouts, bike lanes, or other alternative transportation infrastructure. Policy 4-4, Improve Pedestrian and Bicycle Circulation Throughout Cupertino, expressly directs the City to expand city-wide pedestrian and bicycle circulation in order to provide improved recreation, mobility and safety. Policy 4-5, Pedestrian Access, would require the City to create pedestrian access between new subdivisions and school sites, and to review existing neighborhood circulation plans to improve safety and access for pedestrians and bicyclists to school sites, including completing accessible network of sidewalks and paths. Policy 4-6, Regional Trail Development, would require the City to continue to plan and provide for a comprehensive system of trails and pathways consistent with regional systems, including the Bay Trail, Stevens Creek Corridor and Ridge Trail, and with the policies contained in the Land Use and Community Design Element. The General Alignment of the Bay Trail, as shown in the Association of Bay Area Governments' Bay Trail planning document, is incorporated in the General Plan by reference. Policy 4-7, Increased Use of Public Transit, would require the City to support and encourage the increased use of public transit. Policy 4-9, Traffic Service and Pedestrians Needs, would require the City to balance the needs of pedestrians with desired traffic service, and, where necessary and appropriate, allow a lowered LOS standard to better accommodate pedestrians on major streets and at specific intersections. Policy 4-12,

## LAND USE ALTERNATIVE B

Street Improvement Planning, would require the City to plan street improvements such as curb cuts, sidewalks, bus stop turnouts, bus shelters, light poles, benches and trash containers as an integral part of a project to ensure an enhanced streetscape and the safe movement of people and vehicles with the least possible disruption to the streetscape. Policy 4-13, Safe Parking Lots, directs the City to require parking lots that are safe for pedestrians. Policy 4-15, School Traffic Impacts on Neighborhoods, would require the City to minimize the impact of school drop-off, pick-up and parking on neighborhoods.

Implementation of Land Use Alternative B would therefore support and would not conflict with plans, programs and policies regarding bicycle or pedestrian facilities, or decrease the performance and safety of such facilities. Therefore, related impacts from implementation of Land Use Alternative B would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

<b>TRAF-6</b>	<b>Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would result in cumulatively considerable impacts.</b>
---------------	---

---

The analysis of Land Use Alternative B, above, addresses cumulative impacts to the transportation network in the city and its surroundings; accordingly, cumulative impacts would be the same as Land Use Alternative B's impacts, which are *significant and unavoidable*.

**Significance With Mitigation:** Significant and unavoidable.

### 5.3.7.14 UTILITIES

#### Water

---

<b>UTIL-1</b>	<b>Implementation of Land Use Alternative B would have insufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements are needed.</b>
---------------	---

---

The Project Study Area is within the water utility service area of California Water Service Company (Cal Water) and San Jose Water Company (SJWC). As discussed in Chapter 4.14, Utilities and Service Systems, the City undertook a Water Supply Evaluation (WSE) in May 2014 to assess the adequacy of the water supply for Land Use Alternative B. (The WSE is included as Appendix H, Utilities and Service Systems Data, of this Draft EIR.)

Table 5.3-15 shows the development at buildout (2040) for Land Use Alternative B by water utility service area. The following discussion describes the impacts of Land Use Alternative B by Cal Water and SJWC service area.

**LAND USE ALTERNATIVE B**

**Cal Water**

The 2010 Cal Water LAS District UWMP did not account for the 18.9 percent population increase between 2000 and 2010 provided by US Census data; therefore, the Cal Water LAS District demand in the WSE was revised due to an increase in population projected for the next 26 years. However, stronger water conservation targets were used in the WSE than were used in the 2010 UWMP in terms of average water usage per capita are projected - 159 gpcd for 2020 rather than 193 gpcd as indicated in the 2010 UWMP. This is due to Cal Water data showing that per capital water usage has declined in the past five years. For the period from 2009 to 2013, it averaged 136 gpcd. Even using conservative assumptions, the 2040 projected LAS District total demand is 15,302 acre feet per year (afy) compared to the 2008 actual 15,490 afy.

**TABLE 5.3-15 PROPOSED DEVELOPMENT IN CAL WATER AND SJWC SERVICE AREAS**

Land Use Alternative B	Cal Water	SJWC (+ Cupertino Water)	Total
Residential	2,479 units	837 units	3,361 units
Office	2,355,000 sf	185,231 sf	2,540,231 sf
Commercial	972,734 sf	370,945 sf	1,343,679 sf
Hotel	839 rooms	–	839 rooms

Notes: sf = square feet.

Source: Table 2 of Water Supply Evaluation (Yarner & Associates), May 20, 2014; prepared with input from the City of Cupertino.

For this Alternative, it is assumed that projected water demand is additive to the LAS District and Apple Campus 2 demands. Also, it is assumed that development will occur at a relatively constant rate over the 26-year horizon period. The WSE includes detailed calculations of water demand from this Alternative, based on the land uses shown in Table 5.3-1. The WSE determined the water demand at buildout (2040) for this Alternative in the Cal Water LAS District would be 1,560 afy. Therefore, the five-year increase Land Use Alternative B demand is 312 afy.<sup>46</sup> Table 5.3-16 presents the combined projected water demand for the Cal Water LAS District, Apple Campus 2 development and Land Use Alternative B.

**TABLE 5.3-16 PROJECTED WATER DEMAND CAL WATER LAS DISTRICT +LAND USE ALTERNATIVE B (AFY)**

	2008 (Actual)	2012 (Actual)	2015	2020	2025	2030	2035	2040
LAS District + Apple Campus 2	15,490	12,779	13,641	12,651	13,200	13,749	14,298	14,847
Land Use Alternative B	0	0	0	312	624	936	1,248	1,560
<b>Total</b>	<b>15,490</b>	<b>12,779</b>	<b>13,641</b>	<b>12,963</b>	<b>13,824</b>	<b>14,685</b>	<b>15,546</b>	<b>16,407</b>

Note: afy = acre feet per year.

Source: Table 9 (Cal Water) of Water Supply Evaluation (Yarner & Associates), May 20, 2014; modified to reflect Land Use Alternative B. Note: the 2015 "Total" demand value in Table 9 of the WSE (14,065) appears to be in error; the assumed correct value (13,641) is reported here.

<sup>46</sup> 1,560 afy divided by 5 years = 312 afy.

## LAND USE ALTERNATIVE B

In normal hydrologic years, non-contract water<sup>47</sup> is expected to be available. Cal Water also expects increases in approved SCVWD deliveries will eventually reduce availability of non-contract water. According to the SCVWD, LAS District projected water scheduled delivery amounts will be available through at least 2035.<sup>48</sup>

As previously indicated, the LAS District has historically pumped only a fraction of its total annualized groundwater well capacity, leaving the balance in groundwater storage. Because of this banking practice, there is an adequate supply of stored groundwater in the aquifers supplying LAS District wells.

### *Normal Hydrologic Year*

Total groundwater supplied is the quantity necessary to make up the difference between LAS District demand and SCVWD supplies – both scheduled and non-contract deliveries. Therefore, total supply equals projected demand for any given year. A normal hydrologic year supply is considered the same as the SB X7 7 target water demand projections plus the Apple Campus 2 demand. Table 5.3-17 shows that groundwater will be reliable throughout the 26-year planning horizon of Land Use Alternative B and that no supply deficiencies are expected during a normal hydrologic year.<sup>49</sup>

**TABLE 5.3-17 DEMAND AND SUPPLY COMPARISON - NORMAL HYDROLOGIC YEAR: CAL WATER LAS DISTRICT +LAND USE ALTERNATIVE B (AFY)**

	2015	2020	2025	2030	2035	2040
Total Demand	13,641	12,963	13,824	14,685	15,546	16,407
SCVWD Supply	10,200	9,700	10,200	11,200	12,120	13,000
LAS Groundwater	3,441	3,378	3,855	3,831	3,888	3,984
Total Supply	13,6415	13,078	14,055	15,031	16,008	16,984
<b>Difference</b>	<b>0</b>	<b>115</b>	<b>231</b>	<b>346</b>	<b>462</b>	<b>577</b>

Source: Table 14 (Cal Water) of Water Supply Evaluation (Yarne & Associates), May 20, 2014; Demand modified to reflect Land Use Alternative B; SVWD Supply and LAS Groundwater supply are as presented in WSE (i.e. original values in Table 14 of WSE). Note: The supply surplus (Difference) shown in the table is theoretical. Total groundwater actually supplied is the quantity necessary to make up the difference between LAS district demand and SCVWD supplies – both scheduled and Non-Contract deliveries. Hence, in practice, total supply always equals projected demand for any given year.

### *Single Dry Year*

In single dry years Cal Water can expect a reduction in non-contract water and may possibly see a reduction in firm scheduled deliveries. If any reduction in scheduled deliveries were to occur, the needed supply could be made up by pumping stored groundwater.<sup>50</sup>

<sup>47</sup> Cal Water has a contract with SCVWD until 2035 to purchase treated surface water and convey it to the LAS District. The SCVWD “contract” water is delivered through four connections within its transmission system. “Non-contract” water is water not included in the contracted water.

<sup>48</sup> California Water Service Company. 2010. 2010 Urban Water Management Plan, Los Altos-Suburban District. June 2011.

<sup>49</sup> California Water Service Company. 2010. 2010 Urban Water Management Plan, Los Altos-Suburban District. June 2011.

<sup>50</sup> California Water Service Company. 2010. 2010 Urban Water Management Plan, Los Altos-Suburban District. June 2011.

**LAND USE ALTERNATIVE B**

During a single dry year it is unlikely that SCVWD would request a reduction in its retailer’s (i.e. Cal Water’s or SJWC’s) water demand. SCVWD maintains carryover storage in its reservoirs, locally stored groundwater reserves, and has access of up to 50,000 afy of drought supplies stored as groundwater in the Semitropic Groundwater Bank.<sup>51</sup> According to SCVWD’s 2010 UWMP there will be a 5 percent shortfall in treated water contract deliveries in 2020 and 2025. After this time it is expected that projects resulting from their Water Master Plan will create sufficient additional supplies so that contract deliveries can be met during single dry years. It is assumed that groundwater will provide the necessary supply to meet dry year demands if purchased water reductions are required.

Table 5.3-18 shows that increased groundwater pumping would be able to supply the difference in order to meet 2020 and 2025 demand. Because no reduction in SCVWD supplies are anticipated, the groundwater supply would remain the same. Therefore, the combination of pumped groundwater and purchased water will be sufficient to meet projected single-dry year demands

**TABLE 5.3-18 DEMAND AND SUPPLY COMPARISON - ONE DRY YEAR: CAL WATER LAS DISTRICT +LAND USE ALTERNATIVE B (AFY)**

	2015	2020	2025	2030	2035	2040
Total Demand	13,641	12,963	13,824	14,685	15,546	16,407
SCVWD Supply	10,200	9,700	10,200	11,200	12,120	13,000
LAS Groundwater	3,441	3,378	3,855	3,831	3,888	3,984
Total Supply	13,641	13,078	14,055	15,031	16,008	16,984
<b>Difference</b>	<b>0</b>	<b>115</b>	<b>231</b>	<b>346</b>	<b>462</b>	<b>577</b>

Note: afy = acre feet per year.

Source: Table 15 (Cal Water) of Water Supply Evaluation (Yarne & Associates), May 20, 2014; Demand modified to reflect Land Use Alternative B; SCVWD Supply and LAS Groundwater supply as presented in WSE (i.e. original values in Table 15 of WSE). Note: The supply surplus (Difference) shown in the table is theoretical. Total groundwater actually supplied is the quantity necessary to make up the difference between LAS District demand and SCVWD supplies – both scheduled and Non-Contract deliveries. Hence, in practice, total supply always equals projected demand for any given year.

*Multiple Dry Years*

SCVWD gives highest priority to delivery of Contract water to urban water retailers and indicates it can deliver 100 percent of its contracted supply obligations even during multiple dry year periods. However, during such periods, SCVWD will reduce or eliminate deliveries of Non-Contract water. If drought conditions warrant, SCVWD will reduce or eliminate surface water recharging to aquifers within its service area. If further reductions are necessary, deliveries to agricultural customers will be reduced or eliminated. Deliveries to SCVWD urban water retailers are the last to be affected by drought conditions. Based on SCVWD supplies and policies, Cal Water expects that 100 percent of Contract water will be delivered to the LAS District during a multiple dry year period. Cal Water also plans on pumping its LAS District groundwater supplies so that there will be no reduction in total supply available to meet water demands.

<sup>51</sup> SCVWD.2013.Board Agenda Memo; Budget Adjustment for 2012 Water Banking Operations; January 22, 2013.  
[http://cf.valleywater.org/About\\_Us/Board\\_of\\_directors/Board\\_meetings/\\_2013\\_Published\\_Meetings/MG49261/AS49274/AI49995/DO50113/DO\\_50113.pdf](http://cf.valleywater.org/About_Us/Board_of_directors/Board_meetings/_2013_Published_Meetings/MG49261/AS49274/AI49995/DO50113/DO_50113.pdf).

