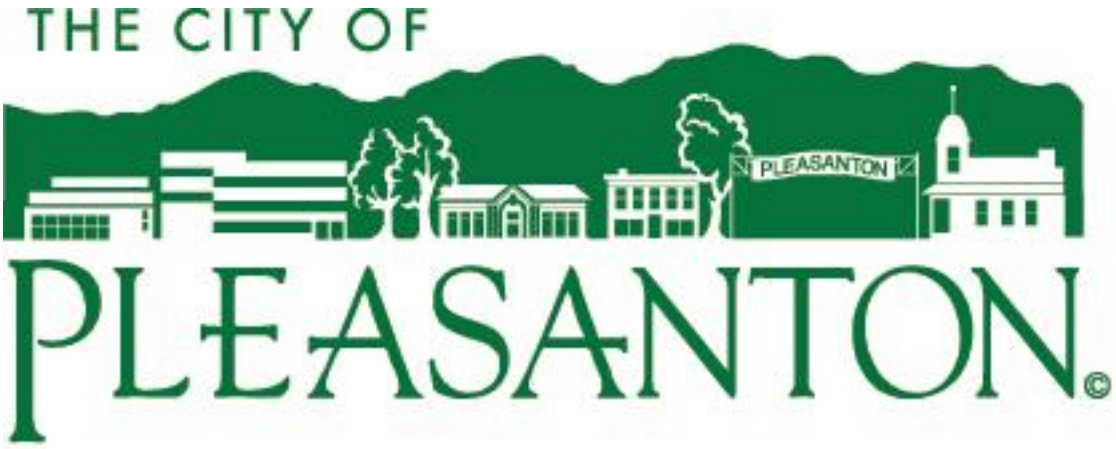
CITY OF PLEASANTON
TRAFFIC CALMING PROGRAM



City of Pleasanton
Traffic Engineering
Revised May 2012

City of Pleasanton
Neighborhood Traffic Calming Program

Introduction

The City of Pleasanton Neighborhood Traffic Calming Program (NTCP) is designed to provide consistent, citywide policies to neighborhood traffic management and to ensure equitable and effective solutions to a variety of traffic concerns expressed by local residents. The program intent is to treat similar traffic problems equally, while recognizing the differences in individual resident levels of concern and traffic tolerances. The NTCP is designed to provide guidelines and methods of evaluation to systematically address neighborhood traffic problems.

Neighborhood traffic concerns are as varied as the residents who perceive them and include a wide range of issues from site specific safety concerns to neighborhood-wide concerns with cut-through traffic speeding through the neighborhood on one or more streets. The nature of the problems should drive the approach as well as the solution. The program outlined here summarizes the process the City will use to address neighborhood traffic concerns in Pleasanton.

Background

The City receives numerous requests, complaints and suggestions from residents about traffic related issues. In many cases driver behavior – in the form of speeding or cut-through traffic - is the root cause of these complaints. Traditionally police enforcement has been successful in deterring speeding traffic. However, there is a high demand for enforcement all over the City and it is not efficient to conduct enforcement on low volume residential streets. Enforcement often works on a temporary basis, but there is a need for more permanent measures to reduce the speed of vehicles and discourage cut-through traffic on low volume residential streets.

Many communities in the Bay Area have adopted varying traffic calming programs in an attempt to reduce the speed of vehicles and discourage cut-through traffic on residential streets. The cities of Oakland and Fremont have developed speed hump programs, San Francisco and San Jose have implemented photo radar programs and Livermore has developed a comprehensive NTCP involving several types of physical devices.

In order to address the concerns of all of Pleasanton's neighborhoods, the City Council directed staff to develop a citywide NTCP.

Purpose Statement

The purpose of the NTCP is to work with neighborhoods to implement measures that affect driver behavior in such a way that reduces vehicles speeds and cut-through traffic and improves the quality of life for residents, pedestrians, bicyclists and motorists. This goal shall be balanced with the need to provide quick emergency response times for emergency vehicles including fire trucks, police and ambulances.

Implementing traffic calming measures is not a solution for all speeding and cut-through traffic woes. Each neighborhood may have its own unique set of problems that must be analyzed to identify solutions. This program has been developed to guide City staff and inform residents about

the processes and procedures for implementing traffic calming measures on residential streets. Under this program, staff will work with residents to identify traffic issues in their neighborhoods and seek appropriate solutions.

