1. INTRODUCTION

BACKGROUND

In 2002, the Public Works Department developed the Neighborhood Livability Program (NLP) in response to a multitude of citizen requests for neighborhood traffic calming. The NLP was modeled after successful programs in other cities that combine Education, Enforcement, and Engineering techniques, commonly referred to as the Three E's. The NLP conducted a series of pilot plans in three neighborhoods to educate residents on available traffic calming devices, assess policies and procedures set forth, and test the effectiveness of various traffic calming devices. The NLP is comprehensive in that it treats an entire neighborhood. This is beneficial in creating coordinated plans and minimizing the chances of pushing the problem from one street to another. However, treating an entire neighborhood takes substantial time and resources.

Since the adoption of the NLP program, Public Works staff has identified the need for a streamlined process that more quickly responds to residents' traffic calming requests. The “revised” Speed Control Program will reduce residents’ wait time while efficiently using staff time to oversee the program. The Speed Control Program (SCP) is anticipated to operate in lieu of the NLP.

Based on the needs of the City and continued improvements to the SCP, the SCP is subject to change at any time. Streets, which may have qualified for the SCP previously, shall be reevaluated in accordance with the most current set of qualifying criteria and ranking system established in subsequent revisions to this document.

GOAL

The SCP will provide City staff and residents with a streamlined process to address neighborhood speeding in established neighborhoods within funding availability.

OBJECTIVES

The SCP utilizes the best practices in traffic calming and lessons learned from the NLP to efficiently address neighborhood speeding. To truly be effective, the program will:

- Determine eligibility based on clearly defined and easily measured parameters
- Focus on localized traffic issues on individual streets
- Offer a limited number of speed control devices that require little design time, are effective at reducing speed, and yet cost effective

Through these objectives, the program is anticipated to reduce the timeframe from a resident’s request for speed control to actual construction. However, this timeframe is dependent on competing demand, priority ranking, available funding and timing of construction of City Capital Improvement Projects.

FUNDING

The City of Elk Grove will prioritize the planning, design, and construction of speed control measures through the SCP. Funding for the SCP is anticipated to come from Gas Tax and/or Measure A and be reauthorized annually within the City approved Capital Improvement Program based on the amount of available funding. The amount of available annual funding will determine the number of speed control requests that can be implemented.

Residents or a group of residents whose street qualifies for speed control may elect to privately fund the approved speed control improvements. The resident or group of residents must enter into a memorandum of understanding (MOU) with the City of Elk Grove, wherein they agree to pay for all costs associated with the installation of speed control devices on their street (construction, inspection, administration, etc.). Once a MOU is executed, the location to receive speed control shall be included in the next City construction project rather than competing against other requests. Private payment for speed control does not relieve a location from the public survey requirements (see Section 3) or any other criterion set forth in these guidelines.
2. INITIATING REQUESTS FOR SPEED CONTROL

Reporting Speed Control Concerns

Speed control concerns shall be reported to the City Traffic Engineer by calling (916) 478-2256. Upon receipt of a reported concern, the Traffic Engineer will coordinate with the reporting party to discuss the details of the concern(s). Once the speed control concerns are determined the Traffic Engineer may make recommendations for implementation of speed control devices.

Define Study Area

The City Traffic Engineer shall define the limits of the study area to be considered for the evaluation of speed control improvements. The study area may be limited to the street segment(s) identified in the initial request or enlarged to encompass the full length of the street, as well as adjacent streets and cul-de-sacs that are affected by the improvements. The Traffic Engineer may find it reasonable to extend the study area on roadways that serve a higher number of vehicles or to combine two or more separate requests for the same street. Logical study areas are commonly defined by physical features such as an arterial roadway, creek, traffic control device (e.g., stop sign) or transition in land use. By defining an appropriate study area, the SCP will employ a more comprehensive approach than addressing requests on a limited segment by segment basis. It is important to look at the cumulative impact of installing a series of speed control measures and the unintended consequence they may have on trip diversion and emergency response time.

Selection of Speed Control Improvements

A primary objective of the SCP is to offer a limited number of effective and efficient speed control devices. Public Works staff will perform engineering investigations to assess if non-physical changes to the traffic environment (i.e., signage, striping, sight distance improvements, and vegetation trimming) will address the concern before recommending physical changes.

Traffic calming devices available under the SCP are categorized as one of the following:

**LEVEL ONE**

- Non-Physical Measures - Any measure that does not require physical changes to the roadway. Non-physical devices are intended to increase drivers’ awareness of surroundings and influence driver behavior without physical obstructions. Including but not limited to signage, striping, sight distance improvements, and vegetation trimming.

**LEVEL TWO**

- Physical Measures (i.e. Speed Humps) – Physical devices designed to create vertical deflection in order to slow vehicles. Vertical deflection devices such as speed humps or speed tables are the most effective at reducing vehicle speeds. These types of devices also pose the greatest potential to slow emergency response vehicles, buses, and delivery trucks.