## LAND USE ALTERNATIVE B

In the following multiple dry year period analysis, normal supply of Contract Water is expected to be available, but Non-Contract deliveries are not. This assumes that reservoir carryover storage in SWP, CVP, and local systems is average prior to the drought. At the beginning of a prolonged drought period, it is also assumed that there are adequate supplies of groundwater stored in the aquifers pumped.

Cal Water also assumes that in future multiple dry year periods, SCVWD would initially ask for voluntary reductions in supply requested by 10 percent. The magnitude of reductions requested could increase depending on the degree and duration of the drought. SCVWD considers its groundwater and imported supplies as one source and does not distinguish between water sources when asking for demand reductions from its retailers. As a result, retail agencies would be asked to reduce total demand, not just imported water use. Cal Water expects that its LAS District customers would be able to achieve these requested reductions in water use. In the LAS District, total annual water use per customer is expected to be lower than in previous dry year periods due to the greater investment in water conservation programs that would be implemented in coming years. As seen in the more recent drought from 2007-2009, the response by Cal Water customers in reducing water use would likely occur faster than in past droughts due to improved water conservation plans and better communications on the need to reduce water use.

Table 5.3-19 compares demand to supply for a 4 year multiple dry year period. For the first three years, the analysis conservatively assumes that demand would remain unchanged from a normal hydrologic year, and that in the fourth year demand would decrease by 10 percent as does the delivery of SCVWD “contract” water. In all cases, the supply is projected to meet 100 percent of demand. It is noted that even if demand did not decrease by 10 percent in year 4 and SCVWD supply did, the increased groundwater supplied in 2040 would be 1,641 acre feet for a total of 4,713 acre feet, which can be pumped by the LAS District by increasing well operation times.

**TABLE 5.3-19 DEMAND AND SUPPLY COMPARISON - MULTIPLE DRY YEAR PERIOD (4 YEARS): CAL WATER LAS DISTRICT + LAND USE ALTERNATIVE B (AFY)**

	2015	2020	2025	2030	2035	2040
Total Demand: Years 1 - 3	13,641	12,963	13,824	14,685	15,546	16,407
SCVWD Supply	10,200	9,700	10,299	11,200	12,120	13,000
LAS Groundwater	3,441	3,378	3,855	3,831	3,888	3,984
Total Supply	13,641	13,078	14,055	15,031	16,008	16,984
<b>Difference</b>	<b>0</b>	<b>115</b>	<b>231</b>	<b>346</b>	<b>462</b>	<b>577</b>
Total Demand: Year 4	12,279	11,667	12,442	13,216	13,991	14,766
SCVWD Supply	9,180	8,730	9,180	10,080	10,908	11,700
LAS Groundwater	3,099	2,937	3,262	3,136	3,083	3,066
<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Note: afy = acre feet per year.

Source: Table 16 (Cal Water) of Water Supply Evaluation (Yarne & Associates), May 20, 2014; Demand years 1-3 modified to reflect Land Use Alternative B; Supply years 1-3 is as presented in WSE (i.e. original values in WSE Table 16); Demand year 4 modified to reflect Land Use Alternative B, and reduced 10 percent[per WSE assumptions]; SCVWD Supply year 4 reduced 10 percent[per WSE assumptions]; LAS Groundwater supply year 4 adjusted so that total supply matches demand [per assumptions in WSE]. Note: The supply surplus (Difference) shown in the table for years 1-3 is theoretical. Total groundwater actually supplied is the quantity necessary to make up the difference between LAS District demand and SCVWD supplies – both scheduled and Non-Contract deliveries. Hence, in practice, total supply always equals projected demand for any given year.

## LAND USE ALTERNATIVE B

As summarized in the WSE, based on the items listed below, it can be reasonably concluded for the next 26 years of operation (2014 – 2040), the LAS District will have adequate water supplies to meet projected demands associated with Land Use Alternative B under the most conservative assumptions regarding potable water use for normal hydrologic, single dry year and multiple dry year conditions:<sup>52</sup>

- Adequacy of existing and planned supplies from SCVWD and LAS District groundwater,
- Plans to maintain existing wells and construct new ones to increase well production capacity,
- Plans to continue to purchase SCVWD Non-Contract water whenever it is made available and thereby increase basin groundwater storage for use during drought periods,
- In-place, ongoing and planned expanded water conservation programs and best management practices for reducing demand during normal hydrologic years, single dry year and multiple dry years in compliance with SB X7 7, CPUC and MOU requirements,
- Cal Water’s historic proven success in obtaining increased reductions in water use during multiple dry years by implementing its demand reduction program, and
- Over 80 years of experience in continuously providing an adequate supply to meet demands during normal, single and multiple dry years in the LAS District.

In summary, buildout of Land Use Alternative B would not result in insufficient water supplies from Cal Water under normal year conditions. In addition, during single dry year and multiple dry years, with the proposed and existing water conservation regulations and measures in place, buildout of Land Use Alternative B also would not result in a significant impact on water supply from Cal Water.

### San Jose Water Company

Table 5.3-20 shows the actual amount of water supplied to SJWC’s system from each source in 2010 and projections until 2035. Projected surface water is based on a long term average at SJWC. Groundwater and SCVWD Treated Water projections include SJWC’s plan to acquire additional water needed for development projects by installing production wells within the distribution system, by purchasing additional treated water from SCVWD and recycled water from the South Bay Water Recycling Program. The overall long-term strategy for groundwater as discussed in the 2003 SCVWD Integrated Water Resource Planning Study (IWRP) is to maximize the amount of water available in the groundwater basins to protect against drought and emergencies. SCVWD attempts to maximize use of treated local and imported water when available.

As previously noted, conservation is treated by SJWC as an additional source of water that offsets potable water demand. SJWC projects an increase in conservation through 2035 to over 5,500 afy conserved due to implementation of a more intensified conservation program. Conservation savings are anticipated resulting from increased use of ultra-low flush toilets, high efficiency toilets, low flow showerheads, water efficient appliances, individual conservation, and reduction in landscape irrigation requirements.

---

<sup>52</sup>California Water Service Company. 2010. 2010 Urban Water Management Plan, Los Altos-Suburban District. June 2011.

## LAND USE ALTERNATIVE B

**TABLE 5.3-20 CURRENT AND PROJECTED SJWC WATER SUPPLY – INCLUDING CONSERVATION (AFY)**

	2010	2015	2020	2025	2030	2035
SCVWD Treated Water	64,783	72,636	74,344	76,086	77,864	79,677
SJWC Groundwater	51,107	57,187	58,340	59,516	60,716	61,940
SJWC Surface Water	15,968	12,080	12,080	12,080	12,080	12,080
<b>Total Demand</b>	<b>131,858</b>	<b>141,903</b>	<b>144,764</b>	<b>147,682</b>	<b>150,660</b>	<b>153,697</b>
Recycled Water	1,208	2,556	4,980	5,234	5,501	5,782
Additional Conservation	4,886	5,106	5,300	5,438	5,579	5,579
<b>Total with Conservation</b>	<b>137,952</b>	<b>149,565</b>	<b>155,044</b>	<b>158,354</b>	<b>161,740</b>	<b>165,058</b>

Note: afy = acre feet per year.

Source: Table 6 (SJWC) of Water Supply Evaluation (Yarne & Associates), May 15, 2014.

The SCVWD will continue to work with SJWC and other local water retailers to refine future projections of both treated water and groundwater use to ensure planning efforts are consistent. Groundwater from the Basin is a substantial source of water for SJWC’s entire service area. In the past five years, groundwater has been the source for approximately one third of SJWC’s total supply.

The City of Cupertino, as discussed previously, has leased the operation and maintenance of its water system to SJWC. Based on information from SJWC, approximately 98 percent of water supply for the City’s water system is purchased from SCVWD. SJWC periodically operates two city wells with a nominal pumping rate of 500 gpm each for a combined production of 1,000 gpm. For the 17 years that SJWC has been operating the Cupertino system, increases in demand have been met by increased purchases from SCVWD and are factored into the demand projections made by SJWC in Table 5.3-20. Therefore, the water supply analysis provided for SJWC also applies to the City of Cupertino system.

SJWC has multiple sources of water which provide a high degree of supply reliability. For added reliability, SJWC incorporates diesel fueled generators which will operate wells and pumps in the event of power outages. Because SCVWD supplies nearly 90 percent of SJWC’s annual water supply, SJWC depends on SCVWD’s supply reliability measures.

SJWC has an established well replacement program. The program identifies and replaces two wells per year based on numerous criteria, including a well’s production and observed water quality problems. The replacement of older wells and optimization of existing wells will allow SJWC to maintain its groundwater supply reliability. SCVWD’s policy is to achieve 95 percent reliability of supply during significant water shortages that occur during multiyear droughts. To accomplish this, SJWC can use less groundwater in certain areas or zones to achieve the overall balance which best meets SCVWD’s and SJWC’s operational goals.

### *Normal, Single-Dry, and Multiple Dry Hydrologic Years*

Table 5.3-21 presents 2035 projected supply and demand during normal, single-dry, and multiple-dry years. These numbers were generated by multiplying the current and 2035 demands by the percentages of normal water supply SJWC experienced during the 1977 single year and the 1987-1992 multi-year droughts.



**LAND USE ALTERNATIVE B**

**TABLE 5.3-21 SJWC 2035 SUPPLY AND DEMAND -- NORMAL, SINGLE-DRY, AND MULTIPLE-DRY YEARS (ACRE FEET)**

2035 Supply and Demand	Normal Water Year	Single-Dry Water Year	Multiple-Dry Water Years				
			Year 1	Year 2	Year 3	Year 4	Year 5
Supply Total	153,697	109,279	152,929	149,701	123,572	121,882	110,816
Demand Total	153,697	109,279	152,929	149,701	123,572	121,882	110,816
<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Source: Table 15 (SJWC) of Water Supply Evaluation (Yarne & Associates), May 15, 2014.

If during a drought the SJWC should experience a shortage of supply, it will activate its current Water Shortage Contingency Plan. As noted in the WSE (May 20, 2014) prepared for the City, *“although there appears to be shortages during droughts, in reality voluntary and involuntary water conservation greatly reduces demand.”* The SJWC foresees meeting all future demands.

SJWC has multiple sources of water which provide a high degree of supply reliability. For added reliability, SJWC incorporates diesel fueled generators which will operate wells and pumps in the event of power outages. SJWC also has an established well replacement program. The program identifies and replaces two wells per year based on numerous criteria, including a well’s production and observed water quality problems. The replacement of older wells and optimization of existing wells will allow SJWC to maintain its groundwater supply reliability.

The WSE includes detailed calculations of water demand from Land Use Alternative B, based on the land use in the SJWC (plus Cupertino Water) service area. As reported in the WSE, total projected water demand at build out of Land Use Alternative B for the SJWC and leased Cupertino Water service areas is estimated to be 357 afy without taking into account requirements for water conservation measures to be incorporated into new development. If these measures are accounted for, Land Use Alternative B water demand in the SJWC service area is 303 afy.

As previously noted, the total projected increase in the SJWC demand between 2015 and 2040 (25 years) for a normal hydrologic year is 14,831 afy.<sup>53</sup> The Land Use Alternative B demand at buildout represents 2 percent of this total SJWC demand.

Since the SJWC 2010 UWMP projected increased demand is based on general growth in its service area, it is reasonable to assume that Land Use Alternative B demand is accounted for in the overall demand forecast as it constitutes a small percentage.

SJWC currently owns rights to receive water from the following sources: 1) groundwater - from the Santa Clara Valley Sub-basin; 2) imported surface water - from the SCVWD; and 3) local surface water - from Los Gatos Creek and Local Watershed.

<sup>53</sup> 156,734 afy minus 141,903 afy equals 14,831 afy; see Table 4.14-4 .

## LAND USE ALTERNATIVE B

Based on the foregoing reasons, there is sufficient SJWC water available to supply the demand projected for Land Use Alternative B for all existing demand and other projected increases in water demand for the next 26 years for normal, one dry year and multiple dry year periods.

In summary, buildout of Land Use Alternative B would not result in insufficient SJWC water supplies under normal year conditions. In addition, during single dry year and multiple dry years, with the proposed and existing water conservation regulations and measures in place, buildout of Land Use Alternative B would not result in a significant impact on SJWC water supply.

## Combined Water Supply

In conclusion, compliance with General Plan policies and strategies, applicable regulations, which are listed below, would further reduce potential impacts on water supplies for both retailers (SJWC and Cal Water). Future development within the Project Study Area would include the latest technology in water efficient plumbing fixtures and irrigation systems, as specified in the 2010 California Plumbing Code and the Cal Water's and SJWC's water efficiency measures relevant to new residential and commercial development.

