



# ***TRANSPORTATION DIVISION***

## **STAFF REPORT**

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**TO:** PLANNING & TRANSPORTATION COMMISSION

**FROM:** Carl Stoffel, Transportation Engineer    **DEPARTMENT:** Planning

**AGENDA DATE:** August 14, 2002

**SUBJECT:** Study Session on Elements of the Neighborhood (Spot Treatment)  
Traffic Calming Program

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### **RECOMMENDATION**

This information in this report is background for a study session. No Commission action is required.

### **BACKGROUND**

On June 12, 2002 the Commission reviewed the first-year report of the Neighborhood Traffic Calming Program (NTCP). The Commission recommended that the City Council approve staff's recommended revisions to the NTCP procedures, including a possible change in the title of the program and some additions to the qualifying criteria for new projects. Refer to the June 12, 2002 Transportation Division Staff Report to the Commission (Attachment 1), along with the draft revised NTCP booklet. This recommendation has not yet gone to the City Council.

At the June 12 meeting, Commissioners requested some additional information about a few elements of the NTCP in the form of a study session. The minutes from the June 12 Commission meeting are included with this report as Attachment 2.

### **PROJECT DESCRIPTION**

The Commission asked for additional information on the following aspects of the NTCP:

1. Education/Enforcement Program (Measure 1 in revised NTCP).
2. Street closures.
3. Funding level.
4. Prioritizing traffic calming measures.

5. Neighborhood funding of traffic calming measures.

## **DISCUSSION**

### **Education and Enforcement Program**

This program is discussed on pages 5 – 6 of the June 12, 2002 staff report and under Measure 1 in the revised NTCP booklet Appendix. One Commissioner and a few residents questioned the effectiveness of the educational part of the program, especially the economic aspect. At this time, the effectiveness of the education/enforcement traffic calming measure as described in Measure 1 is not known yet. Staff developed this program specifically for the Ross Road traffic calming project (between Colorado and Loma Verde), in response to the residents' working group that desired such a program instead of physical measures. While there was no consensus in the group in favor of physical measures, there was support for encouraging responsible driving through a combination of persuasion and deterrence. This project is still in the trial stage and has not yet been evaluated. The program is composed of education and enforcement measures used in Palo Alto and other cities. When the NTCP was before the Commission and Council for adoption last year, Commissioners and Council Members requested that education and enforcement be included in the traffic calming program. Staff, therefore, believes it was a logical step to use the Ross Road experiment as the basis for a new, explicit traffic calming measure to be included in the booklet (Measure 1). This measure is not mandatory; residents are free to choose it if they wish. Ross Road is, thus, a demonstration project from which lessons will be learned about the effectiveness of the education and enforcement approach.

Staff explains at the bottom of the page describing Measure 1 that the measure will probably not be effective on a long-term basis. The most important point is that "priority enforcement" (2 to 3 times weekly) can only be provided during the four-month trial period, and only if there are not higher-priority Police Department needs during that time. The Police Department has also committed to provide "enhanced enforcement" (once a week) for qualified traffic calming projects on the waiting list. Police Department staff for residential traffic enforcement is very limited, due to the high demands for enforcement on major streets and other calls for service. It is doubtful that the Police Department could provide priority enforcement for more than two project areas at a time.

Staff has estimated the cost of the Education/Enforcement program for a typical four-month traffic calming trial as follows. The costs presented below are order-of-magnitude accuracy only.

**Education/Enforcement Traffic Calming Measure  
Four-Month Trial in Typical Spot Treatment Area  
(Based on Current Ross Road Traffic Calming Project)**

Element	Capital Cost	Staff and Administrative Costs	TOTALS
Priority Enforcement (2-3 x weekly)	Existing officers and equipment utilized (as time and staffing permit)	\$8,000	\$8,000
<b>SUBTOTAL FOR ENFORCEMENT ELEMENT ONLY</b>			\$8,000
Speed Watch (residents use radar guns)	\$0—radar guns are older unused units	\$900	\$900
Radar Trailer Placement	Police already have one unit. A second would be desirable at a cost of \$18,000. Assume capital cost distribution over 18 project areas over life of unit, or \$1000 per location	\$1,500	\$2,500
“Neighborhood Watch” signs	\$200 for two	\$200 for two	\$400
Press Releases	Insignificant	\$300	\$300
Pace Car Program (pledge card and bumper stickers)	\$300 for 120 households	\$1300 for 120 households	\$1600
<b>SUBTOTAL FOR EDUCATION ELEMENTS ONLY</b>			\$5,700
<b>GRAND TOTAL FOR EDUCATION AND ENFORCEMENT ELEMENTS</b>			\$13,700

The above total cost for the education/enforcement program for a typical traffic calming project, which is about \$14,000, is comparable to the cost of the most inexpensive physical traffic calming project for that size area--three speed humps. On the other hand, the education/enforcement measure is a bargain compared to the more expensive traffic calming measures—for example, three traffic circles would cost well over \$100,000 to install permanently. Staff does not expect that many traffic calming projects will consist solely of education and enforcement measures—perhaps one every three years. It is very important, however, to provide an alternative between an unacceptable status quo and physical measures; in support of which there may be no consensus. The education/enforcement program provides such an alternative.