The City Traffic Engineer will determine the most appropriate measure(s) to implement for a given road segment within the study area. Level One devices may be implemented at the discretion of the Traffic Engineer. In order for Level Two devices to be implemented, initial qualifying criteria must be met as outlined below. Vertical traffic calming measures are not appropriate on every street even when basic qualifying criteria are met. Staff reserves the right to approve or reject speed control requests on a case by case basis. If Level One calming has been implemented and the 85th% speed is still greater than 25 mph after a period of not less than 3 months, another request may be submitted and consideration of alternative speed control devices will be made.
INITIAL QUALIFYING CRITERIA

In order to be eligible for Level Two traffic calming, the candidate street must meet initial qualifying criteria. The criteria are shown in Table 1.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Petition Demonstrating Support by Affected Households</td>
<td>Support of speed control improvements by $\geq 75%$ of households that are within the study area as defined by the City Traffic Engineer</td>
</tr>
<tr>
<td>2. Street Classification</td>
<td>2–lane Local Residential Street</td>
</tr>
<tr>
<td>3. Posted/Legal Speed Limit</td>
<td>25 mph or less</td>
</tr>
<tr>
<td>4. Adjacent Land Use</td>
<td>$\geq 75%$ Residential, Park or School</td>
</tr>
</tbody>
</table>

Streets meeting the initial qualifying criteria will be entered into the implementation process as outlined in Section 3.

3. IMPLEMENTATION PROCEDURES (Level Two traffic calming)

PROJECT INITIATION

Speed Control Program Petition

The Speed Control Program Petition Form is included with these Guidelines as Appendix A. The petition shall include the following minimum information:

- Street name
- Locations of concern (e.g., from A Street to C Street)
- Time of day when issue occurs (e.g., 4:00-6:00 PM)
- Name, address, phone number, and signatures are required from at least 75% of the parcels within the study area (only one vote per parcel and only one signature from the primary residence on the parcel is required). Signatures must be from occupants legally residing at the property that are at least 18 years old. Only one signature per parcel (primary residence only) will be counted in determining compliance with the 75% requirement.

If the minimum number of signatures cannot be obtained, then the process does not continue due to a lack of support for action.

Confirmation of Initial Qualifying Criteria

Upon receipt of a complete and qualifying Petition\textsuperscript{1}, Public Works staff will confirm that the street meets the initial qualifying criteria specified in Section 2. Streets meeting the initial qualifying criteria will be moved to the Project Evaluation Phase of the process.

\textsuperscript{1} Public Works may consider a speed control request without supporting signatures from only a school, church, park or other City Department.
**Response to Applicant**

If a street satisfies the minimum requirements and is a candidate for the program, Public Works staff will notify all properties within the study area in writing. Staff will also notify all properties within the study area of non-qualifying streets and provide an explanation as to why the street was declined. If the street fails to meet any of the necessary requirements, the street may not be considered for the program for 2 years.

**PROJECT EVALUATION**

**Fire Department Review**

After selection of the speed control device(s), the Project is sent to The Cosumnes Fire Department (CSD) for review. CSD has an emergency response time goal of 6 minutes or less, 90% of the time, as measured by the first arriving unit to the scene of the emergency. Fire apparatus are more sensitive to Level Two Physical Measures (Speed Humps) than passenger vehicles. A reduction in travel speed equates to slower emergency response times. If the street is determined to be a primary fire response route, it could preclude the installation of speed control devices. The CSD will analyze the Project proposal and consider the following factors in their evaluation:

- Is the street a primary emergency response route for the area?
- If so, are there alternate routes that could be taken without significantly negatively impacting response times?

Speed control devices that have a significant negative impact on emergency response times will not be permitted. In the event that response time goals are anticipated to be exceeded as a direct result of device placement, CSD may deny placement of devices and the evaluation process shall not continue.

CSD Project review times typically take 4-6 weeks.

**Site Review**

Public Works staff will review the study area for installation constraints and challenges. Engineering judgment will determine the suitability of traffic calming within horizontal curves or where sight distance may be compromised.

**Vertical Device Location Selection Guidelines**

To determine the location for device installation, the following guidelines are considered:

- Devices shall not be located over manholes, water valves and survey monuments.
- A minimum distance of 250 feet from a traffic signal or stop control should be maintained.
- Devices should be located a minimum distance of 100 feet from uncontrolled street intersections.
- Devices should be located at least ten feet away from driveways and 25 feet away from fire hydrants.
- Devices should be located near street lights to enhance night visibility.
- Installation near property lines is desirable to minimize impacts on a single parcel.
- Parking restrictions are not required at devices locations; however, drivers may prefer not to park on the raised device.
• Care should be taken when placing devices within horizontal or vertical curves and on roadways with grades greater than 5 percent. Adequate sight distance to device or advanced warning shall be maintained.

• Speed humps should be placed at a minimum interval of 300 feet and a maximum interval of 600 feet to maintain effective mid-block speed control. Speed tables should be used discriminately at a minimum interval of 500 feet.

• The number of devices placed on a street is determined by the street length, interval spacing, and engineering judgment.