The General Plan includes policies and strategies that, once adopted, would ensure adequate water supplies are available for the residents of Cupertino. Within the Land Use/Community Design Element, Policy 2-76, Stevens Creek Park, would require the Santa Clara County Parks program to pursue the goal of connecting upper and lower Stevens Creek Parks. The County parks budget should pursue acquisition to the extent possible and emphasize passive park development in keeping with the pristine nature of the hillsides, and work to retain the watershed and storage basin properties of Stevens Creek. Policy 2-77, Continuous Open Space, would require the City to actively pursue inter-agency cooperation including with the SCVWD, which can help Cupertino carry out its open space policies by continuing to cooperate with local government to fund access and restoration projects. For example, SCVWD helped Cupertino prepare its natural flood plain policy for Stevens Creek between Stevens Creek Boulevard and the Stevens Creek reservoir, which has implications for ground water recharge and water quality. Policy 2-88, Park Design, would require the City to design parks to utilize the natural features and topography of the site and to keep long-term maintenance costs low. Strategy 1, Native Plants, would require the City to maximize the use of native plants and minimize water use. Strategy 2, Creek Enhancement, would require the City to, where possible, open and restore covered creeks and riparian habitat. Strategy 3, Demonstration Gardens, would require the City to consider the creation of demonstration gardens in some parks where feasible as a method of educating the public on sustainable landscaping design and techniques. Within the Environmental Resources/Sustainability Element, Policy 5-1, Principles of Sustainability, would require the City to incorporate the principles of sustainability into Cupertino's planning and development system in order to improve the environment, reduce greenhouse gas emission and meet the needs of the present community without compromising the needs of future generations. Policy 5-29, Coordination of Local Conservation Policies with Region-wide Conservation Policies, directs the City to continue coordination with regional water districts regarding water conservation efforts, including compliance with drought plans. Additionally, Policy 6-19, Water Conservation and Demand Reduction Measures, would direct the City to proactively reduce water use, consistent with State goals. Strategies 1 through 3 under this policy would, respectively, direct the City to develop and Urban Water Management Plan (UWMP), comply with the State's 20x20x20 Water Conservation Plan, and increase the use of recycled water where feasible. This coordination and

## LAND USE ALTERNATIVE B

compliance with regional and State conservation programs and requirements would serve to reduce water use and demand overall and especially during drought years, which would serve to ensure adequate water supplies under implementation of Land Use Alternative B.

Buildout of Land Use Alternative B would not result in insufficient water supplies from either SJWC or Cal Water under normal, single-dry, or multiple dry years, and new or expanded entitlements would not be needed. Impacts from the implementation of Land Use Alternative B would be *less than significant*.

### *Applicable Regulations*

- The Water Conservation Act of 2009 (Senate Bill SB X7 7)
- 2010 California Plumbing Code that would require water conserving fixtures
- Cupertino's Landscaping Ordinance - Municipal Code Chapter 14.15
- Cupertino's Water Conservation Ordinance - Municipal Code Chapter 15.32
- SJWC's, Cal Water's and SCVWD's water supply and demand management strategies and water shortage contingency plan identified in the UWMPs
- City of Cupertino General Plan

**Significance Without Mitigation:** Less than significant.

---

**UTIL-2      Implementation of Land Use Alternative B would not require or result in the construction of new water facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.**

---

As discussed in Impact UTIL-1 above, the water demand associated with Land Use Alternative B would be served with available and planned water supplies provided by Cal Water and SJWC.

The General Plan includes policies and strategies that, once adopted, would ensure adequate water supplies are available for the residents of Cupertino. Within the Environmental Resources Element, Policy 5-26, Recycled Water, would direct the City to explore opportunities for the use of recycled water, including the potential expansion of an existing recycled water line from Sunnyvale to the Homestead Road area. This development of this facility could cause significant environmental effects. Policy 7-4, New Development Public Infrastructure Requirements, would require new development to provide or pay for adequate public facilities to accommodate growth; this policy could therefore result in the construction of new water facilities or the expansion of existing facilities to serve new development. Although creation of new infrastructure or facilities associated with these policies could create significant environmental effects, compliance with applicable regulations, as discussed below, as well as project-level environmental review would serve to evaluate and mitigate potential adverse physical effects.

In addition, future development under Land Use Alternative B would be located within already-developed urban areas and therefore, would connect to an existing water distribution system. Future development would be required to pay "construction tax" fees as outlined in Section 4.14.1.1, Regulatory Framework, in Chapter 4.14, Utilities and Service Systems, of this Draft EIR, allocated to service, system maintenance and capital upgrades.

## LAND USE ALTERNATIVE B

In summary, in accordance with the General Plan policies listed above and under Impact UTIL-1, and applicable regulations below, buildout of Land Use Alternative B would not result in water demands that would require the construction of new water treatment facilities or the expansion of existing facilities.

### *Applicable Regulations*

- The Water Conservation Act of 2009 (Senate Bill SB X7 7)
- 2010 California Plumbing Code that would require water conserving fixtures
- Cupertino's Landscaping Ordinance - Municipal Code Chapter 14.15
- Cupertino's Water Conservation Ordinance - Municipal Code Chapter 15.32
- SJWC's, Cal Water's and SCVWD's water supply and demand management strategies and water shortage contingency plan identified in the UWMPs

**Significance Without Mitigation:** Less than significant.

---

**UTIL-3      Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to water supply.**

---

This section analyzes potential impacts to water supply that could occur from Land Use Alternative B in combination with other reasonably foreseeable projects in the surrounding area. The geographic scope of this cumulative analysis is taken as the Cal Water and SJWC service areas. While Land Use Alternative B would contribute to an increased cumulative demand for water supply, the increased demand would not exceed the long-term supply under normal circumstances, as discussed above. Additionally, Cal Water, SJWC and SCVWD UWMPs determine that the water supply will be sufficient to accommodate future demand in the Cal Water and SJWC service areas through 2035, and by extension through 2040, under normal circumstances. In the multiple dry years, with Cal Water, SJWC and SCVWD drought contingency plans in place, any shortages would be managed through demand reductions and other measures such as increased groundwater pumping. In addition, with SB X7 7 and the State, county, and local water conservation ordinances in place, each jurisdiction would be required to conserve its water use through establishing water efficiency measures. In addition, the General Plan includes policies and strategies that, once adopted, would ensure adequate water supplies are available for the residents of Cupertino. Policy 5-29, Coordination of Local Conservation Policies with Region-wide Conservation Policies, directs the City to continue coordination with regional water districts regarding water conservation efforts, including compliance with drought plans. This coordination and compliance would serve to reduce water use and demand overall and especially during drought years. Additionally, Policy 6-19, Water Conservation and Demand Reduction Measures, would direct the City to proactively reduce water use, consistent with State goals. Strategies 1 through 3 under this policy would, respectively, direct the City to develop and Urban Water Management Plan (UWMP), comply with the State's 20x20x20 Water Conservation Plan, and increase the use of recycled water where feasible. In addition, pursuant to SB 610 and SB 221, WSAs would be prepared for large development projects prior to approval of each project to ensure adequate water supply for new development.

## LAND USE ALTERNATIVE B

Overall, cumulative water demands would neither exceed planned levels of supply nor require building new water treatment facilities or expanding existing facilities beyond what is currently planned. In addition, future development would be required to pay development fees (i.e. construction taxes), which would offset the costs of system maintenance and capital upgrades to support the new development in the Cal Water and SJWC service areas. Therefore, the cumulative impact would be less than significant.

**Significance Without Mitigation:** Less than significant

### Wastewater

---

**UTIL-4      Implementation of Land Use Alternative B would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.**

---

#### *San Jose/Santa Clara Water Pollution Control Plant*

The Cupertino Sanitary District (CSD) sewer collection system directs wastewater to the San Jose/Santa Clara Water Pollution Control Plant (SJ/SCWPCP), a joint powers authority. The San Francisco RWQCB established wastewater treatment requirements for the SJ/SCWPCP in an NPDES Permit (Order No. R2-2009-0038), adopted April 8, 2009 and effective June 1, 2009.<sup>54</sup> The NPDES Order sets out a framework for compliance and enforcement applicable to operation of the SJ/SCWPCP and its effluent, as well as those contributing influent to the SJ/SCWPCP. This NPDES Order currently allows dry weather discharges of up to 167 million gallons per day (mgd) with full tertiary treatment, and wet weather discharges of up to 271 mgd with full tertiary treatment.

As the dischargers named in the NPDES Permit, the City of San Jose and the City of Santa Clara implement and enforce pretreatment programs for effluent discharged into Artesian Slough, tributary to Coyote Creek and South San Francisco Bay. The dischargers conduct programs to educate residents, professionals, and business owners about the proper use of their sewer and drainage systems in order to help preserve their own facilities and to help protect the environment.

The CSD is one of six additional satellite collection systems that discharge into the SJ/SCWPCP. Each satellite collection system is responsible for an ongoing program of maintenance and capital improvements for sewer lines and pump stations within its respective jurisdiction in order to ensure adequate capacity and reliability of the collection system. The responsibilities include managing overflows, controlling Infiltration and Inflow (I&I) and implementing collection system maintenance.

The SJ/SCWPCP, serving as the Discharger, and has an approved pretreatment program, which include approved local limits, as required by prior permits. The previous permit required the Discharger to evaluate its local limits –such as those established by the CSD -- to ensure compliance with updated effluent limits. These local limits are approved as part of the pretreatment program required by this permit. The

---

<sup>54</sup> San Francisco RWQCB NPDES Permit (Order No. R2-2009-0038) for SJ/SCWPCP. [http://www.waterboards.ca.gov/rwqcb2/board\\_info/agendas/2009/april/SJSC\\_FinalOrder%20-%204-09.pdf](http://www.waterboards.ca.gov/rwqcb2/board_info/agendas/2009/april/SJSC_FinalOrder%20-%204-09.pdf).

## LAND USE ALTERNATIVE B

SJ/SCWPCP is required to monitor the permitted discharges in order to evaluate compliance with permit conditions.

With continued compliance with applicable regulations listed below, projected wastewater generated from potential future development under Land Use Alternative B would not exceed the wastewater treatment requirements or capacity of the SJ/SCWPCP. Therefore, the wastewater treatment requirements of the San Francisco RWQCB would not be exceeded due to buildout of Land Use Alternative B, resulting in a *less-than-significant* impact.

### *City of Sunnyvale Water Pollution Control Plant*

The Sunnyvale sewer collection system, which serves a small area of the Project Component locations along Stevens Creek Boulevard, directs wastewater to the Sunnyvale Water Pollution Control Plant (SWPCP). The San Francisco RWQCB established wastewater treatment requirements for the SWPCP in an NPDES Permit (Order No. R2-2009-0061), adopted August 12, 2009 and effective October 1, 2009. Discharge Prohibition III.C of the permit states the average dry weather effluent flow shall not exceed 29.5 mgd. Exceeding the SWPCP's average dry weather flow design capacity (29.5 mgd) may result in lowering the reliability of achieving compliance with water quality requirements. The prohibition against exceeding design capacity is meant to ensure effective wastewater treatment by limiting flows to the SWPCP's design treatment capability.

Treated wastewater from the SWPCP flows into Moffett Channel, which is a tributary to the Guadalupe Slough and the South San Francisco Bay. The SWPCP has an average dry weather flow design capacity of 29.5 mgd and a 40 mgd peak wet weather flow capacity. The average dry weather flow discharged to Moffett Channel during the months of June, July, August, and September in 2006-2008 was 9.4 mgd. The average flow discharged to Moffett Channel was 11.8 mgd during 2006 - 2008, the average wet weather flow (October-May) discharged to Moffett Channel was 13.1 mgd during 2006 - 2008, and the maximum daily effluent flow rate was 35 mgd during 2006 -2008<sup>55</sup>.

All public entities that own or operate sanitary sewer systems greater than one mile in length – including the CSD and the SJ/SCWPCP -- that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California are required to comply with the terms of State Water Resources Control Board (SWRCB) Order. No. 2006-0003-DWQ, as amended by Order No. WQ 2008-0002-EXEC. These public entities are considered “enrollees” of the statewide permit, as amended. One purpose of the statewide SWRCB permit is to prevent sewer system overflows (SSOs). Major causes of SSOs include: grease blockages, root blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, excessive storm or ground water inflow/infiltration, debris blockages, sanitary sewer system age and construction material failures, lack of proper operation and maintenance, insufficient capacity and contractor-caused damages. Many SSOs are preventable with adequate and appropriate facilities, source control measures and operation and

---

<sup>55</sup> San Francisco RWQCB NPDES Permit (Order No. R2-2009-0061) for City of Sunnyvale WPCP.  
[http://www.waterboards.ca.gov/rwqcb2/board\\_decisions/adopted\\_orders/2009/R2-2009-0061.pdf](http://www.waterboards.ca.gov/rwqcb2/board_decisions/adopted_orders/2009/R2-2009-0061.pdf).

## LAND USE ALTERNATIVE B

maintenance of the sanitary sewer system. To facilitate proper management of sanitary sewer systems, each Enrollee must develop and implement a system-specific Sewer System Management Plan (SSMP).

With continued compliance with applicable regulations listed below, projected wastewater generated from potential future development under Land Use Alternative B would not exceed the wastewater treatment requirements or capacity of the SWPCP. Therefore, the wastewater treatment requirements of the San Francisco RWQCB would not be exceeded due to buildout of Land Use Alternative B, resulting in a *less-than-significant* impact.

