

SECTION 3

3.0 TRAFFIC CALMING

3.1 TRAFFIC CALMING PROCESS SUMMARY

Traffic calming is a means in which to reduce speeds and minimize vehicular traffic on local neighborhood streets. Citizen involvement in neighborhood traffic management activities is strongly encouraged. This section is intended to aid citizens in resolving traffic problems in residential areas. In the City, traffic calming techniques are limited to local residential streets. A *local residential street* is defined as all minor streets, marginal access streets, residential collectors and cul-de-sacs primarily serving residential property.

The following procedures are considered typical for receiving, responding to, and managing citizens' requests for residential traffic management on their streets or in their neighborhoods. Variations in this process may be approved by the City Council when deemed appropriate due to unique circumstances.

When a neighborhood representative contacts City Staff to discuss neighborhood traffic problems or concerns, the representative will be asked to complete a Traffic Calming Request Form and submit it to the Traffic Engineer's office. These forms may be obtained by contacting the Public Works Department - Traffic Engineering Division. A Traffic Calming Request Form is provided in Appendix I and is also available online. Once the application has been submitted, the Traffic Engineer will evaluate the need for a traffic calming technique and, if one is warranted, will determine the type of technique to be installed.

If physical traffic calming measures are warranted, a neighborhood petition from the "affected area" is required, and the Traffic Engineer will notify the representative of this additional requirement. The "affected area" is defined as those properties along streets expected to receive traffic calming techniques, those streets whose access is substantially dependent upon the streets to be calmed, and any streets expected to receive significant increases in traffic volume or type as a result of the traffic calming technique installation. The City Engineer shall be responsible for final approval of the affected area to be petitioned.

Once the completed petition reflecting a positive response has been returned to the Traffic Engineer, the City Engineer will make the final recommendation to the City Manager. The City Manager will place the item on the agenda for consideration by the City Council. If approved by the City Council, the project will be scheduled for construction by the City Engineer.

3.2 EXISTING CONDITION ANALYSIS

The Traffic Engineering Division of the Public Works Department will perform any necessary data collection and analysis to assess and quantify the traffic and safety conditions in the neighborhood. The Public Works Department staff will identify the tentative study area, collect preliminary information from their files and other potentially affected agencies, and complete any needed traffic analysis. While there are no absolute minimum criteria or warrants established for use of traffic calming techniques, staff will refer to the following guidelines when evaluating the magnitude of traffic and safety problems, potential for improvement using traffic calming techniques, and establishment of priorities for project implementation.

3.2.1 Minimum Vehicular Volume

Traffic volumes on residential streets will determine the appropriate traffic calming measures as follows:

- Less than four thousand (4,000) vehicles per day: Education; Enforcement; Increased police enforcement for traffic violations (i.e. speeding); and Physical techniques;
- More than four thousand (4,000) vehicles per day: Education; Enforcement; Increased police enforcement for traffic violations (i.e. speeding); Alternative actions only - no physical techniques.

3.2.2 Speed

The ideal, acceptable and not acceptable traffic speeds on local streets are as follows:

TABLE 3.1
Vehicle Speeds on Local Streets

| | Ideal | Acceptable | Not Acceptable |
|--|--------------|-------------------|-----------------------|
| Average Speed – All Vehicles | 0-25 mph | 26-30 mph | 31-35 mph |
| 85 th Percentile Speed | 0-30 mph | 31-35 mph | 36-40 mph |
| 95 th Percentile Speed | 0-35 mph | 36-40 mph | 41-45 mph |
| Percent of Vehicles in 10 mph Pace Speed | 70% | 60% | 50% |

3.2.3 Cut Through Traffic

A vehicle that detours through a neighborhood for the convenience of decreasing the amount of time it takes to reach a destination is known as cut through traffic. The volume of cut through traffic is typically quantified by estimating the expected traffic generated by a neighborhood based on the Institute of Transportation Engineers (ITE) *Trip Generation Land Use 210 – Single Family Housing*. The expected daily volume is divided by the actual daily traffic volume to calculate the percent of cut through traffic.

The acceptable and not acceptable percentages of cut through traffic are as follows:

TABLE 3.2
Cut Through Traffic

| Classification | Acceptable | Not Acceptable |
|-----------------------|-------------------|-----------------------|
| Local Street | 0% - 25% | ≥ 25% |
| Collector Street | 0% - 50% | ≥ 50% |

3.2.4 Accidents

Accident problems are considered significant when there are three (3) or more reported accidents, including pedestrian, bicycle and auto accidents, along a residential street or within a neighborhood during a period of twelve (12) consecutive months.

3.2.5 Street Grades and Alignment

Traffic calming are not typically installed on streets with grades exceeding eight (8%) percent, or where a combination of vertical and horizontal alignment would result in inadequate stopping sight distance for motorists encountering traffic calming measures.

3.2.6 Transit, School and Emergency Routes

Traffic calming techniques are not typically installed on streets serving as designated transit routes or primary emergency access routes. School authorities should be consulted in conjunction with proposed traffic calming techniques if a school route is considered.

3.3 RESULTS OF TRAFFIC CALMING ANALYSIS

Utilizing the information gathered from analysis and speed studies, the Traffic Engineer will determine the type of technique to be installed.