PROJECT APPROVAL

Property Owner Approval of Vertical Device Location(s)

Public Works staff shall identify suitable locations for the placement of vertical speed control devices pursuant to the Location Selection Guidelines in Section 3. In order for a device to be installed at the recommended location, the property owners that are adjacent to the location of the speed hump or other Level Two traffic control device must sign a statement indicating that they are willing to have the device installed in front of their house. The typical Property Owner Approval Statement is included for reference as Appendix B. If any property owner is not willing to have the device installed in front of their house, then it will not be installed. In cases where the speed hump or other traffic control device is to be located on the property line, then all adjacent property owners must sign an approval statement in order for the device to be placed. In the event that approvals from property owners cannot be obtained to locate a device on a street, then no device will be installed.

Final Vote for Speed Control Implementation

Upon approval of device locations, a final vote among property owners within the study area is required for speed control project implementation. Public Works staff will issue a final survey sent via regular mail. Only property owners within the study area will receive a survey. Surveys will be sent far enough in advance to reach recipients at least two and one half (2 ½) weeks prior to the response deadline. The survey will include a description of the proposed project indicating the type and location of device(s) being proposed. A survey will only be considered if it is received or post marked by the due date printed on the response form.

For implementation to be approved, a minimum of 75% of all returned surveys must be in favor. If a street fails to receive the necessary 75% support rate, the street may not be considered for the Program again for a period of five years, at which time a new petition must be submitted.

All property owners and residents within the study area will be informed of the final survey results by mail.

PROJECT IMPLEMENTATION

Projects approved for implementation shall be considered for inclusion in the next available Capital Improvement Program (CIP). Scheduling of installation will be dependent on available funding and CIP budget adoption. The CIP is updated annually prior to June 30.

Once adopted in the CIP, Public Works staff will prepare final construction documents and solicit bids for the annual speed control project. Devices shall be constructed in accordance with applicable design standards and specifications and as set forth in the construction documents.
4. PROCEDURES FOR DEVICE REMOVAL

In the event that residents desire removal of existing speed control devices, a process similar to the installation process shall be required. The process for removal requires demonstrated resident and property owner support. Removal of devices installed under the SCP shall not be considered for a period of at least 3 years after installation.

Device removal may be considered when all of the criteria listed below are met:

- A period of not less than 3 years has passed since device installation.
- A petition must be submitted identifying the location of speed humps (or similar device) to be removed and the motivation for removing them. The petition requires signatures from 75% of the residents within the original study area in favor of removal. If the minimum number of signatures cannot be obtained, then the process does not continue due to a lack of support for action.
- Vertical measures are found to be ineffective at reducing speed based on a speed survey conducted over a 24-hour period. The mid-block speed must be less than 2 mph lower than the speed demonstrated prior to installation in order to be considered ineffective. In addition, the mid-block 85th percentile speed should be within 5 mph of the posted or legal speed.
- Devices were placed in a location conflicting with the adopted guidelines, and another location exists which does not conflict with the adopted guidelines.
- A community meeting is held to discuss device removal.

If all of the above criteria are met, device removal is subject to final approval by the City Council. If approved, removal work shall be programmed in the next available CIP budget and included in the corresponding speed control project consistent with the Project Implementation section.
APPENDIX A

SPEED CONTROL PROGRAM PETITION FORM
CITY OF ELK GROVE
SPEED CONTROL PROGRAM PETITION FORM

Street name: ________________________________________________________________

Locations of concern (e.g., from A Street to C Street): ________________________________

Time of day when issue occurs (e.g., 4:00-6:00 PM): ________________________________

Resident Support

Name, address, phone number, and signatures are required from at least 75% of the households within the study area (only one vote per parcel and only one signature from the primary residence on the parcel is required). Signatures must be from occupants legally residing at the property that are at least 18 years old. Only one signature per parcel (primary residence only) will be counted in determining compliance with the 75% requirement.²

We, the undersigned residents of ____________________________ (street) between ____________________________ (street) and ____________________________ (street), do hereby request the City of Elk Grove, to install speed control devices on our street to attempt to slow speeding drivers. By signing below, we understand that speed control devices may include non-physical and or physical measures with related signing and pavement markings, and may be installed in front of our residence. We also understand that installing these vertical devices may produce some noise and slow emergency vehicle response time to our home(s).

<table>
<thead>
<tr>
<th>Signature</th>
<th>Printed Name</th>
<th>Address</th>
<th>Phone Number/Email Address³ (Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

² The City will notify all properties within the study area of final petition results in writing.
³ Please provide your email address if you prefer to receive written notifications via email.
APPENDIX B

SPEED CONTROL LOCATION SUPPORT FORM
CITY OF ELK GROVE
SPEED CONTROL LOCATION SUPPORT FORM

Property Owner Support
I am the Property Owner of ________________________________ and (Choose one)

☐ Support
☐ Do not support

the placement of a speed control device in front of my property as shown on the attached exhibit.

Signature: _________________________________________________________________

Printed Name: ______________________________________________________________

Address: __________________________________________________________________

Phone Number:  ____________________________________________________________

Email:  ____________________________________________________________