### *Applicable Regulations*

- San Francisco RWQCB NPDES Permit (Order No. R2-2009-0038) for SJ/SCWPCP
- San Francisco RWQCB NPDES Permit (Order No. R2-2009-0061) for SWPCP
- SWRCB Order No. 2006-0003-DWQ for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems
- SWRCB Order No. WQ 2008-0002-EXEC revising SWRCB Order No. 2006-0003-DWQ
- Chapter 15.20 of the City's Municipal Code establishing standards for individual onsite sewage disposal systems consistent with RWQCB standards.
- Cupertino Sanitary District Operations Code
- Cupertino Sanitary District Sewer System Management Plan

**Significance Without Mitigation:** Less than significant.

---

**UTIL-5      Implementation of Land Use Alternative B would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.**

---

Buildout of Land Use Alternative B would have a significant impact if it would result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would have a significant effect on the environment. As discussed above in Impact UTIL-4 above and Impact UTIL-6 below, future demands from Land Use Alternative B would not exceed the design or permitted capacity of the wastewater treatment plants serving the Project Study Area (i.e. SJ/SCWPCP and SWPCP). The potential impacts to the collection system would be addressed through applicable General Plan policies and measures as identified in Impact UTIL-6 below. In addition, the CSD's requirement for new projects to prepare a hydraulic model and, if necessary, improve collection system capacity would ensure that demands from individual projects in the Project Study Area would not significantly impact the wastewater collection service. The General Plan includes policies and strategies that, once adopted, would ensure adequate wastewater collection and treatment facilities are available for the residents of Cupertino. Policy 5-26, Recycled Water, would direct the City to continue to explore opportunities for the use of recycled water, including the potential expansion of an existing recycled water line from Sunnyvale to the Homestead Road area. Policy 5-22, Storm Drainage Management and Conformance with Watershed-Based Planning, would direct the City to encourage development projects to follow watershed-based planning and zoning by examining the project in the context of the entire watershed area. Strategy 1, Storm Drainage Master Plan,

## LAND USE ALTERNATIVE B

would direct the City to develop and maintain a Storm Drainage Master Plan, which would result in the creation of new wastewater treatment facilities or conveyance systems. Additionally, Policy 7-4, New Development Public Infrastructure Requirements, would require new development to provide or pay for adequate public facilities to accommodate growth; this policy could therefore result in the construction of new wastewater facilities or the expansion of existing facilities to serve new development. The development of treatment facilities or conveyance systems associated with recycled water, wastewater, and/or improved stormwater systems could cause significant environmental effects; however, compliance with applicable regulations, as discussed below, and project-level environmental review would serve to evaluate and mitigate potential adverse physical effects. As a result, the impact would be *less than significant*.

### *Applicable Regulations*

- San Francisco RWQCB NPDES Permit (Order No. R2-2009-0038) for SJ/SCWPCP
- San Francisco RWQCB NPDES Permit (Order No. R2-2009-0061) for SWPCP
- SWRCB Order No. 2006-0003-DWQ for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems
- SWRCB Order No. WQ 2008-0002-EXEC revising SWRCB Order No. 2006-0003-DWQ
- Chapter 15.20 of the City's Municipal Code establishing standards for individual onsite sewage disposal systems consistent with RWQCB standards.
- Cupertino Sanitary District Operations Code
- Cupertino Sanitary District Sewer System Management Plan

**Significance Without Mitigation:** Less than significant.

---

<b>UTIL-6</b>	<b>Implementation of Land Use Alternative B would result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.</b>
---------------	--

---

Buildout of Land Use Alternative B would have a significant impact if future projected demand exceeds the wastewater service capacity of the SJ/SCWPCP or SWPCP, or the CSD or City of Sunnyvale collection systems.

### *Collection Systems*

#### Cupertino Sanitary District

Specific capacity deficiencies were identified in the current Cupertino General Plan update, including sewer lines serving the City Center area, and lines on Stelling Road and Foothill Boulevard. City Center is the general area at the southeast quadrant of the intersection of De Anza Blvd and Stevens Creek Blvd. Trunk lines serving City Center identified as flowing either at or above capacity include those in Stevens Creek Boulevard between Randy Lane and Wolfe Road, and those in Wolfe Road south of I-280 and between Pruneridge Avenue and I-280. An additional trunk line, consisting of 10-inch to 18-inch sewer lines located in Randy Lane, Wheaton Drive, Denison Avenue and Norwich Avenue, was also identified as operating at or



## LAND USE ALTERNATIVE B

above capacity in a 2000 flow study performed as part of the City Center development.. Capacity improvements have been made to the lines on Wolfe Road. The other lines identified as providing insufficient capacity for existing flows have not been upgraded to date. New developments that substantially increase wastewater capacity, including projects potentially associated with Land Use Alternative B buildout, could result in wastewater flows that exceed the collection system capacity. To address this possibility, the CSD would require developers of substantial projects to demonstrate that adequate capacity exists, or to identify the necessary mitigations. The CSD defines substantial projects as those projected to generate substantial increases in wastewater. In these situations, the developer is required to prepare a hydraulic model of the pipe system between the project and the downstream limits of CSD facilities. To demonstrate capacity is available, the model must show that existing pipes flow less than two-thirds full when the new development wastewater flow is added to existing flows. In the event that adequate capacity is not available, improvements would need to be identified and constructed to provide a system that flows at less than two-thirds full. The requirement to prepare a hydraulic model and, if necessary, improve capacity is a standard condition of the CSD required for new development, independent of Land Use Alternative B. As a result, impacts on the CSD collection system would be *less than significant*.

Furthermore, the CSD is currently performing a capacity analysis of their entire collection system. Improvements required to mitigate system deficiencies as well as to accommodate future development will be identified and added to their Capital Improvement Program (CIP). Capacity fees will then be developed to fund the CIP. New development that increases wastewater transmission and treatment demand would be required to contribute towards system capacity enhancement improvements through payment of the capacity fee. In this manner, CSD would be responsible for upgrading their system rather than placing the responsibility on the developers of the largest wastewater generators, as is currently the case. If and when this fee is developed and implemented, it will create a more reliable and equitable mitigation for new development.

### *City of Sunnyvale*

Buildout of the portion of the Heart of the City Special Area east of Finch Avenue and south of Stevens Creek Boulevard could result in wastewater flows to the City of Sunnyvale that exceed the downstream pipe capacity if large office developments are allowed. Trunk service mains would require capacity enhancing improvements if large office users are allowed in the Cupertino service area.

Development in this area is guided by the Heart of the City Specific Plan. This Specific Plan does allow office uses in the entire corridor with appropriate mitigation measures. However, development adjacent to the single family residences on the east side along Stevens Creek Boulevard would not be large office campuses due to the small size of the properties and the need to maintain compatibility with adjoining single-family residential uses. Offices allowed in this area would be smaller, like attorney's offices or small office spaces . Modification of the Heart of the City Specific Plan to allow large office space in the area would require further environmental review, which would address sanitary sewer capacity issues, as well as neighborhood compatibility. Without modification of the Heart of the City Specific Plan, the City of Sunnyvale could continue to provide system capacity for future growth in its Cupertino service area. As a result, impacts on the City of Sunnyvale collection system would be *less than significant*.

## LAND USE ALTERNATIVE B

### *Treatment Systems*

#### San Jose/Santa Clara Water Pollution Control Plant

The CSD calculated wastewater flow associated with the 2020 General Plan development allocations, together with existing flows at the time the General Plan was approved, to be 7.2 mgd. The projected additional wastewater generated by buildout of Land Use Alternative B, over and above the current General Plan flows, are calculated to be less than 0.84 mgd. Adding the Land Use Alternative B buildout flows to the current General Plan flow (7.2 mgd) results in a total wastewater generation of less than 8.04 mgd. The total contractual treatment allocation with the SJ/SCWPCP is 7.8 mgd. Thus, Land Use Alternative B would exceed the current contractually available treatment capacity by less than 0.24 mgd. The following discussion identifies alternatives to increase treatment capacity, analyses to reduce projected treatment requirements, and a tracking mechanism to allow development to occur up to such time as the contractual treatment threshold is reached, at which time a development moratorium would be implemented.

#### *Increase Treatment Capacity*

Both the SJ/SCWPCP and City of Sunnyvale treatment plants have excess capacity, and would be able to treat wastewater produced by development under the Land Use Alternative B. CSD would need to enter into an agreement with either or both of these agencies to provide additional treatment capacity. Implementation of such an agreement would allow the Project to proceed without the need for any physical expansion of existing facilities.

CSD, with assistance from the City of Cupertino, could potentially purchase additional capacity from any one, or combination of the six other agencies with contractual rights to direct flow to the SJ/SCWPCP. These agencies include Cities of San Jose, Santa Clara, and Milpitas, West Valley Sanitation District, Sanitation District # 2 – 3, and the Burbank Sanitary District. No discussions have yet taken place with any of these agencies to determine the viability of this approach.

There is no contractual limit on the amount of wastewater Cupertino can send to Sunnyvale, and the SWPCP has capacity available to treat the Project flow. The transmission pipes between Cupertino and the SWPCP, however, are undersized to convey the needed flow. Upsizing the transmission lines would be required if additional flow were to be directed to the SWPCP.

#### *Generation Rates*

In addition, as explained above, flows have decreased over time: in 2000 the flows were 131 mgd and flows in 2010 were less than 110 mgd.<sup>56</sup> The SJ/SCWPCP currently treats 105 mgd. The SJ/SCWPCP Master Plan sets a future capacity of 450 mgd. Projections of future wastewater treatment demands are based on generation rates provided by CSD. While the rates used for residential development are mandated by the SJ/SCWPCP contract with CSD, the generation rates for office, commercial and hotel uses are subject to discretion. CSD believes the rates used are conservative, but hasn't performed the analysis needed to

---

<sup>56</sup> San Francisco RWQCB NPDES Permit (Order No. R2-2009-0038) for SJ/SCWPCP. [http://www.waterboards.ca.gov/rwqcb2/board\\_info/agendas/2009/april/SJSC\\_FinalOrder%20-%2004-09.pdf](http://www.waterboards.ca.gov/rwqcb2/board_info/agendas/2009/april/SJSC_FinalOrder%20-%2004-09.pdf).

**LAND USE ALTERNATIVE B**

determine how conservative they may be. Studies could be performed in the future to identify realistic generation rates. This could reduce the amount of additional treatment capacity required for the buildout of the Land Use Alternative B. Over the 26-year Project buildout time frame, it is expected that implementation of current green building standards will result in reduced wastewater treatment demands. As described above in the Section 4.14.1.1, Regulatory Setting, Municipal Code Chapter 16.58 requires that buildings larger than 50,000 square feet to be LEED Certified and buildings from 25,000 to 50,000 square feet to be LEED Silver certified. The wastewater generation rates used by CSD in projecting Project impacts do not consider the green technology that will be implemented over the course of Project buildout. The City is considering the preparation of a study to determine the actual building wastewater generation for both standard and green/LEED buildings pursuant to Chapter 16.58. The results of such a study would provide the CSD a more realistic generation rate to apply to the qualifying buildings that are within the CSD jurisdiction. This would allow projections to be updated to determine a realistic development allocation that would not exceed the contractual treatment threshold with SJ/SCWPCP.

*Monitoring*

The CSD projects the remaining contractual treatment capacity at the SJ/SCWPCP to be 0.6 mgd (7.8 mgd minus 7.2 mgd) upon buildout of the Land Use Alternative B. That projection includes the remaining development allocation, which is also part of the Land Use Alternative B. The remaining development allocation is projected to generate 0.72 mgd, and the remaining contractual treatment capacity for the Alternative is 1.32 mgd (0.6 mgd plus 0.72 mgd). Based on the conservative wastewater generation rates used by CSD, over half the proposed development allocation under the Land Use Alternative B could be built before exceeding the contractual treatment threshold with SJ/SCWPCP. A development monitoring system could be implemented to track the projected wastewater generation as projects are approved.

Nevertheless, Land Use Alternative B exceeds the current contractually available treatment capacity at SJ/SCWPCP by less than 0.24 mgd. As a result, unless and until additional contractual capacity is achieved, impacts on the contractual treatment capacity at SJ/SCWPCP would be *significant*.

City of Sunnyvale

The SWPCP has a capacity of 29.5 mgd and is currently operating at a daily treatment rate of about 15 mgd. The projected wastewater generation for the entire Heart of the City Special Area is 0.84 mgd. The portion of this Special Area served by the SWPCP is 4-percent of the total surface area of the Special Area. Assuming a uniform use distribution across the entire Special Area, the wastewater flow to the SWPCP would be 0.03 mgd. The projected increase amounts to 0.23-percent of the current daily treatment flow of 15 mgd, and 0.11 percent of the SWPCP's dry weather permitted capacity. Thus, the projected increase in wastewater is within the system's capacity and impacts on the SWPCP would be *less than significant*.

The General Plan includes policies and strategies that, once adopted, would ensure adequate wastewater collection and treatment facilities are available for the residents of Cupertino. Within the Public Utilities, Infrastructure, and Services Element, Policy 7-2, Sunnyvale Treatment Plant, would require the City to consider the impacts on the Sunnyvale sanitary sewer system if significant office uses are proposed in the east Stevens Creek Boulevard area. Policy 7-3, Sewer Tributary Lines, would require the City to recognize that new high discharge users in the Vallco area and the Stevens Creek Boulevard and Blaney Avenue areas

## LAND USE ALTERNATIVE B

will require private developers to pay for the upgrading of tributary lines. Strategy 1, Cost Estimates, would require the City to develop preliminary cost estimates for the upgrading of the sewer tributary lines to discuss with prospective developers.

