Neighborhood Traffic Calming Program

Transportation Division | Department of Public Works

Adopted July 2020

City of Cupertino | 10300 Torre Avenue

Cupertino, CA 95014

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Introduction

Due to rising public interest and concerns about speeding and cut-through traffic in Cupertino's residential neighborhoods, the City of Cupertino Transportation Division has developed a Neighborhood Traffic Calming Program (NTCP).

The Neighborhood Traffic Calming Program aims to establish a consistent set of guidelines to provide residents and property owners with a means to obtain relief from traffic-related concerns, namely speeding vehicles and cut-through traffic on their residential street. This is accomplished through a multi-step process involving an initial petition, a traffic survey, neighborhood meetings, a postcard survey and the possible installation of traffic calming measures.

Guiding Principles

- The primary purpose of the NTCP is to address neighborhood concerns and to reduce the speed and volume of traffic on local residential and residential collector streets with an established speed limit of 25 miles per hour. The NTCP does not apply to roadways designated as arterial roads or collector roads.

- Emergency vehicle access will be maintained in all traffic calming plans. Emergency vehicle travel times will also be considered when evaluating traffic calming measures.

- Reasonable automobile, pedestrian and bicycle access should be maintained to streets with traffic calming measures.

- Removal of some on-street parking spaces may be necessary to install some traffic calming measures. Parking loss at specific locations will be balanced with the neighborhood's desire for the traffic calming device.

- Only approved traffic calming devices included in this manual will be considered for installation under the NTCP. Transportation Division staff will examine the feasibility of the installation of a particular device before a recommendation is made.

- Traffic calming devices will be planned, designed and used in keeping with sound engineering and planning practices. The installation of traffic control devices such as signs, markings and speed humps will be compliant with the State of California Vehicle Code and the Manual of Uniform Traffic Control Devices.

- Requests for traffic calming devices shall be evaluated on a first-come, first-served basis and implemented up to the limit of funds available. Eligible traffic calming projects will be prioritized for implementation based upon the severity of traffic conditions.

- Traffic calming measures require approval by affected residents and property owners prior to implementation.

Funding

The City allocates General Fund dollars each year for the NTCP program. Projects are funded in priority order based upon the severity of the problem, and if the budget is exhausted, remaining projects will be carried over to the next year. Larger projects, which might deplete the budget, may be considered as a separate capital improvement project. Those projects would compete with other City projects for funding and may be scheduled in future fiscal years.

The Neighborhood Traffic Calming Process

The Neighborhood Traffic Calming Program includes a structured, six (6) step planning process. In most cases, the total process from initial inquiry to installation takes four to six months. Each step in this process is outlined below.

Step 1: Initial Inquiry and/or Petition by Residents

The first step in the NTCP process begins with an inquiry to the Transportation Division from one or more residents or property owners. If, during the initial inquiry, the property owner or resident requests signing and/or striping, the Transportation Manager can approve the installation. No further action would be necessary.

If signing and/or striping is not sufficient and additional traffic calming is desired, staff will direct the resident or property owner to obtain signatures, on a petition provided by City staff, from a minimum of 10 percent of the residents or property owners on the street in question. This petition will have a statement explaining the traffic concern. Through this petition, there is an assurance the individual's concerns also reflect the concerns of the neighborhood.

Step 2: Traffic Study, Identification of Appropriate Measures and Establishment of Notification/Voting Area

After a petition has been received, staff will conduct a traffic or speed survey to determine if the speed of traffic or the amount of cut-through traffic on the street exceeds the NTCP thresholds. The criteria established for local residential and residential collector streets are detailed in Table 1 and Table 2 below. If the survey verifies the traffic concern, staff will move to the next step in the process.

During this phase of the NTCP, staff will also establish a notification/voting area. This area will include those properties that are directly affected by the traffic issue and the potential traffic calming measures. Only properties on the segment of street in question, or on cul-de-sacs or courts directly connected to the street, will be included in the notification/voting area. Properties on separate or distant areas of the same street or on streets with alternate ingress and egress will generally not be included in the notification area. Specific notification areas will be determined by staff on a case-by-case basis.

Table 1: Local Residential Streets (25 mph Speed Limit)

Speed Criteria	Cut-Through Volume Criteria
☐ 15% (85th percentile speed) of the vehicles on the street exceed 32 mph or 30 mph in a school zone.	☐ 25% or more of the traffic on the street is cut-through traffic; and ☐ Street carries more than 1000 vehicles per day Cut-through traffic is defined as traffic entering the neighborhood with a destination outside of the neighborhood

Step 3: Neighborhood Meeting with Affected Residents/Property Owners to Identify Preferred Traffic Calming Measures

Staff will arrange a neighborhood meeting with the residents and property owners within the notification area and send out an informational letter about the meeting. Whenever possible, staff will arrange to hold the meeting at a public venue near the affected area.