Table 3.3 “Recommended Traffic Calming Techniques” is a listing of speed requirements and recommended devices that could be used to address speeding. These techniques are in order from less intrusive to more intrusive. No traffic calming measures will be recommended for any collector or arterial street as shown on the Major Street Plan or any street with a traffic volume of over four thousand (4,000) vehicles per day.

TABLE 3.3
Recommended Traffic Calming Techniques

| 85th Percentile Speed above posted speed limit | Traffic Calming Technique Recommended |
|--|--|
| 0 – 5 mph | Not recommended |
| 5 – 10 mph | Street narrowing or surface roughing |
| 10 mph and above | Speed table or combination of techniques |

Examples of various traffic calming measures are provided in Appendix J of this Manual.

3.4 NEIGHBORHOOD PETITIONS AND COST SHARE

When a proposed technique is approved by the City Engineer, the Traffic Engineer will prepare a petition package to be circulated by the Applicant. The petition will include the name and address of each of the property owners in the affected area as well as the description and detail of the proposed technique. The Applicant can pick up the petition package or arrange to have it mailed.

It is the responsibility of the representative to circulate the petition within the affected area. The petition must be delivered (in a legally acceptable manner) or offered to all property owners in the affected area. A positive response must be obtained by sixty-six (66%) percent or more of the total number of properties in the affected area to proceed further with the traffic calming project design and implementation. The petition must be returned to the Traffic Engineer within three (3) months of receipt of the petition package by Applicant.

At the request of the representative, the City will circulate the petition in the form of mailout postcards. A positive response of sixty-six (66%) percent or more must still be achieved. Those properties that do not submit a response after three (3) attempts by the City will be counted as a negative response.

Any neighborhood that does not meet the traffic calming warrant outlined in this manual may request City Council approval to circulate a petition for installation of a physical device. This petition shall require a positive response of eighty (80%) percent or more for installation of the device to be considered by City Council.

The installation cost of calming techniques may be shared with the City and the neighborhood requesting the technique. If the City's standard materials are used, there will be no cost to the neighborhood. If decorative or non-standard measures are desired, the neighborhood will incur the additional cost for the specialty items.

3.4.1 Standard Materials

The standard technique will be either a rubberized speed hump or City mountable curb surrounding a planted island. Yellow three (3) button delineators will be installed for visibility around the outer perimeter on City standard green U-channel posts.

3.4.2 Standard Landscaping

A standard island may contain drought tolerant landscaping or hardscape. A tree may be positioned in the center as necessary for visibility concerns. Vegetation will be installed as designated by the City Arborist. A water spigot may be included as standard landscaping for maintenance of vegetation. Any necessary property dedication or landscape maintenance agreement shall be completed prior to final project design.

3.4.3 Exceptions – Special Material/Landscaping Requests

Should a neighborhood prefer a more decorative final product, a request of the design preferences shall be made to the Traffic Engineer. The request will be reviewed by the Traffic Engineer and the City Engineer for safety and maintenance issues. If approved, the

neighborhood shall be responsible for any additional costs incurred for all decorative elements. An agreement must be signed between the City and representatives of the subdivision and approved by the City Council. This agreement may also include a maintenance element, if the subdivision elects to maintain the landscaping.

3.5 REVIEW AND ANALYSIS OF APPLIED SOLUTIONS

All installations will be monitored and evaluated by Public Works Department Staff for desired effectiveness. The City will perform a review to evaluate the effectiveness of the applied technique after the residents and motorists have had adequate time to adjust to the change. Evaluation of the project includes resident and motorist reaction, field observation, traffic counts, speed studies, and other data collection as needed. If the project has not met its objectives within the monitoring period, the City Engineer will provide additional information to the City Manager who will inform the City Council.

3.5.1 Removal

Removal will only be considered after one (1) year and after a new petition with sixty-six (66%) percent response for removal is approved by the City Council, or if field conditions have changed which justify removal as recommended by the City Engineer and approved by the City Council.

3.5.2 Re-Evaluation

The re-evaluation of a previously denied request may only be reviewed after a period of one (1) year with the submission of a new application.

3.6 CONSTRUCTION

When a traffic calming project has received the necessary petition support, the City Engineer will schedule design and implementation of the project within budgetary constraints. All designs shall follow ITE or other nationally recommended guidelines, if available. Depending upon the number of traffic calming requests received, a project may be placed on a waiting list and prioritized based on relative need. Certain techniques may be installed for a "test period" while others may be installed in a permanent fashion.

3.6.1 Material Submittal

Specifications are required to be submitted for all decorative elements requested by the Applicant. Installation of requested material is based on the approval of the City Engineer.

3.6.2 Test Requirements

The subdivision/home owners association will be responsible for the costs incurred for all testing services required for non-standard, decorative elements through the neighborhood cost share program.

3.6.3 Inspection

The subdivision/home owners association will be responsible for the costs incurred for all inspection services required for non-standard, decorative elements through the neighborhood cost share program.

3.6.4 Maintenance

Maintenance of traffic calming techniques will be the responsibility of the City, unless a subdivision or home owners association has a written agreement with the City to maintain the area.