While the current General Plan recognizes existing system deficiencies in both the CSD and City of Sunnyvale wastewater service areas and includes the following policies to address this issue, Land Use Alternative B exceeds the current contractually available treatment capacity at SJ/SCWPCP by 0.24 mgd and impacts would be *significant*.

### *Applicable Regulations*

- SWRCB Order No. 2006-0003-DWQ for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems
- SWRCB Order No. WQ 2008-0002-EXEC revising SWRCB Order No. 2006-0003-DWQ
- Chapter 15.20 of the City's Municipal Code establishing standards for individual onsite sewage disposal systems consistent with RWQCB standards.
- Cupertino Sanitary District Operations Code
- Cupertino Sanitary District Sewer System Management

## Mitigation Measure

The following mitigation measures are recommended to ensure that CSD has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments:

**Mitigation Measure UTIL-6a:** The City shall work with the Cupertino Sanitary District to increase the available citywide treatment and transmission capacity to 8.65 million gallons per day, or to a lesser threshold if studies justifying reduced wastewater generation rates are approved by CSD as described in Mitigation Measure UTIL-6c.

**Mitigation Measure UTIL-6b:** The City shall work to establish a system in which a development monitoring and tracking system to tabulate cumulative increases in projected wastewater generation from approved projects for comparison to the Cupertino Sanitary District's treatment capacity threshold with San Jose/Santa Clara Water Pollution Control Plant is prepared and implemented. If it is anticipated that with approval of a development project the actual system discharge would exceed the contractual treatment threshold, no building permits for such project shall be issued prior to increasing the available citywide contractual treatment and transmission capacity as described in Mitigation Measure UTIL-6a.

**Mitigation Measure UTIL-6c:** The City shall work with the Cupertino Sanitary District to prepare a study to determine a more current estimate of the wastewater generation rates that reflect the actual development to be constructed as part of Project implementation. The study could include determining how the green/LEED certified buildings in the City reduce wastewater demands.

**Significance With Mitigation:** Less than significant.

**LAND USE ALTERNATIVE B**

---

**UTIL-7      Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to wastewater.**

---

This section analyzes potential impacts related to wastewater treatment that could occur from Land Use Alternative B in combination with reasonably foreseeable growth within the SJ/SCWPCP and SWPCP service areas.

Buildout of Land Use Alternative B would generate a minor increase in the volume of wastewater delivered for treatment at SJ/SCWPCP and SWPCP. This increase represents less than 1 percent of the available treatment capacity at the SJ/SCWPCP and SWPCP, and it would occur incrementally over a period of 26 years. Both the SJ/SCWPCP and SWPCP serving the Project Study Area currently use less than their design and permitted wastewater treatment capacity. Cumulative wastewater treatment demand over the Land Use Alternative B buildout period – based on the recent trends of diminishing wastewater treatment demand and the generally projected population growth in the service areas – is far below the excess capacity of the SJ/SCWPCP and SWPCP. Because the cumulative demand would not substantially impact the existing or planned capacity of the wastewater treatment systems, which have sufficient capacity for wastewater that would be produced by the Land Use Alternative B, the construction of new wastewater treatment facilities would not be necessary.

Future development would also be required to comply with all applicable regulations and ordinances protecting wastewater treatment services as described in Section 4.14.2.1, Environmental Setting, in Chapter 4.14, Utilities and Service Systems.

Wastewater from cumulative projects would be treated according to the wastewater treatment requirements documented in the respective NPDES permits for the SJ/SCWPCP and SWPCP, and enforced by the San Francisco RWQCB. Therefore, with implementation of Mitigation Measure UTIL-6, cumulative development combined with Land Use Alternative B would not exceed wastewater treatment requirements, and cumulative impacts to sanitary wastewater service would be *less than significant*.

**Significance With Mitigation:** Less than significant.

## **Solid Waste**

---

**UTIL-8      Implementation of Land Use Alternative B would not be served by a landfill(s) with sufficient permitted capacity to accommodate this Alternative’s solid waste disposal needs.**

---

Existing and potential development under Land Use Alternative B would not be served by landfill sites with sufficient permitted capacity to accommodate the city’s solid waste disposal needs, based on existing contractual agreements. As described in Section 4.14.3.1, Environmental Setting, in Chapter 4.14, Utilities and Service Systems, of this Draft EIR, 99 percent of all solid waste generated in Cupertino – which includes City [Recology] hauled waste, as well as self-hauled waste from private projects within the City – is disposed at four different landfill facilities. One hundred (100) percent of City [Recology] hauled waste –

## LAND USE ALTERNATIVE B

which accounts for 92 percent of the total waste volume – goes to one landfill (Newby Island). Table 5.3-22 compares the remaining capacity, maximum daily and annual capacity, and estimated closure date for each of the four landfills.

**TABLE 5.3-22 LANDFILLS EXISTING CAPACITY AND ESTIMATED CLOSURE DATE**

Landfill Facility	Remaining Capacity (cubic yard)	Daily Capacity (tons/day)	Estimated Closure Date
Newby Island Landfill (as of 10/16/2006)	18,274,953	4,000	6/1/2025 <sup>a</sup>
Guadalupe Sanitary Landfill (as of 1/1/2011)	11,055,758	1,300	1/1/2048
Monterey Peninsula Landfill (as of 12/31/2004)	48,560,000	3,500	2/28/2107
Altamont Landfill (as of 8/22/2005)	45,720,000	11,500	1/1/2025

a. The agreement between the Newby Island Landfill and the City of Cupertino ends in 2023.  
Source: CalRecycle, 2014.

In 2012, the city of Cupertino’s actual disposal rate for residents was 2.6 pounds per person per day (PPD) with the target of 4.3 PPD. For employees, the disposal rate was 4.3 PPD with the target rate of 8.1 PPD.<sup>57</sup> The City of Cupertino’s disposal rates for both residents and employees have been below target rates and steadily decreasing since 2007.<sup>58</sup>

The per capita disposal rate target is also known as “the 50 percent equivalent per capita disposal target.” It is the amount of disposal Cupertino would have had during the CalRecycle-designated base period (2003 – 2006) if it had been exactly at a 50 percent diversion rate. It is calculated by CalRecycle using the average base period per capita generation for Cupertino (in pounds), then dividing this generation average in half to determine the 50 percent equivalent per capita disposal target. The target is an indicator for comparison with that jurisdiction’s annual per capita per day disposal rate beginning with the 2007 program year.<sup>59</sup>

As shown on Table 5.3-23, at 2040 buildout of Land Use Alternative B, it is anticipated that the city will generate solid waste at a rate of 111,191 tons/year, which equates to approximately 305 tons/day. The anticipated amount of solid waste would have a less-than-significant impact with regard to daily per capita disposal targets, but two of four currently-used landfill facilities that receive the majority of the city’s solid waste are likely to reach their permitted maximum capacities by 2040 and will no longer be available. The Newby Island Landfill facility will reach its capacity in 2025 (the City’s agreement with the facility ends earlier, in 2023), and Altamont Landfill also is anticipated to reach its capacity in 2025, as shown in the Table 5.3-22. Since the Newby Island Landfill facility currently accepts 92 percent of the solid waste generated by Cupertino, the City must find an alternative to this landfill when it closes in approximately ten years.

<sup>57</sup> CalRecycle, “Jurisdiction per Capita Disposal Trends: Cupertino,” <http://www.calrecycle.ca.gov/>, accessed on May 15, 2014.

<sup>58</sup> CalRecycle, “Jurisdiction per Capita Disposal Trends: Cupertino,” <http://www.calrecycle.ca.gov/>, accessed on May 15, 2014.

<sup>59</sup> CalRecycle, Understanding SB 1016 Solid Waste Per Capita Disposal Measurement Act, [www.calrecycle.ca.gov/lgcentral/goalmeasure/Tools/Presentation.ppt](http://www.calrecycle.ca.gov/lgcentral/goalmeasure/Tools/Presentation.ppt), accessed June 2, 2014.

**LAND USE ALTERNATIVE B**

**TABLE 5.3-23 PROJECTED RESIDENTS, EMPLOYMENT, AND WASTE GENERATION AT 2040 BUILDOUT – LAND USE ALTERNATIVE B**

	2012 <sup>a</sup>	Existing	2040 Buildout
Residents	59,022	58,302	68,051
Employment	35,438	27,387	39,092
Residential Disposal Rate Target (pounds/person/day)	4.3	4.3	4.3
Employee Disposal Rate Target (pounds/person/day)	8.1	8.1	8.1
Maximum Disposal (tons/year)	98,704	86,237	111,191
Actual Disposal (tons/year)	27,652	-	-

a. The latest data on the actual disposal information was from 2012.  
Source: CalRecycle, 2014.

Anticipated rates of solid waste disposal would have a less-than-significant impact in regard to target disposal rates, and the City would continue its current recycling ordinances and zero-waste policies. Nevertheless, the 2023 termination of the agreement between the Newby Island Landfill facility, as well as the facility’s estimated closure date in 2025 would result in insufficient solid waste disposal capacity at buildout of Land Use Alternative B, resulting in a *significant* impact.

**Mitigation Measure**

The following mitigation measure is recommended to minimize the potential for implementation of Land Use Alternative B to not be served by a landfill(s) with sufficient permitted capacity to accommodate Land Use Alternative B’s solid waste disposal needs:

**Mitigation Measure UTIL-8:** The City shall continue its current recycling ordinances and zero-waste policies in an effort to further increase its diversion rate and lower its per capita disposal rate. In addition, the City shall monitor solid waste generation volumes in relation to capacities at receiving landfill sites to ensure that sufficient capacity exists to accommodate future growth. The City shall seek new landfill sites to replace the Altamont and Newby Island landfills, at such time that these landfills are closed.

Implementation of Mitigation Measure UTIL-8 would serve to ensure sufficient capacity of landfill is available for future development under Land Use Alternative B. In addition, the trend of lower per capita solid waste volumes would continue to reduce the amount of waste disposed at landfills overall, which may delay the estimated closure date of landfill sites, including the Newby Island Landfill facility.

With incorporation of the above Mitigation Measure UTIL-8, related to the potential for implementation of Land Use Alternative B to not be served by a landfill(s) with sufficient permitted capacity to accommodate Land Use Alternative B’s solid waste disposal needs, impacts would be *less than significant*.

**Significance With Mitigation:** Less than significant.

## LAND USE ALTERNATIVE B

---

**UTIL-9 Land Use Alternative B would not be out of compliance with federal, State, and local statutes and regulations related to solid waste.**

---

As discussed in Section 4.14.3 of this Draft EIR, the City has complied with State requirements to reduce the volume of solid waste through recycling and reuse of solid waste. The City's per capita disposal rate is below the target rate established by CalRecycle. Cupertino adopted a Source Reduction and Recycling Element (SRRE) and a Household Hazardous Waste Element (HHWE) in compliance with the California Integrated Waste Management Act. The City has gone beyond the SRRE by implementing several programs, including the City's and Recology's organics or food waste collection program and Environmental Recycling Day events offered to residents 3 times per year by Recology. Implementation of the referenced strategies, plans, and programs, as well as the Climate Action Plan that launched in May 2014, will enable the city to meet the 75 percent of solid waste by the year 2020. These programs will be sufficient to ensure that future development in Cupertino would not compromise the ability to meet or perform better than the State mandated target.

Construction and demolition associated with future development under Land Use Alternative B would generate significant solid waste. At least 60 percent of this waste, however, would be expected to be diverted from landfill disposal by recycling in accordance with the City's construction debris ordinance. Therefore, future development would comply with applicable statutes and regulations and the impact would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

---

**UTIL-10 Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would result in significant cumulative impacts with respect to solid waste.**

---

The buildout of Land Use Alternative B will increase the quantity of solid waste for disposal. Although AB 939 established a goal for all California cities to provide at least 15 years of ongoing landfill capacity, growth from other cities in the region may exceed that which was taken into account when calculating landfill capacity. Also, because the Newby Island Landfill facility, which takes approximately 92 percent of the City's solid waste, is expected to close in 2025, Cupertino may eventually experience insufficient landfill capacity to accommodate existing or increased population and employment levels.

As shown in the Chapter 4.11, Population and Housing, of this Draft EIR, projected growth in Cupertino under Land Use Alternative B is greater than that anticipated by regional projections. Although the 2040 buildout of Land Use Alternative B would add 3,649 fewer residents than ABAG's 2040 projection for Cupertino, the 2040 buildout employment levels and housing units would be above regional projections. The Table 5.3-24 compares the 2040 buildout of Land Use Alternative B and the regional growth scenario.



**LAND USE ALTERNATIVE B**

**TABLE 5.3-24 BUILDOUT AND REGIONAL GROWTH COMPARISON – LAND USE ALTERNATIVE B**

	ABAG Projection	2040 Buildout	Difference
Residents	71,700	68,051	-3,649
Housing Units	24,180	24,715	535
Employment	33,260	39,092	5,832

Source: Association of Bay Area Governments, Plan Bay Area, Projections 2013, Subregional Study Area Table, Santa Clara County; PlaceWorks, 2014.