At this meeting, City staff will present the traffic calming measures described in the Appendix. Staff will also address concerns and answer questions about these devices and the NTCP process in general.

At the conclusion of the meeting, staff will poll the individuals in attendance to see if there is agreement on the type of traffic calming device they would like to see on their street. If staff determines a consensus can be reached, staff will move to Step 4 of the process, a postcard survey. If there is not clear direction from the residents, staff will arrange a second and final neighborhood meeting. If, at the conclusion of the second meeting, staff determines a consensus cannot be reached, the process may be concluded depending on the desires of the residents and property owners.

Step 4: Postcard Survey

At the successful conclusion of Step 3, City staff will mail a postcard survey to all the residents and property owners within the notification area, asking them for a yes-or-no vote on whether or not they would like to see the selected traffic calming device(s) installed on their street. Noticed residents will have a two (2) week period to return their vote and are encouraged to communicate with and remind their neighbors to submit their vote. For a device to be installed, a supermajority (67 percent) of residents need to respond with support for the proposed measures.

If a supermajority is not received, the NTCP process does not proceed. Residents and property owners receive a notification of vote results and are informed they may reapply for the process in one year.

Step 5: Approval by Staff and/or the City Council

Depending on the type of device(s) selected from the traffic calming device inventory in the Appendix, Public Works staff will approve the installation of the device or, in some instances, will bring a recommendation to the City Council. To determine what type of approval is necessary for a particular device, refer to Table 3 below.

Table 3: Traffic Calming Device Approval

Device	Approval Process
• Speed / warning signs and striping	• Transportation Manager Approval
• Speed humps • Speed tables • Median islands • Traffic Circles / Roundabouts • Bulb-outs / Curb extensions • Turn restriction signs • Radar speed feedback sign	• Resident / property owner approval (67% majority) • Transportation Manager Approval • Public Works Director Approval

Step 6: Installation of Traffic Calming Device(s)

After approval, the project will be placed on a prioritized list for implementation. Approved projects will be ranked for installation according to the following criteria and point system:

Percent of vehicles exceeding speed limit	• 1 point / percentage point
Number of vehicles exceeding 1,000 average daily traffic volume	• 1 point / 100 vehicles
Number of reported speed related accidents (in last 2 years)	• 10 points / accident
Vicinity to schools or parks (within 600 ft)	• 5 points each
Percent of property owners approving installation(s)	• 1 point / percentage point

Projects will be implemented, beginning with the highest-ranking project, until available funding is depleted. Projects not funded for a specific funding cycle shall be re-evaluated and shall compete on an annual basis with any new eligible installation on a priority basis.

SPEED AND WARNING SIGNS

Speed and warning signs may be installed to increase roadway users' awareness of upcoming roadway conditions such as a change in the speed limit or the presence of a crosswalk ahead.

The frequent use of signs and striping may decrease their effectiveness and cause visual pollution in some neighborhoods. Signing and striping will be installed to applicable State and municipal codes. After a sign is installed it is typically not removed.

Estimated Cost:

Approximately $250 per sign

Torre Avenue & Rodrigues Avenue, Cupertino

TURN RESTRICTION SIGNS

Turn restriction signs prohibit certain turning movements to discourage cut-through traffic on residential streets. Cut-through traffic volume reduction is potentially significant; however, turn restrictions may redirect traffic to other neighborhood streets and impede access by legitimate residents. Speed and noise are not typically reduced with this measure.

Estimated Cost:

Approximately $250 per sign

S Stelling Road & Lilac Way, Cupertino

SPEED HUMPS / SPEED TABLES / SPEED CUSHIONS

Speed humps are rounded, raised areas placed across the roadway to slow speed. Speed humps have a parabolic profile and are generally 3 – 4 inches high and 12 feet wide in the direction of travel. Often referred to as "bumps" on signage and by the general public, speed humps may reduce speeds to 15 – 20 mph.

Speed tables are modified speed humps with a ten-foot-wide flat top that results in a 22-foot-wide hump in the direction of travel. Speed tables provide a gentler driving experience than speed humps, and as a result less reduction in speed can be expected. Speed tables may be designed as raised midblock crossings often in conjunction with curb extensions.