The goals of the NTCP are to:

- Define a process to evaluate neighborhood concerns.
- Implement "quick response" measures when possible.
- When quick response measures are not effective, identify local streets for additional traffic calming criteria.
- Prioritize local streets for additional traffic calming devices based on fair and impartial methodologies.
- Work with the neighborhood to identify and approve a traffic calming strategy.
- Establish the means to pay for and maintain the devices.
- Implement the program through the Capital Improvement Program.

TRAFFIC CALMING IMPLEMENTATION

Step 1 – Resident Correspondence

The NTCP is based entirely on requests and concerns voiced by local residents. Traffic issues may be related to the larger neighborhood or may be very location specific. More localized (spot) problems include vegetation obstructing drivers' view and additions or modifications to existing signs or markings. More complex, neighborhood-wide problems are speeding or cut-through traffic on a long stretch of street or multiple streets. Each of these concerns will be analyzed by staff to determine if quick response or traffic calming prioritization is necessary.

To address the range of concerns most effectively, without requiring that site specific problems with fairly routine solutions go through the same process as more complex neighborhood problems, there are two levels of review and response provided and different steps associated with each.

Step 2 – Quick Response

Quick response measures apply to more site specific concerns that can be addressed through existing routing traffic control measures.

When a resident(s) lodges a complaint with the City regarding speeding or high volumes on their street the following steps must be taken before the NTCP is considered:

1. The normal traffic service request process shall run its course. This includes documentation of the residents concern, field investigation and data collection, if warranted.

2. The responsible staff member will then make a determination as to action necessary if any. If it is determined that a significant speeding problem does exist, the following possible actions may be taken at this point:

Increased Speed Enforcement: This can include the use of the speed trailer to raise driver awareness of speed limits and targeted enforcement to address those times when significant speed limit violations occur.

Permanent Speed Limit Sign Installation: Speed limit signs may be installed if they aid in increasing driver awareness of speed limits. Indiscriminate use and placement of speed limit signs should be avoided.

Deployment of Neighborhood Speed Limit Awareness Signs: These are high quality paper signs with unique messages and graphics that can be mounted on garbage cans by residents to raise driver awareness. The program requires the involvement of several neighbors who will be given 3-4 signs each and would rotate signs on their garbage cans to keep the message fresh.

Neighborhood Speed Watch Program: This program can involve neighborhood flyers alerting residents to their neighbors' concerns about speeding, neighborhood speed limit awareness signs (discussed above), and a radar speed check program. The radar speed check program would require residents to monitor speeds using radar equipment. The owner of vehicles that were recorded at unlawful speeds would be sent a letter asking them to obey the posted speed limits. No citations would be issued, and there would be no confrontation of drivers by residents. Residents would be trained by police staff in the proper use of the radar equipment.

If the resident is not satisfied with the recommended course of action the decision may be appealed to the Staff Traffic Committee. The Committee will listen to the resident, review the situation and make a determination as to whether further actions are warranted. The Committee may recommend that the NTCP should be pursued.

If at this point the resident is still not satisfied with staff response they may appeal it to the City Council.

Step 3 – Traffic Calming Prioritization

If routine procedures cannot resolve the problems and they require non-routine measures or affect multiple streets, the requested street may be added to the annual traffic calming request list. Shortly before the new funding cycle begins, streets listed on the traffic calming priority list will be analyzed and prioritized, using existing traffic volumes and speeds, collision history, pedestrian generating land uses and the adjacent land uses. The Traffic Calming Prioritization and Scoring Criteria Worksheet is included in Appendix A. The goal of the prioritization program is to impartially analyze each street and identify streets most in need of traffic calming devices.

Some streets will not meet the minimum traffic calming volume or speed thresholds and will be eliminated from the traffic calming program entirely. The remaining streets will then be ranked based on their priority ranking score and a traffic calming priority list will be generated. Streets that meet the minimum volume and speed thresholds will be carried over into the next year's traffic calming request list for future analysis. Typically one street annually is fully funded through the NTCP. Streets that meet the minimum volume and speed thresholds and do not qualify for traffic calming may choose to fund traffic calming devices themselves. Appendix B discusses funding thresholds and criteria and outlines this process.