Although implementation of existing waste reduction programs and diversion requirements discussed above would reduce the potential for exceeding existing capacities of landfills, the potential lack of landfill capacity for disposal of solid waste would have a significant impact. However, with incorporation of the Mitigation Measure UTIL-8, this impact related to the potential for Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, to result in significant cumulative impacts with respect to solid waste would be *less than significant*.

**Significance With Mitigation:** Less than significant.

## Energy Conservation

**UTIL-11 Implementation of Land Use Alternative B, in combination with past, present, and reasonably foreseeable projects, would not result in a substantial increase in natural gas and electrical service demands, and would not require new energy supply facilities and distribution infrastructure or capacity enhancing alterations to existing facilities.**

Land Use Alternative B, upon buildout, will result in 2,540,231 square feet of additional office space, 1,343,679 square feet of additional commercial space, 839 additional hotel rooms, and 3,316 additional housing units. The proposed increase in development would result in a long-term increase in energy demand, associated primarily with the operation of lighting and space heating/cooling in the added building space. In addition, construction activities associated with development require the use of energy (e.g. electricity and fuel) for various purposes such as the operation of construction equipment and tools, as well as excavation, grading, demolition, and vehicle travel.

Future new development would be constructed using energy efficient modern building materials and construction practices. The new buildings also would use new modern appliances and equipment, and would comply with the current CALGreen Building Code, which would require the use of recycled construction materials, environmentally sustainable building materials, building designs that reduce the amount of energy used in building heating and cooling systems as compared to conventionally built structures, and landscaping that incorporates water efficient irrigation systems.

The General Plan includes policies and strategies that, once adopted, would ensure energy conservation is practiced in Cupertino. Within the Environmental Resources/Sustainability Element, Policy 5-1, Principles

## LAND USE ALTERNATIVE B

of Sustainability, would require the City to incorporate the principles of sustainability into Cupertino's planning and development system in order to improve the environment, reduce greenhouse gas emission and meet the needs of the present community without compromising the needs of future generations. Policy 5-3, Conservation and Efficient Use of Energy Resources, would require the City to encourage the maximum feasible conservation and efficient use of electrical power and natural gas resources for new and existing residences, businesses, industrial and public uses. Strategy 1, Alternate Energy Sources, would require the City to continue to ensure the ease of access to, and use of, solar energy and other alternate, renewable energy resources for all new and significantly renovated private and public buildings through effective policies, programs and incentives. Strategy 2, Comprehensive Energy Management Plan, would require the City to prepare and implement a comprehensive energy management plan for all applicable public facilities and equipment, to achieve the energy goals established in the City's municipal Climate Action Plan, and to embed this plan into the City's Environmentally Preferable Procurement Policy to ensure measures are achieved through all future procurement and construction practices. Strategy 4, Energy Efficient Replacements, would require the City to continue to use life cycle cost analysis, to identify City assets for replacement with more energy efficient technologies. Strategy 5, Incentive Program, would require the City to support incentive programs that include such items as reduced permit fees for building projects that exceed the City's Green Building Ordinance and CalGreen, continue to promote other incentives from the state, County and Federal Governments for improving energy efficiency and expanding renewable energy installations by posting information regarding incentive, rebate and tax credit programs on the City's web site. Strategy 6, Solar Access Standards, would require the City to continue to ensure compliance with the State of California Subdivision Map Act solar access standards in order to maximize natural heating and cooling opportunities for future residences and businesses, and to encourage the inclusion of additional shade trees and landscaping for energy efficiency. Strategy 8, Energy Cogeneration Systems, would require the City to encourage the use of energy cogeneration systems through the provision of an awareness program targeting the larger commercial and industrial users and public facilities. Strategy 9, Regulation of Building Design, would require the City to ensure designers, developers, applicants and builders meet the City's Green Building Ordinance and CalGreen, and encourage architects, building designers and contractors to exceed these requirements for new projects through the provision of incentives, to encourage either passive solar heating and/or dark plaster interior with a cover for swimming pools, cabanas and other related accessory uses where solar access is available, to encourage the use of renewable energy sources where feasible, and continue to offer energy audits and/or subvention programs that also advance community adoption of alternative energy technologies. Strategy 10, Use of Discretionary Development Permits (Use Permits), would require the City to require, as conditions of approval for new and renovated projects, the provision of energy conservation/efficiency applications, aligned with the City's Green Building Ordinance and CalGreen. Strategy 11, Energy Efficient Transportation Modes, would require the City to continue to encourage fuel-efficient transportation modes such as "clean" multi-modal public transit, car and vanpooling, flexible work hours, safe routes to schools, and pedestrian and bicycle paths through community education and training, infrastructure investment, and financial incentives, including commuter benefits programs. Policy 5-4, Green Building Design, would require the City to set standards for the design and construction of energy and resource conserving/efficient buildings (Green Building Design). Strategy 1, "Green Building" Program, would require the City to periodically review and revise the City's Green Building Ordinance to ensure alignment with state CalGreen requirements for all major private and public projects that ensure reduction in energy and water use for new development through site selection and building design. Strategy 2, Building Energy Audits, would require the City to

## LAND USE ALTERNATIVE B

continue to offer and leverage regional partners' programs to conduct building energy assessments for homes, commercial, industrial and city facilities, and recommend improvements that lead to energy and cost savings opportunities for participants.

With the implementation of these General Plan Policies and the CALGreen Building Code, significant energy conservation and savings would be realized in future new development. Even with the energy saving practices in place, it is possible that new electrical switches and/or transformers might be required to handle additional loads. However, potential environmental impacts from possible new electrical switches/transformers are not anticipated to be significant and, if necessary, would be addressed in project-specific reviews. In addition, buildout of Land Use Alternative B would not significantly increase energy demands in the context of the 70,000 square mile PG&E service territory for electricity and natural gas generation, transmission and distribution. As a result, new energy supply facilities and distribution infrastructure or capacity enhancing alterations to existing facilities would not be required. Therefore, with consideration of the applicable regulations listed below, impacts related to energy conservation would be *less than significant*.

### *Applicable Regulations*

- Federal Energy Independence and Security Act of 2007
- Federal Energy Policy Act of 2005
- California Building Code (Title 24, CCR)
- California 2006 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608)
- Governor's Green Building Executive Order (S-20-04)
- City of Cupertino General Plan, Environmental Resources/Sustainability Element
- City of Cupertino Municipal Code, Chapter 16.58, Green Building Standards

**Significance Without Mitigation:** Less than significant.

## 5.3.8 RELATIONSHIP OF THE ALTERNATIVE TO THE OBJECTIVES

As discussed in Section 3.5, Project Objectives, of Chapter 3, Project Description, of this Draft EIR, the primary purpose of the proposed Project is to: 1) replenish, re-allocate, and increase citywide office, commercial, hotel, and residential development allocations in order to plan for anticipated future growth while, sustaining the community's character, goals, and objectives; 2) consolidate development requests by several property owners for amendments to the General Plan, by reviewing seven Study Areas; and 3) provide a full range of housing to meet the needs of all segments of the city's population.

The City has also drafted a 2040 Community Vision and Guiding Principles as part of the overall Project, which builds upon the framework of the current General Plan's vision, goals, and guiding principles, and reflects the community's desires for Cupertino's future. The proposed Project is based on the vision for the city 1) to be a balanced community with: quiet and attractive residential neighborhoods; exemplary parks and schools; accessible open space areas, hillsides, and creeks; and a vibrant, mixed-use "Heart of the City;" and 2) to be safe, friendly, healthy, connected, walkable, bikeable, and inclusive for all residents and workers, with ample places and opportunities for people to interact, recreate, innovate and collaborate. This

## **LAND USE ALTERNATIVE B**

vision statement is included in the proposed General Plan and outlines the objectives of the proposed Project.

Under Land Use Alternative B, the development allocation would be replenished for office, commercial, hotel, and residential, as shown in Table 5.3-1. Implementation of Land Use Alternative B would accommodate the RHNA for the 2014–2022 planning period to allow the city to meet its fair share housing obligation of 1,064 units. Implementation of this Alternative would meet the Project Objectives; however, it would result in less replenishment of development allocation for office, commercial, hotel, and residential unit reallocation. Therefore, while implementation of this Alternative would not result in the greatest amount of replenishment of development allocations, it does generally meet all of the project objectives.

## 6. CEQA-Required Assessment Conclusions

---

This chapter provides an overview of the impacts of the proposed Project based on the analyses presented in Chapters 4.0 through 5.3 of this Draft EIR. The topics covered in this chapter include impacts found not to be significant, significant unavoidable impacts, growth-inducing impacts, and significant irreversible changes to the environment. A more detailed analysis of the effects that the proposed Project would have on the environment, and proposed mitigation measures to minimize significant impacts, are provided in Chapters 4.0 through 4.14.

### 6.1 IMPACTS FOUND NOT TO BE SIGNIFICANT

As required by CEQA Guidelines Section 15128, the following possible significant effects have been determined not to be significant and are therefore not discussed further in this EIR. For the reasons stated below, it was determined during the scoping process for this EIR that the proposed Project would not have a significant effect on Agriculture and Forestry Resources or on Mineral Resources,

#### 6.1.1 AGRICULTURE AND FORESTRY RESOURCES

The proposed Project is located within the City of Cupertino, which is an urbanized city. Maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency categorize land within Cupertino as Urban and Built-Up Land.<sup>1</sup> There are no agricultural lands classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) within the city of Cupertino. In addition, the California Land Conservation (Williamson) Act 2010 Status Report identifies land in Santa Clara County that is currently under Williamson Act contract.<sup>2</sup> Potential future development permitted as a result of the proposed Project would not occur within lands zoned for agricultural use in Cupertino. Therefore, there would not be a not conflict with existing zoning for agricultural use, or a Williamson Act contract.

According to 2006 mapping data from the California Department of Forestry and Fire Protection, the City does not contain any woodland or forestland cover;<sup>3</sup> hence, the City does not contain land zoned for Timberland Production nor does the Cupertino Zoning Map identify any areas zoned for Timberland Production.<sup>4</sup> Consequently, there would be no impacts with regard to agriculture and forestry resources.

---

<sup>1</sup> California Resources Agency, Farmland Mapping and Monitoring Program. Santa Clara County Important Farmland 2010, accessed on March 20, 2014.

<sup>2</sup> California Department of Conservation, 2010, California Land Conservation (Williamson) Act 2010 Status Report, page 23, [http://www.conservation.ca.gov/dlrp/lca/stats\\_reports/Documents/2010%20Williamson-%20Act%20Status%20Report.pdf](http://www.conservation.ca.gov/dlrp/lca/stats_reports/Documents/2010%20Williamson-%20Act%20Status%20Report.pdf), accessed on March 20, 2014.

<sup>3</sup> California Department of Forestry and Fire Protection Fire and Resource Assessment Program, Land Cover Map, accessed on March 20, 2014.

<sup>4</sup> City of Cupertino, 2005 General Plan, Zoning Map, <http://www.cupertino.org/index.aspx?page=291>, accessed on March 20, 2014.

## CEQA-REQUIRED ASSESSMENT CONCLUSIONS

### 6.1.2 MINERAL RESOURCES<sup>5</sup>

Although Cupertino does have mineral resource zones (MRZ) classified as MRZ-2, which are areas where adequate information indicates that significant mineral deposits are present, and MRZ-3, which are areas containing mineral deposits for which the significance cannot be evaluated from available data, the city is largely urbanized and therefore, with the exception of the four areas mentioned below, there are no areas in the city identified for protection or conservation with regard to mineral resources given those areas are already developed and/or not considered suitable for conservation.<sup>6</sup>

There are four mineral resource areas within the general area of Cupertino, including two located within the unincorporated lands of the Santa Clara County but are within Cupertino's boundary agreement areas and two are located within the city boundary. The Hansen Permanente and Stevens Creek sites have been designated by the State as having mineral deposits of regional or state significance. However, these two sites are under the jurisdiction of the Santa Clara County and the Project does not propose new development on these sites.

The two sites located within the city that are classified as mineral resource areas for which the State requires policies supporting preservation and extraction are not within the boundaries of the proposed Project Component locations; therefore, the Project would have no impact on these areas. Regardless, most of the areas have been developed with residential and other urbanized uses and one area is considered depleted.<sup>7</sup> Consequently, because the mineral resource areas within the City of Cupertino have been developed and not considered suitable for conservation, there would be no impacts to mineral resources.

## 6.2 SIGNIFICANT UNAVOIDABLE EFFECTS

Chapter 2, Executive Summary, of this Draft EIR contains Table 2-1, which summarizes the impacts, mitigation measures, and levels of significance with and without mitigation.

In compliance with CEQA, "each public agency shall mitigate or avoid the significant effects on the environment of the project it carries out or approves whenever it is feasible to do so."<sup>8</sup> The term "feasible" is defined in CEQA to mean, "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors."<sup>9</sup> CEQA Guidelines Section 15370 defines "mitigation" as including: (1) avoiding the impact altogether by not taking a certain action or parts of an action; (2) minimizing impacts by limiting the degree or magnitude of an action and its implementation; (3) rectifying the impact by repairing, rehabilitating, or restoring the impacted environment; (4) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and (5) compensating for the impact by replacing or providing substitute resources or environments.