One element of the education program--the Pace Car Program--has received considerable publicity in local media. Staff has received a number of inquiries from other cities and individuals who would like to have a similar program. A few members of the public have reacted negatively to the cost of the bumper stickers in the Pace Car Program. The Pace Car Program was first made available to residents in the Ross Road traffic calming project area. Recently it was made available citywide. So far, out of 120 households in the Ross Road project area, 30 pace car pledge cards have been returned and 7 households have requested about 15 bumper stickers. Outside of the Ross Road area, only about three requests for the pledge cards and bumper stickers have been received. The approximate cost of the Pace Car Program, based on experience with the Ross Road project area (including the pledge card, bumper stickers, and staff and administrative costs), is about \$13 per requesting household, or about \$7 per requesting resident.

### Street Closures

The Commission approved staff's recommendation to exclude street closures and similar measures (a.k.a. "volume reduction measures") from the revised NTCP. The reasons are (a) excessive traffic diversion often leading to a wider project area, and (b) excessive staff time required (refer to detailed discussion on page 4 of the June 12, 2002 staff report to the Commission). These measures are described in detail under Measures 16-19 in the Appendix of the existing NTCP booklet dated April 9, 2001. Guideline 4 of the existing booklet explains that Comprehensive Plan policy is to keep streets open to vehicle traffic, with three exceptions: demonstrated safety problem; overwhelming through traffic; or where the closure would increase use of alternate travel modes. For practical purposes, staff has interpreted "overwhelming through traffic" to mean an average daily level of 60 percent or more.

When the Commission first considered and approved the NTCP on September 27, 2000, Commissioners discussed volume reduction measures extensively. At least one Commissioner thought that volume reduction measures should not be part of the traffic calming program. The Commission concluded that the primary focus of the new traffic calming program should be on improved safety for non-motorized street users through speed reduction. The Commission removed the phrase "reduce volumes" from Objective 1 of the program, but retained the objective "reduce cut-through traffic". In the end, the Commission decided that volume control measures should be retained in the program as an effective way to reduce cut-through traffic.

At the recent June 12, 2002 Commission meeting, a few citizens spoke or sent letters disagreeing with staff's recommendation to eliminate volume reduction measures from the NTCP. These citizens felt that such measures are useful tools to reduce cut-through traffic. Though they were not present at the recent Commission meeting, there are many citizens who are strongly opposed to volume reduction measures when their streets are expected to receive traffic diverted from closed streets or if their usual neighborhood access route is proposed to be altered or closed. (A recent example is the heated

opposition to staff's consideration of prohibiting left turns from Embarcadero to Churchill, in the Churchill Avenue traffic calming study.) Staff does not doubt that volume reduction measures are useful and effective—in fact, they are the most effective method to reduce cut-through traffic. The problem resides in the negative impact of causing traffic to spill over onto neighboring streets. Even though the revised NTCP now excludes volume reduction measures, staff will continue to consider such measures in neighborhood-wide (area) circulation studies, provided that their usage complies with Comprehensive Plan Policies T-32 and T-33. For further information, refer to CMR:440:00 which provides a summary of the Commission's discussion about street closures for the Downtown North Traffic Calming Project (Attachment 3). Refer also to Commission minutes of October 11, 2000 when the Downtown North project was discussed.

### Funding

Securing funding for traffic calming projects can be a challenge, especially for the larger neighborhood-wide projects. The usual source of funds for the spot treatment program as well as neighborhood projects is the Street Improvement Fund. Some of this funding may be reimbursable from gas tax funds. Other possible sources of funds are grants, a future City infrastructure bond measure, developer mitigation funds, a future Citywide traffic impact fee, and resident financing and gifts (see discussion in a later section of this report on resident financing). Grants are usually available only for projects that have some regional importance. A City bond measure for miscellaneous capital projects is not planned at this time. The Transportation Division is preparing a study that will lead to a traffic impact fee that, hopefully, will be assessed on development projects citywide and will fund a variety of transportation projects, including traffic calming. No details are available at this time.

Another source of funding is developer mitigation funds. The Downtown North Traffic Calming Study (not the actual installation of measures) was funded by a developer contribution as a public benefit for a downtown PC zone project. The Stanford University General Use Permit (GUP) approved in December 2000 contains a condition (G10 "Neighborhood Traffic Studies") that requires Stanford to help fund any neighborhood traffic study in the area between I-280 and Middlefield Road, from Oregon/Page Mill to the north City boundary. The condition is probably most applicable to neighborhood-wide studies (rather than the spot treatment projects), but the Santa Clara County Department is willing to receive an application for any type of traffic calming study. Stanford's financial commitment is limited to a maximum of \$100,000 for the life of the GUP, so it does not appear to be a source of continued funding for the NTCP. This funding source would be applicable to any future study of the wider Churchill neighborhood area that might be later approved by the Commission or Council (a staff report on that topic will be sent to the Commission in the near future).