Step 4 – Neighborhood Traffic Calming Meeting and Traffic Calming Study Approval
After the highest ranking street is identified, a neighborhood planning process is initiated to involve the residents of the local street and others affected users of the facility. Since traffic calming devices may have negative impacts on local neighborhoods, it is necessary to determine if there is adequate support for the process before beginning.

To initiate the process, the boundaries of the affected street shall be determined by the Traffic Engineer with potential input from local residents and the Staff Traffic Committee. An initial neighborhood traffic calming workshop will be held and all of the residents within the boundary will be notified by mail. Public meeting notices will also be posted at each street entrance at least 1 week before the scheduled meeting so that others potentially affected by the devices may also attend. The purpose of this workshop is to solicit neighborhood input and discuss the traffic calming program and process. Staff will discuss the various devices available to residents and their historical measures of effectiveness at other locations if applicable. Staff will also discuss devices that are not applicable under the NTCP.

This will mostly be an educational workshop, both for staff to learn residents' concerns and for the residents to learn more about the traffic calming process. This workshop is purposely held prior to the circulation of an initial traffic calming study approval petition so that the residents are more educated about the process that they are being asked to support. At this meeting, it is required that a neighborhood steering committee be identified to coordinate future outreach efforts within the neighborhood and collect petition signatures.

The local street must then petition the City and demonstrate their interest in the study by obtaining support from at least 50% of the residents within the project boundaries. The local neighborhood steering committee shall be responsible for gathering petition signatures. If at least 50% of the residents do not sign the petition, the request will not proceed and the next highest ranking street will be contacted. For the purposes of this program, a resident is defined as any person owning or renting a living unit with its own street address, regardless of how many people live in each unit. Each street address may be represented by one signature.

Step 5 – Neighborhood Steering Committee Meetings
Should sufficient support be collected by the steering committee, City staff will meet with the neighborhood steering committee to review the various tools available that address the neighborhood's concerns. Different tools have different impacts on the behavior of neighborhood traffic and it is important to consider those tools that are best suited to the neighborhood's specific issues. For example, if traffic volumes are a major concern to residents, it is appropriate to examine traffic calming tools that mitigate cut-through traffic. If speeds are the neighborhood's main focus, tools specifically oriented to speed control should be considered.

The steering committee is responsible for developing the traffic calming plan for the neighborhood. The steering committee should develop a traffic calming plan that fairly and equitably meets the needs of the entire street. This step should also provide information to the area residents on the approximate cost of alternative calming measures, as the residents may be responsible for a portion of the project funding. It is vital to the success of a neighborhood process that the steering committee considers this funding aspect as well as the possible impact to other affected agencies.

This provides clear parameters and realistic expectations for the neighborhood from the beginning and reduces the potential for plans to be advanced that are not feasible or the implementation of devices that need to be removed at some future time.

The Staff Traffic Committee and other potentially affected agencies may choose to participate in aspects of the planning process to understand the concerns of the residents and share their interests with the neighborhood. It is imperative to consider impacts to primary emergency response routes when developing a NTCP. See Appendix C for additional information on emergency response routes.

Step 6 - Traffic Calming Plan Development and Approval

City staff will develop a traffic calming plan for the neighborhood based on the information gathered at the initial meeting and general direction given by the steering committee and other stakeholders. The plan will include construction cost estimates and anticipated funding strategies. This plan will be presented at a second neighborhood workshop. Any significant deficiencies identified by residents as a result of this meeting will require additional neighborhood workshops.

Plan approval is a very important step in the process. The plan must be acceptable to all affected parties in order to be effective. If the various stakeholders have been involved throughout the process, the plan should address their different needs and concerns. If the plan does not, it should be revised to be acceptable to all the stakeholders.

Once the traffic calming plan has been reviewed by the local residents, a petition will be required of all residences within the project boundaries. At least 67% of the fronting residences within 500' of each proposed device must indicate their support for the device. In addition, the proposed device **MUST** be approved by all of the property owners fronting each device. If the residences do not show support, the devices will not be installed. It is critical that each location receive the necessary approval, since large gaps between traffic calming devices could lead to an increase in vehicle speeds. Any one device rejection may require staff to revisit the neighborhood steering committee and develop other alternatives. The petition shall clearly state any funding participation required of the residents. It is the City's intent to assure a strong majority and not be faced with the removal of questionable devices.

After the required petitions of support are received by staff, a report will be prepared showing the conceptual plan and presented to the City Council for approval. If the City Council approves the conceptual plan, final engineering plans and specifications will be prepared by staff so that the project may be implemented.