---

<sup>5</sup> City of Cupertino, 2005 General Plan EIR, Section 15, Mineral Resources, Page VI-37.

<sup>6</sup> City of Cupertino, 2005 General Plan, Section 5, Environmental Resources/Sustainability, pages 5-13 to 5-15.

<sup>7</sup> City of Cupertino, 2005 General Plan, Section 5, Environmental Resources/Sustainability, page 5-13.

<sup>8</sup> Public Resources Code, Section 21002.1(b).

<sup>9</sup> Public Resources Code, Section 21061.1.

## CEQA-REQUIRED ASSESSMENT CONCLUSIONS

For the following impacts, while some mitigation measures would reduce impacts, they would not reduce the impact to a less-than-significant level; therefore, these impacts are considered significant and unavoidable, in some cases even with the adoption and implementation of feasible mitigation measures. The following is a brief discussion of the mitigation measures, which are discussed in full in Chapter 4, that would partially reduce impacts and of those that were considered to reduce the impacts of the proposed Project to less than significant, but were considered infeasible and the infeasibility of those measures.

### 6.2.1 AIR QUALITY

As discussed in Chapter 4.2, Air Quality, of this Draft EIR, the following impacts would be significant and unavoidable.

---

<b>AQ-1</b>	<b>Implementation of the proposed Project would conflict with or obstruct implementation of the applicable air quality plan.</b>
-------------	--

---

While the proposed Project would support the primary goals of the 2010 Bay Area Clean Air Plan, the buildout of the proposed Project would conflict with the BAAQMD Bay Area Clean Air Plan goal for community-wide vehicles miles traveled (VMT) to increase at a slower rate compared to population and employment growth. The rate of growth in VMT would exceed the rate of population and employment growth, resulting in a substantial increase in regional criteria air pollutant emissions in Cupertino. The Plan Bay Area aims to improve transportation efficiency and reduce regional infrastructure costs in the region. Policies and development standards in the proposed Project would facilitate continued City participation/cooperation with BAAQMD and VTA to achieve regional air quality improvement goals, promote energy conservation design and development techniques, encourage alternative transportation modes, and implement transportation demand management strategies. However, due to the level of growth forecast in the city and the programmatic nature of the proposed Project, no additional mitigating policies or development standards are available and impacts are considered *significant and unavoidable*.

---

<b>AQ-2</b>	<b>Implementation of the proposed Project would violate an air quality standard or contribute substantially to an existing projected air quality violation in Cupertino.</b>
-------------	--

---

Future projects under the proposed Project would generate air pollutant emissions during operation and construction phases that could exceed BAAQMD's significance criteria.

- **Operational Emissions:** Future development under the proposed Project would result in a substantial long-term increase in criteria air pollutants over the 26-year General Plan horizon. Criteria air pollutant emissions would be generated from on-site area sources (e.g. landscaping fuel, consumer products), vehicle trips generated by the project, and energy use (e.g. natural gas used for cooking and heating). While the General Plan includes policies and strategies described in Chapter 4.2, Air Quality, that once adopted would reduce operational emissions from development under the proposed Project to the maximum extent practicable, there are no additional measures available to mitigate this impact due to the level of growth forecast in the city.

## CEQA-REQUIRED ASSESSMENT CONCLUSIONS

In addition, Mitigation Measure AQ-4a, for new sources of Toxic Air Contaminants (TACs), would also reduce criteria air pollutants associated with light industrial land uses within the city. Operational emissions from future development would be determined during project-level CEQA review. The total criteria air pollutant emissions from operation of future development projects under the proposed Project would be substantial and would contribute to increases in concentrations of air pollutants, which could contribute to ongoing violations of air quality standards. It should be noted that the identification of this program-level impact does not preclude the finding of less-than-significant impacts for subsequent projects that comply with BAAQMD screening criteria or meet applicable thresholds of significance. However, due to the programmatic nature of the proposed Project, no additional mitigating policies are available, and the impact is considered *significant and unavoidable*.

- **Construction Emissions:** Future construction emissions associated with individual development projects under the proposed Project would generate an increase in criteria air pollutants and TACs. Existing federal, State, and local regulations, and policies and strategies of the proposed Project described throughout Chapter 4.2, Air Quality, protect local and regional air quality. Continued compliance with these regulations and implementation of General Plan policies and strategies, would reduce construction-related impacts to the extent feasible. However, if uncontrolled, fugitive dust ( $PM_{10}$  and  $PM_{2.5}$ ) levels downwind of actively disturbed areas during construction or overlapping construction activities could violate air quality standards or contribute substantially to an existing or projected air quality violation and expose sensitive receptors to elevated concentrations of pollutants during construction activities.

While Mitigation Measure AQ-2a would require adherence to the current Bay Area Air Quality Management District's basic control measures for reducing construction emissions of  $PM_{10}$  and Mitigation Measure AQ-2b would require adherence to BAAQMD's basic control measures for fugitive dust control and would ensure impacts from fugitive dust generated during construction activities are less than significant, applicants for future development in Cupertino could generate construction exhaust emissions in excess of the BAAQMD significance thresholds. An analysis of emissions generated from the construction of specific future projects under the General Plan would be required to evaluate emissions compared to BAAQMD's project-level significance thresholds during individual environmental review. It should be noted that the identification of this program-level impact does not preclude the finding of less-than-significant impacts for subsequent projects that comply with BAAQMD screening criteria or meet applicable thresholds of significance. However, due to the programmatic nature of the proposed Project, no additional mitigation measures are available and the impact is considered *significant and unavoidable*.



---

## CEQA-REQUIRED ASSESSMENT CONCLUSIONS

---

**AQ-3                    Implementation of the proposed Project would result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).**

---

The proposed Project's contribution to cumulative air quality impacts are identified under Impact AQ-1 and AQ-2 summarized above. Consequently, Impact AQ-1 and AQ-2 identified a significant regional air quality impact. Mitigation measures proposed under Impact AQ-1 and AQ-2 to reduce Project-related emissions would reduce impacts to the extent feasible. Due to the programmatic nature of the proposed Project, no additional mitigating policies or development standards are available. Air pollutant emissions associated with the proposed Project would result in a cumulatively considerable contribution to air quality impacts, and the Project's impacts would be *significant and unavoidable*.

**AQ-6                    Implementation of the proposed Project would cumulatively contribute to air quality impacts in the San Francisco Bay Area Air Basin.**

---

As described under AQ-3, regional air quality impacts were identified as significant; therefore, in combination with past, present, and reasonably foreseeable projects, the proposed Project even with implementation of applicable regulations, as well as, the mitigation measures and General Plan policies outlined above, would result in a significant cumulative impact with respect to air quality. Therefore, the impact would be *significant and unavoidable*.

### 6.2.2 NOISE

As discussed in Chapter 4.10, Noise, of this Draft EIR, the following impacts would be significant and unavoidable.

**NOISE-3                Implementation of the proposed Project would result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.**

---

As a result of implementation of the proposed Project and ongoing regional growth, it is anticipated that there would be substantial permanent increases to the ambient noise levels throughout Cupertino, and that these increases would primarily result from increases to transportation-related noise, especially that of automobile traffic. The impact analysis in Chapter 4.10, Noise found that there would be multiple major road segments that would experience substantial permanent increases in ambient noise levels, including at sensitive land uses. While the General Plan contains numerous policies to address excessive roadway noise at existing sensitive land uses that could in certain cases reduce or prevent significant increases in ambient noise at sensitive land uses under implementation of the proposed Project, the measures described in these policies would not be universally feasible, and some of the most effective noise-attenuation measures, including sound walls and berms, would be infeasible or inappropriate in a majority of locations where

## CEQA-REQUIRED ASSESSMENT CONCLUSIONS

sensitive land uses already exist. Factors which would render these mitigations infeasible include but are not limited to cost, aesthetic considerations, and negative impacts to pedestrian and bicycle connectivity. Therefore, even after the application of relevant, feasible regulations and General Plan policies, the impact to ambient noise levels would remain significant. For this noise impact, there is no feasible mitigation for preventing substantial increases in ambient noise levels, since all conceivable mitigations would be economically impractical, scientifically unachievable, outside the City's jurisdiction, and/or inconsistent with City planning goals and objectives. Impacts would remain significant and unavoidable because no feasible mitigation measures are available to mitigate noise impacts to a less than significant level, resulting in a *significant and unavoidable* impact.

---

<b>NOISE-5</b>	<b>Implementation of the proposed Project, in combination with past, present, and reasonably foreseeable projects, would result in significant cumulative impacts with respect to noise.</b>
----------------	--

---

The analysis of the proposed Project, addresses cumulative impacts with regard to noise, as well as groundborne noise and vibration. As previously discussed under Impact NOISE-3, impacts related to substantial permanent increases to the ambient noise levels throughout Cupertino would be *significant and unavoidable*.

### 6.2.3 TRANSPORTATION AND TRAFFIC

As discussed in Chapter 4.13, Transportation and Traffic, of this Draft EIR, the following impacts would be significant and unavoidable.

---

<b>TRAF-1</b>	<b>Implementation of the proposed Project would result in increases to level of service (LOS) to exceed acceptable standards at the intersections discussed below; therefore, would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths.</b>
---------------	--

---

The proposed Project would result in *significant* and unavoidable impacts to the following intersections during at least one of the peak hours.

- SR 85 Northbound Ramps and Stevens Creek Boulevard (#2): LOS E – AM Peak Hour
- Stelling Road and Stevens Creek Boulevard (#3): LOS F – PM Peak Hour
- Sunnyvale-Saratoga Road/De Anza Boulevard and Homestead Road (#5): LOS F – AM and PM Peak Hours
- De Anza Boulevard and I-280 Northbound Ramp (#6): LOS F – AM and PM Peak Hours
- De Anza Boulevard and I-280 Southbound Ramp (#7): LOS F – AM and PM Peak Hours
- De Anza Boulevard and Stevens Creek Boulevard (#8): LOS F – PM Peak Hour

---

## CEQA-REQUIRED ASSESSMENT CONCLUSIONS

- De Anza Boulevard and McClellan Road/Pacifica Drive (#9): LOS F – PM Peak Hour
- Wolfe Road and Homestead Road (#16): LOS F – PM Peak Hour
- Wolfe Road and I-280 Northbound Ramp (#18): LOS F – AM Peak Hour
- Wolfe Road and I-280 Southbound Ramp (#19): LOS F – AM and PM Peak Hours
- Stevens Creek Boulevard and Wolfe Road/Miller Avenue (#21): LOS E+ AM Peak Hour
- North Tantau Avenue/Quail Avenue and Homestead Road (#24): LOS E – AM Peak Hour and E+ – PM Peak Hour
- Stevens Creek Boulevard and Tantau Avenue (#27): LOS F – PM Peak Hour
- Stevens Creek Boulevard and I-280 SB Ramps/ Calvert Drive (#29): LOS F – PM Peak Hour
- Agilent Tech Drive Way and Stevens Creek Boulevard (#30): LOS F - AM Peak Hour
- Lawrence Expressway Southbound Ramp and Stevens Creek Boulevard (#31): LOS F – AM Peak Hour
- Stevens Creek Boulevard and Lawrence Expressway Northbound Ramp (#32): LOS F – AM Peak Hour

While implementation of Mitigation Measure TRAF-1 would secure a funding mechanism for future roadway and infrastructure improvements that are necessary to mitigate impacts from future projects based on then current standards, impacts would remain *significant and unavoidable*, because the City cannot guarantee improvements at these intersections at this time. This is in part because the nexus study has yet to be prepared and because some of the impacted intersections are under the jurisdictions of the Cities of Sunnyvale and Santa Clara and Caltrans.

### Freeway Levels of Service

Under the proposed Project, one of the HOV lane segments and the following mixed-lane freeway segments would have *significant and unavoidable* impacts:

- SR 85 Southbound between I-280 and Stevens Creek Boulevard
- I-280 Southbound between Lawrence Expressway and Saratoga Avenue
- I-280 Southbound between Saratoga Avenue and Lawrence Expressway
- I-280 Southbound between Wolfe Road and De Anza Boulevard
- I-280 Southbound between De Anza Boulevard and SR 85 (mixed-flow lanes and HOV lane)

Even with implementation of Mitigation Measures TRAF-1, which includes preparing and implementing a Traffic Mitigation Fee Program to guarantee funding for roadway and infrastructure improvements that are necessary to mitigate impacts from future projects based on the then current City standards, impacts would be *significant and unavoidable*.