### Prioritizing Traffic Calming Measures

At least one Commissioner suggested that the Commission may want to look at prioritizing certain of the traffic calming measures according to effectiveness. The “Introduction” page of the Appendix of the revised NTCP booklet recently approved by the Commission states that traffic calming measures are listed in approximate order of effectiveness. Measure 1 (Education and Enforcement) is described as being effective only as long as it is active. The least effective measures are the passive measures which drivers can choose to obey or not, the most typical of which are signing and striping. The active measures are cited as being the most effective. Measures 10 –17 are described as being the most desirable and effective of the active measures because they force drivers into vertical or horizontal movements. The booklet Appendix includes a wide variety of acceptable traffic calming measures. Practically, however, staff believes most projects will make use of a small subset of these measures that are the most effective, most cost-effective, or least complicated to design and install. Notwithstanding, staff believes that it is useful for residents to have an understanding of the range of possible measures available to provide a framework for the few most effective or popular measures. In addition, the unique circumstances of a given location may lend themselves to use of approved measures outside the small subset more commonly employed.

### Neighborhood Funding of Traffic Calming Measures

For background, Commissioners are referred to page 21 of the NTCP booklet, under the heading “Resident Funding of Permanent Installation”, which describes the existing voluntary resident funding provision. Further background was included on page 10 of the September 27, 2000 Transportation Division report to the Commission (Attachment 1). The current voluntary funding provision is informal (i.e., does not involve an assessment district or other legal form) and applies only to funding of permanent installations. By using City funding for a trial installation, sufficient equality among qualified traffic calming projects is obtained. After that point, if residents do not wish to wait for City funding to complete the approved project in the final form, they may fund it themselves. Instead of having residents assemble their own funding, another approach would be either a Mello-Roos tax or a mini-assessment district. This tax requires approval of 2/3 of voters in the traffic calming area and no benefit engineering study is required. Both processes are expensive to administer and are not cost effective for occasional small NTCP projects.

Staff conducted a very cursory search of various cities’ programs where the information was readily available. There is some variation regarding the amount and methods of financial participation by residents. There are two basic variables in the various cities’ approaches. The first is whether resident funding is voluntary or mandatory. The second is which funding mechanisms are used. Most cities have provisions for resident funding and many *require* it. A very brief overview follows (note that all information may be up to date).

Portland, OR. Portland allows residents to pay for speed humps to speed up the process. Two methods are provided—(i) residents assemble their own payment however they wish (similar to Palo Alto’s method); and (ii) formation of a local improvement district under which all property owners in the project area must pay their share, upon City Council hearing and approval.

Los Altos. The City pays 100 percent of the cost of installing trial measures, but will pay only 50 percent of the cost for permanent measures, thus requiring that residents partially fund the permanent measures. Residents assemble their own payment however they wish.

Mountain View. The city has paid for all traffic calming installations.

Menlo Park. The city has paid for all the traffic calming installations.

San Luis Obispo. The city pays up to a certain predetermined amount. If the traffic calming project exceeds that amount, residents must pay the remainder. A range of payment strategies is allowed, including (i) residents assemble their own payment however they wish; (ii) a benefit assessment district is formed, which applies mostly to higher-cost projects; and (iii) enabling a property tax payment by the affected households by means of municipal code provisions.

Salt Lake City. Three methods are available to residents. Neighborhoods may apply for partial funding of approved traffic calming projects through a neighborhood matching grant program. Under this program up to \$5,000 in matching City funds are available per project and require a 50 percent match in cash or labor. Second, neighborhoods meeting the federal qualifications for Community Development Block Grant (CDBG) funding may apply for 100 percent funding of projects. Third, residents may assemble funding by whatever method they choose.

Ventura. The city pays for 100 percent of the cost of installing trial measures. If residents decide they want the measures to remain permanently, they are required to hire a consultant and contractor to prepare the plans and perform the installation, all at the residents’ expense. Residents must sign a petition indicating they are aware of this cost requirement.

### **NEXT STEPS**

If the Commission desires, staff can include a summary of this study session in the City Manager’s Report (CMR) transmitting the Commission’s June 12, 2002 approval of the revised NTCP.

### **ATTACHMENTS/EXHIBITS:**

1. June 12, 2002 Transportation Division Staff Report to the Commission
2. June 12, 2002 Planning and Transportation Commission Meeting Minutes

3. Excerpts from CMR 440:00 and October 11, 2000 Transportation Division Staff Report to the Commission.
4. Excerpts from September 27, 2000 Transportation Division Staff Report to the Commission

**COURTESY COPIES:**

1. Citizens who requested information on the traffic calming program since April 2001
2. Neighborhood Associations
3. Citizens who sent correspondence for or attended the June 12, 2002 Commission meeting on the NTCP

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Division Head Approval:

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