



PUBLIC WORKS DEPARTMENT

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CITY COUNCIL INFORMATIONAL MEMORANDUM

Date: August 29, 2024

To: Cupertino City Council

From: Pamela Wu, City Manager, Chad Mosley, Director of Public Works, David Stillman, Transportation Manager

Re: De Anza Blvd Buffered Bike Lane Project

Background

The upcoming scheduled implementation of the De Anza Blvd Buffered Bike Lane project has resulted in a substantial amount of misinformation being presented to City Council through a campaign of emails and a Change.org petition from members of the public opposed to the project. Staff has prepared this memorandum to address and clarify this information.

Project Scope

De Anza Boulevard is a major north-south principal arterial roadway across Cupertino, a designated truck route along most of its length, and has posted speed limits of 35 and 40 mph. Currently, standard Class II bike lanes exist along both directions of De Anza Boulevard within Cupertino, and no buffer zone exists to increase the separation between bicycle and vehicle traffic. The De Anza Blvd Buffered Bike Lane Project, the highest-ranking Tier 2 project in the 2016 Cupertino Bicycle Transportation Plan, will enhance the safety of the existing Class II bicycle lanes on De Anza Blvd between Homestead Road and Bollinger Road by creating a painted buffer zone to provide greater separation between the bike lanes and the adjacent vehicle lanes. Recently the City of San Jose completed the installation of a painted buffer zone separating the Class II bike lanes from vehicle traffic lanes along De Anza Boulevard within their City limits south of Bollinger Road. The improvements from Cupertino's project will similarly enhance safety for cyclists within Cupertino by providing a continuation of buffered bike lanes into the City's jurisdiction in addition to calming vehicular traffic speeds.

In the southbound direction, De Anza Blvd currently has three vehicle travel lanes between Homestead Road and the I-280 southbound ramp, and four lanes between the

I-280 southbound ramp and Bollinger Road. De Anza Blvd then reduces back to 3 lanes south of Bollinger Road. In the northbound direction, De Anza Blvd has three lanes between Bollinger Road and Stevens Creek Blvd, four lanes between Stevens Creek Blvd and the I-280 southbound ramp, and then reduces back to three lanes between the I-280 southbound ramp and Homestead Road, and northward into Sunnyvale. Due to the constrained pavement widths along some segments, the number of travel lanes will be reduced in order to provide room for the painted buffer zone. These modifications include a reduction from four to three lanes in the northbound direction between Stevens Creek Blvd and Lazaneo Drive, and a reduction in the southbound direction, from four to three lanes between Stevens Creek Blvd and Bollinger Road (a fourth lane will be provided at McClellan Road for right-turning vehicles). The attached exhibit shows existing and proposed lane configurations. Minor lane width adjustments will also be performed along the corridor to provide for a consistent and safe driver experience.

Engagement and Actions

The project was included in the Capital Improvement Program budget for Fiscal Year 2022-23, approved by City Council on June 9, 2022 by 4-1 vote. On December 21, 2022, the project was presented to the Bicycle Pedestrian Commission (BPC), where the proposed modifications to the lane configurations were discussed and general support from the commission was received. At the meeting, in response to a suggestion and inquiry from commissioner Ganga, staff noted that traffic data from the corridor would be collected and evaluated. No formal action was taken at the meeting. Staff returned to the BPC on April 19, 2023 to request that the BPC recommend Council approve the allocation of \$166,259 of Cupertino's Transportation Development Act Article 3 (TDA3) funding for the project. Following a discussion about the project, the BPC voted unanimously to approve the allocation request. City Council subsequently approved the allocation unanimously under consent on June 6, 2023.

On July 19, 2023, the project was again discussed at the BPC, within the context of a larger discussion about the Transportation Division work plan. Staff explained at the meeting that a microsimulation analysis of the De Anza Blvd corridor was not performed, but that traffic data was collected and traffic patterns were observed. On April 16, 2024, City Council awarded the construction contract for \$529,680 unanimously under consent.

Data Collection and Analysis

Traffic count data was collected in February and March 2023. Data included 24-hour northbound and southbound volumes, in 15-minute increments.

Vehicle throughput along a corridor such as De Anza Blvd is constrained more by the capacities of the signalized intersections and the ability to accommodate a progression of vehicles, than by the number of through lanes. Staff verified the adequacy of the De Anza Blvd corridor to support the design through a quantitative analysis of the per-lane

capacity of the signalized intersections, as well as through observation of the performance of similar corridors with similar traffic volumes as an indication of expected performance of the De Anza corridor. A more detailed analysis, such as a computer microsimulation, was not performed due to the inherent challenges of accurately modeling the corridor. This type of analysis is not an appropriate tool for evaluating this corridor due to the number of lanes, predominance of driveways and variability of traffic volumes. Model results would be highly sensitive to design inputs and assumptions, requiring extensive engineering judgement. This approach would require lengthy and expensive evaluation of the corridor, and the results would not provide significantly more insight than the quantitative analysis performed.

With respect to the performance of similar corridors, one notable example is El Camino Real in the cities of Mountain View and Sunnyvale. El Camino Real has three through lanes in each direction, numerous driveways which introduce significant friction along the corridor, and multiple signalized intersections with high-volume cross streets. Per-lane traffic volumes along El Camino Real are similar to, and in some locations higher than, the per-lane volumes expected along De Anza Blvd following project implementation. El Camino Real operates acceptably under these conditions.

Based upon available green times, traffic signal cycle length, and per-lane hourly capacities of arterial roadways, the volume-to-capacity ratios of the travel lanes along De Anza Blvd will be acceptable and drivers should not experience an increase in vehicle delays with the proposed changes.

Following implementation of the project, Transportation Division staff will be monitoring traffic flows, and adjustments to signal timings and coordination will be performed if necessary to ensure satisfactory vehicle progression is maintained and delays are minimized.

Finally, regarding the need for a formal traffic analysis, the 2018 California Governor's Office of Planning and Research (OPR) Technical Advisory "*On Evaluating Impacts in CEQA*" states, "reducing roadway capacity (for example, by removing or repurposing motor vehicle travel lanes) will generally reduce VMT and therefore is presumed to cause a less-than-significant impact on transportation. Generally, no transportation analysis is needed for such projects."

Sustainability Impact

The recommended improvements are intended to encourage bicycle use, which will reduce single-occupancy vehicle trips and lead to reduced vehicle emissions. This will help the City achieve air quality and greenhouse gas emission reduction goals.

Fiscal Impact

The FY 2022/2023 budget allocated \$525,000 for the project, which is partially offset by Transportation Development Act Article 3 grant funds received (\$166,259).

Prepared by: David Stillman, Transportation Manager
Reviewed by: Chad Mosley, Director of Public Works
Approved for Submission by: Pamela Wu, City Manager

Attachment:

A – Exhibit of Before and After Lane Configurations

De Anza Buffered Bike Lanes Project Before & After Lane Configuration

Exhibit A