---

<b>TRAF-2</b>	<b>Implementation of the proposed Project would result in significant and unavoidable impacts to the following four Congestion Management Program (CMP) intersections at least one of the peak hours.</b>
---------------	---

---

The proposed Project would result in *significant and unavoidable* impacts to the following Santa Clara County's Congestion Management Program (CMP) intersections at least one of the peak hours:

- SR 85 Northbound Ramps and Stevens Creek Boulevard (#2)

## CEQA-REQUIRED ASSESSMENT CONCLUSIONS

- Stelling Road and Stevens Creek Boulevard(#3)
- Sunnyvale-Saratoga Road/De Anza Boulevard and Homestead Road (#5)
- De Anza Boulevard and I-280 Northbound Ramp (#6)
- De Anza Boulevard, and I-280 Southbound Ramp (#7)
- De Anza Boulevard and Stevens Creek Boulevard (#8)
- Wolfe Road and I-280 Northbound Ramp (#18)
- Wolfe Road and I-280 Southbound Ramp (#19)
- Wolfe Road/Miller Avenue and Stevens Creek Boulevard (#21)
- Stevens Creek Boulevard and I-280 Ramps/ Calvert Drive (#29)
- Lawrence Expressway Southbound Ramp and Stevens Creek Boulevard (County) (#31)
- Lawrence Expressway Northbound Ramp and Stevens Creek Boulevard (County) (#32)

Even with implementation of Mitigation Measures TRAF-1, which includes preparing and implementing a Traffic Mitigation Fee Program to guarantee funding for roadway and infrastructure improvements that are necessary to mitigate impacts from future projects based on the then current City standards, the impacts to these CMP intersections would be *significant and unavoidable*.

---

<b>TRAF-6</b>	<b>Implementation of the proposed Project, in combination with past, present, and reasonably foreseeable projects, would result in additional cumulatively considerable impacts.</b>
---------------	--

---

The analysis of the proposed Project, above, addresses cumulative impacts to the transportation network in the city and its surroundings; accordingly, cumulative impacts would be the same as proposed Project, which are *significant and unavoidable*.

## 6.3 GROWTH-INDUCING IMPACTS

Section 15126.2(d) of the CEQA Guidelines requires that an EIR discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Typical growth inducing factors might be the extension of urban services or transportation infrastructure to a previously unserved or under-served area, or the removal of major barriers to development. This section evaluates the proposed Project's potential to create such growth inducements. As Section 15126.2(d) requires, "[i]t must not be assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment." In other words, negative impacts associated with growth inducement occur only where the projected growth would cause significant adverse environmental impacts.

Growth-inducing impacts fall into two general categories: direct or indirect. Direct growth-inducing impacts are generally associated with providing urban services to an undeveloped area. Indirect, or secondary growth-inducing impacts consist of growth induced in the region by additional demands for housing, goods, and services associated with the population increase caused by, or attracted to, a new project.

## CEQA-REQUIRED ASSESSMENT CONCLUSIONS

Further, while implementation of the proposed Project would induce growth, as discussed in detail in Chapter 4.11, Population and Housing, of this Draft EIR, this growth would be consistent with the regional planning objectives established for the Bay Area. Further, this additional growth would come incrementally over a period of approximately 26 years and a policy framework is in place to ensure adequate planning occurs to accommodate it. The proposed Project has mixed-used development near transportation facilities and employment centers, and implements energy and water conservation requirements related to existing and new development, thereby, minimizing commitment and consumption of non-renewable resources, to the extent practicable.

### 6.3.1 DIRECT IMPACTS

The proposed Project would directly induce population, employment and economic growth by replenishing the commercial, residential, hotel, and office space allocation within some areas of the city. The proposed Project would result in the following growth patterns based on the expected growth assumptions for the city boundary:

- Implementation of the proposed Project to the year 2040 would result in increased office space development allocation of approximately 4,040,231 square feet. This would result in a total anticipated office space of approximately 12,970,005 square feet by 2040.<sup>10</sup>
- Implementation of the proposed Project to the year 2040 would result in increased commercial space development allocation of approximately 1,343,679 square feet. This would result in a total anticipated commercial space of approximately 5,073,248 square feet by 2040.<sup>11</sup>
- Implementation of the proposed Project to the year 2040 would result in increased hotel room development allocation of approximately 1,339 rooms. This would result in a total anticipated hotel room inventory of approximately 2,429 rooms by 2040.<sup>12</sup>
- Implementation of the proposed Project to the year 2040 would result in increased residential unit development allocation of approximately 4,421 units. This would result in a total anticipated residential unit inventory of approximately 25,820 residential units by 2040.<sup>13</sup>

State law requires the City to promote the production of housing to meet its fair share of the regional housing needs distribution made by ABAG. The housing and commercial/industrial growth in Cupertino would allow the City to address its regional fair-share housing obligations.

In addition, the type of growth envisioned by the proposed Project would be concentrated in specific, designated areas therefore Major Mixed-Use Special Areas, designated Study Areas, Gateways, Nodes, and designated Housing Element Sites. The growth envisioned under the proposed Project would result in regional benefits by promoting growth that encourages less automobile dependence and supports regional transit systems, which could have associated air quality and noise effects. Encouraging infill growth in designated areas would help to reduce development pressures on lands outside the city boundary.

---

<sup>10</sup> Existing built/approved office space is 8,929,774 square feet.

<sup>11</sup> Existing built/approved commercial space is 3,729,569 square feet.

<sup>12</sup> Existing built/approved hotel rooms are 1,090 rooms.

<sup>13</sup> Existing built/approved residential units are 21,339 units.

## **CEQA-REQUIRED ASSESSMENT CONCLUSIONS**

### **6.3.2 INDIRECT IMPACTS**

The proposed Project is considered growth inducing because it encourages new growth in the urbanized areas of Cupertino. Development in these areas would consist of infill development on underutilized sites, sites that have been previously developed, and that are vacant and have been determined to be suitable for development. However, infrastructure is largely in place and commercial or office growth would be required to comply with the City's General Plan, Zoning regulations and standards for public services and utilities; secondary effects associated with this growth do not represent a new significant environmental impact which has not already been addressed in the individual resource chapters of this EIR.

## **6.4 SIGNIFICANT IRREVERSIBLE CHANGES**

Section 15126.2(c) of the CEQA Guidelines requires an EIR to discuss the extent to which a proposed Project would commit nonrenewable resources to uses that future generation would probably be unable to reverse. The three CEQA-required categories of irreversible changes are discussed below.

### **6.4.1 LAND USE CHANGES THAT COMMIT FUTURE GENERATIONS**

As described in detail in Chapter 3, Project Description, of this Draft EIR, the proposed Project generally maintains the land use pattern of the existing General Plan. The current General Plan provided development allocations for buildout of the city through the year 2020; however, the Apple Campus 2 project, which was not envisioned in the General Plan, used up much of the commercial and office space development allocation resulting in the need to replenish development allocation in order to accommodate future growth. The proposed Project includes increased density and heights at some locations, but future development under the proposed Project would be located on land that is generally urbanized or on infill sites and sites in developed areas that are underutilized. Once future development under the proposed Project occurs, it would not be feasible to return the developed land to its existing (pre-project) condition. Therefore, at least some of the development allowed under the proposed Project would most likely lead to irreversible changes in land use.

### **6.4.2 IRREVERSIBLE DAMAGE FROM ENVIRONMENTAL ACCIDENTS**

Irreversible changes to the physical environment could occur from accidental release of hazardous materials associated with development activities; however, compliance with the applicable regulations and implementation of the policies in the current General Plan, as discussed in Chapter 4.7, Hazards and Hazardous Materials, would reduce this potential impact to a less-than-significant level. Therefore, irreversible damage is not expected to result from the adoption and implementation of the proposed Project.

### **6.4.3 LARGE COMMITMENT OF NON-RENEWABLE RESOURCES**

Implementation of development allowed under the proposed Project would result in the commitment of limited, renewable resources such as lumber and water. In addition, development allowed by the proposed Project would irretrievably commit nonrenewable resources for the construction of buildings, infrastructure,

## CEQA-REQUIRED ASSESSMENT CONCLUSIONS

and roadway improvements. These nonrenewable resources include mined minerals such as sand, gravel, steel, lead, copper, and other metals. Future buildout under implementation of the proposed Project also represents a long-term commitment to the consumption of fossil fuels, natural gas, and gasoline. Increased energy demands would be used for construction, lighting, heating, and cooling of residences, and transportation of people within, to, and from Cupertino. However, as shown in Section 4.14.1, Water; Section 4.14.3, Solid Waste; and Section 4.14.4, Energy Conservation, of Chapter 4.14, Utilities and Service Systems, of this Draft EIR, several regulatory measures and General Plan policies and strategies encourage energy and water conservation, alternative energy use, waste reduction, alternatives to automotive transportation, and green building.

Future development as a result of increased development allocation, under the Project would be required to comply with all applicable building and design requirements, including those set forth in Title 24 relating to energy conservation. In compliance with CALGreen, the State's Green Building Standards Code, future development would be required to reduce water consumption by 20 percent, divert 50 percent of construction waste from land-fills, and install low pollutant-emitting materials.

Therefore, while the construction and operation of future development, as a result of increased development allocations under the proposed Project, would involve the use of nonrenewable resources, compliance with applicable standards and regulations and implementation of General Plan policies would reduce the use of nonrenewable resources to the maximum extent practicable, and Therefore, the proposed Project would not represent a large commitment of nonrenewable resources in comparison to a business as usual situation.

## **CEQA-REQUIRED ASSESSMENT CONCLUSIONS**



## ***7. Organizations and Persons Consulted***

---

This Draft EIR was prepared by the following consultants and individuals:

### **Lead Agency**

*City of Cupertino*

Aarti Shrivastava  
Assistant City Manager  
Community Development and Strategic Planning

Piu Ghosh  
Senior Planner

Rebecca Tolentino  
Senior Planner

George Schroeder  
Associate Planner

Timm Borden  
Director of Public Works

Carol Atwood  
Director of Recreation and Community Services

Chad Mosley  
Senior Civil Engineer

David Stillman  
Senior Civil Engineer

Winnie Pagan  
Associate Civil Engineer

### **Agencies and Consultants**

*Pacific Gas & Electric*

John Joseph  
Senior Program Manager, Green Communities and Innovator Pilots

## **ORGANIZATIONS & PERSONS CONSULTED**

### *Yarne & Associates, Inc. Water Management Consulting Services*

Jeffery L. Yarne  
Principal

### *Schoolhouse Services*

Dick Recht  
Principal

### *Santa Clara County Library District*

Derek E. Wolfgram  
Deputy County Librarian for Community Libraries

Gayathri Kanth  
Cupertino Community Librarian

### *Santa Clara County Sheriff*

Ken Binder  
Captain, West Valley Patrol Division

### *Santa Clara County Fire Department*

Joe Parker  
Deputy Chief of Operations Division

Cheryl Roth  
Operations/Support Services Divisions

## **Report Preparers and Qualifications**

### *PlaceWorks*

Steve Noack, AICP  
Principal, Principal-in-Charge  
BS, Urban and Regional Government, Willamette University, Salem, OR

Terri McCracken  
Senior Associate, Project Manager  
BA, Environmental Studies and Planning, Sonoma State University, Rohnert Park  
BS, Environmental Education, University of Oklahoma, Norman, OK

## ORGANIZATIONS & PERSONS CONSULTED

William Hass

BS, Civil and Environmental Engineering, South Dakota State University, Brookings, SD  
Master of Public Administration, University of Southern California, Los Angeles, CA

Cathy Fitzgerald, DEnv, PE, qsd/qsp

Senior Engineer

BA, Biology, University of California, Los Angeles

MA, Marine Biology, University of California, Santa Barbara

Doctor of Environmental Science & Engineering, University of California, Los Angeles, CA

Nicole Vermillion

Associate Principal

BA with Honors, Environmental Studies, University of California, Santa Cruz, CA

BS with Honors, Ecology & Evolutionary Biology, University of California, Santa Cruz, CA

Master of Urban & Regional Planning, University of California, Irvine, CA

Bob Mantey

Manager, Noise, Vibration & Acoustics

BS, Engineering, Harvey Mudd College, Claremont, CA

Stuart Michener

Senior Geologist

BA, Environmental Studies, Colby College, Waterville, ME

Graduate work in Hydrogeology, Waste Management Program, Colorado School of Mines

MS, Geology, University of Massachusetts, Amherst, MA

Steve Bush

Assistant Scientist

BS, Chemical Engineering, University of California, Santa Barbara, CA

MS, Chemical Engineering, University of California, Los Angeles, CA

Kelly Cha

Project Planner

BA, Architecture, University of California, Berkeley, CA

Eric Panzer

Project Planner

BS, Environmental Science, University of California, Berkeley, CA

Ricky Caperton

Project Planner

BA, Environmental Studies and Planning, Sonoma State University, Rohnert Park, CA

MA, Environmental Law and Policy, Vermont Law School, South Royalton, VT

## ORGANIZATIONS & PERSONS CONSULTED

Alex Lopez

Planner

BS, Environmental Sciences, University of Arizona, Tucson, AZ

Grant Reddy

Graphic Design Specialist

Bachelor of Environmental Design, University of Colorado, Boulder, CO

Cubic Program Graduate, Leeds School of Business, Boulder, CO

## Other Consultants

### *BKF Engineers*

Fletcher Parsons

Project Engineer

Cole Gaumnitz

Project Engineer

### *Environmental Collaborative*

Jim Martin

Principal

### *Hexagon Transportation Consultants*

Gary Black

President, Principal-in-Charge

Jill Hough

Vice President and Principal Associate

### *Tom Origer & Associates*

Tom Origer

Principal Investigator, Principal-in-Charge

Janine Loyd

Senior Associate, Project Manager