Speed cushions are speed humps that include wheel cutouts to allow large vehicles to pass unaffected while reducing passenger car speeds. Emergency vehicles with wider axles are able to straddle speed cushions without affecting their speed, thus maintaining their emergency response time. Speed cushions may be considered on key emergency response routes.

Estimated Cost:

Approximately $20,000 - $25,000

Cost is per speed hump or table (includes signing and striping).

Meteor Drive, Cupertino

MEDIAN ISLAND

Median islands are raised islands along the centerline of a street near an intersection that provide separation between the travel lanes at that location. Median islands are designed to prevent turning vehicles from crossing into opposing travel lanes when making turns onto or off of the street, and also may slow traffic due to the narrowing of the travel lanes. Median islands may act as a refuge island for pedestrians crossing wider streets. Depending on the width of the street, on-street parking may be eliminated in the vicinity of the island.

Median islands are typically 2' to 3' wide (or wider if acting as a pedestrian refuge), 10' to 20' long and about 6" high. The islands are not landscaped but will have decorative hardscape in the center.

Estimated Cost:

Approximately $1,500 - $3,000

Cost will vary with the width and length of the median island.

S Tantau Avenue & Barnhart Avenue, Cupertino

TRAFFIC CIRCLES/ROUNDABOUTS

Traffic circles are raised circular medians that direct traffic counterclockwise within an intersection. Traffic circles can help manage speeds, reduce volume and improve side street access. Vehicles must change their direction of travel to maneuver around the circle. Per the State guidelines, traffic circles are controlled by "Yield" signage on all approaches. The traffic circles are not landscaped and will have decorative hardscape in the center. There is no impact on drainage or street sweeping. Emergency vehicle response times may also increase.

Estimated Cost:

Approximately $2,000 - $30,000

Cost will vary based on size and type of material used.

Portal Avenue & Wheaton Drive, Cupertino

BULB-OUTS / CURB EXTENSIONS

Bulb-outs, also known as curb extensions, are a method of narrowing the roadway by extending raised curbs into the street. This has the effect of slowing vehicle speeds and often reducing cut-through traffic. Bulb-outs can be used at street entrances, exits, and midblock locations. Bulb-outs used at intersections will slow turning vehicles as well as decrease the crossing length for pedestrians, which acts to enhance safety for pedestrians. Narrowing travel lanes may force motor vehicles and bicycles closer together making cycling uncomfortable for less experienced riders. Parking may also be impacted depending upon the extent of the bulb-outs installed.

Though less aesthetically pleasing, bulb-outs can also be constructed using flexible posts rather than extending the curb using concrete. The use of flexible posts allows existing drainage patterns to remain and may allow for the passage of bicycles, eliminating the need to share a narrower lane with motor vehicles.

Estimated Cost:

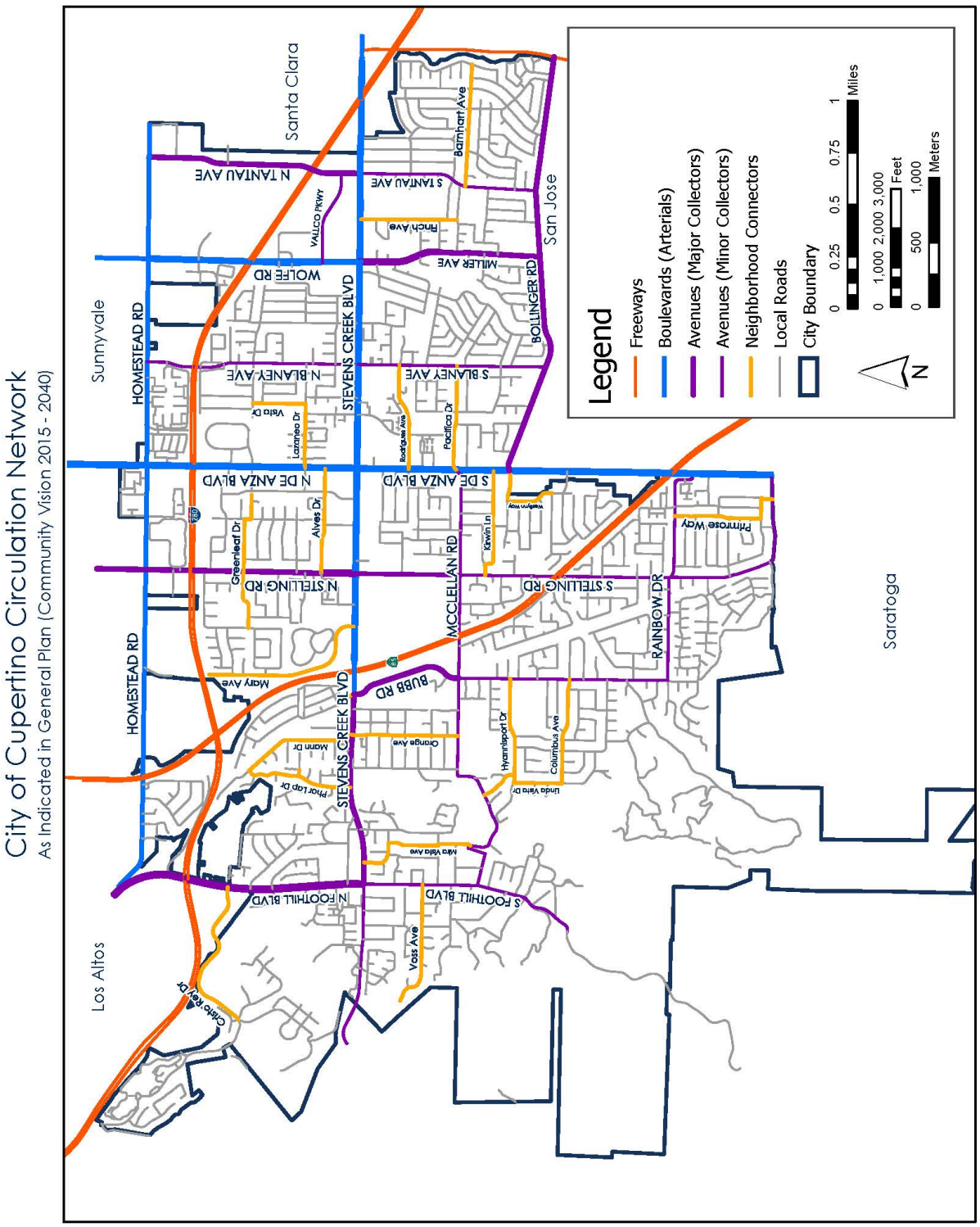
Approximate cost ranges from $1,000 for flexible posts and $2,000 for a simple raised berm, to $40,000 for low maintenance/high-aesthetic landscaped islands.

Cost is per set (one on each side of the street).

Merritt Drive & Vista Drive, Cupertino

Alves Drive & Bandley Drive, Cupertino

Appendix – A: Circulation Network Map



Neighborhood Traffic Calming Program Petition Form

Name: _____

Address: _____

Phone Number: _____

Email: _____

Please indicate traffic issues that concern residents in your neighborhood:

☐ Speeding ☐ Traffic Volumes

☐ Collisions ☐ Pedestrian/Bicycle Safety

☐ Other

_____

_____

Please list the boundaries of your neighborhood. Attach a map if necessary:

_____

_____

_____

Please list possible solutions that you would like the city of Cupertino to consider:

_____

_____

_____

To request that your neighborhood be included in the Neighborhood Traffic Calming Program (NTCP), complete both sides of this form and return to the address below:

City of Cupertino

Attn: NTCP – Transportation Division

10300 Torre Ave

Cupertino, CA 95014

You will be notified when your request form has been received and processed. If you have any questions, please call the Transportation Division at 408.777.3354

We the undersigned are petitioning the City, requesting Traffic Calming for Residents of

_____

_____

All persons signing this petition do hereby:

1. Certify that they are at least 18 years of age and reside within the impacted area;
2. Validate the presence of traffic issues in the neighborhood and the need for traffic calming; and
3. Agree that the following contact person(s) represent the neighborhood as facilitator(s) between the neighborhood residents and the City of Cupertino staff in matters pertaining to 1 and 2 above

1.	Name	Address	Phone
2.	Name	Address	Phone
3.	Name	Address	Phone

Use Back Side for Signatures

Only One Signature Per Address

1.	Name	Address	Phone	Signature
2.	Name	Address	Phone	Signature
3.	Name	Address	Phone	Signature
4.	Name	Address	Phone	Signature
5.	Name	Address	Phone	Signature
6.	Name	Address	Phone	Signature
7.	Name	Address	Phone	Signature
8.	Name	Address	Phone	Signature
9.	Name	Address	Phone	Signature
10.	Name	Address	Phone	Signature
11.	Name	Address	Phone	Signature