The final engineering drawings and cost estimates will be presented to the neighborhood steering committee prior to actual construction to ensure that they represent what was agreed to by the neighborhood. Residents also need to be aware in advance of the construction impacts (noise, dust, potential traffic rerouting) and the anticipated construction schedule to minimize frustrations during the actual construction. This is important to ensure that there are no surprises once construction starts. These drawings will be available to all the stakeholders for review.

Step 7 - Before and After Studies
A critical component of a successful traffic calming program is the evaluation of neighborhood plans and specific traffic calming tools. Before and after studies will be conducted to evaluate the measures of effectiveness and to learn more about how individual devices and systems of devices affected driver behavior. This information can be used to determine whether the neighborhood's desired outcomes have been achieved, and to what degree, and to define the appropriate use of specific devices in future traffic calming programs. Before and after studies will also be used to determine if the traffic problem has shifted to other neighborhood streets.

Step 8 - Review and Revise Process
After completion of each NTCP, the planning process will be reviewed and evaluated to identify appropriate changes that would enhance and improve the process. Because the process itself is critical to the success of the overall program and to the individual neighborhood traffic calming plans, the process will be reassessed after each plan is completed and revised as necessary.

Policies

The series of policies have been developed to guide traffic calming in the City of Pleasanton. The NTCP Policy Document is included as Appendix C.

GLOSSARY OF TERMS

Cut Through Traffic - traffic that travels through a neighborhood, but does not begin or end a trip in the neighborhood.

ADT (Average Daily Traffic) - the average number of trips a roadway carries per day.

Local Street - A roadway designed to serve only adjacent land uses in commercial and residential areas. Typical volumes for these streets are 500-3,000 ADT.

Residential Collector Street - A roadway which provides access to residential areas and feeds traffic to arterials. Typical volumes for these streets are 3,000-6,000 ADT.

Collector Street - A roadway which provides access to adjacent land uses and feeds local traffic to arterials. Typical volumes for these streets are 4,000-10,000 ADT.

Arterial Street - A roadway which feeds through traffic to freeways, provides access to adjacent land uses primarily at intersections, and features traffic control measures. Typical volumes for these streets are 10,000-45,000 ADT.

Emergency Response Route - a defined route that emergency vehicles use to reach residences and businesses in an efficient and safe manner.

APPENDIX A

Traffic Calming Ranking

Street Name: _____
Between: _____ and _____

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Minimum Criteria and Prioritization Criteria Policies:

- The minimum criteria:
  Speed – _____ (min. 32 MPH)
  Volume – _____ (min. 1000 ADT or 750 ADT if speeds exceed 35 mph)

- **Minimum Criteria Met**: _____ (YES/NO)

- -

Speed : _____ **Points:_____**

85th percentile speed (critical speed)	Points
34 mph	2
35 mph	4
36 mph	6
37 mph	8
38 mph or more	10 maximum

Speed : _____ **Points:_____**

85th percentile speed (critical speed)	Points
8 mph or more above posted speed limit	1
9 mph of more above posted speed limit	2
10 mph or more above posted speed limit	3 maximum

Volume (Average Daily Traffic): _____ **Points: _____**

Local Street	Residential Collector Street	Collector Street	Points
1000 – 1200	2000 – 2300	3000 - 3500	1
1201 – 1400	2301 – 2600	3501 - 4000	2
1401 – 1600	2601 – 2900	4001 – 4500	3
1451 – 1800	2901 – 3200	4501 – 5000	4
1801 and above	3201 and above	5001 and above	5 maximum

Collision History : _____ **Points: _____**

One point per collision susceptible to correction by traffic calming device over a 2-year period (5 points maximum)

Fronting Uses (including homes, schools, parks & public facilities)

Fronting Use: _____ **Points:_____**

Percentage of the street that has fronting homes	Points
0	0
0-25 %	1
26-50%	2
50-75%	3
75-99%	4
100%	5 maximum

Pedestrian Generators (such as parks, schools, public facilities, not including homes)*

Pedestrian Generators: _____ **Points: _____**

Number of pedestrian generators within neighborhood boundary	Points
1	1
2	2
3	3
4	4
5 or more	5 maximum

* Elementary, middle, junior and senior high schools will be weighted double points in this category.

Engineering Judgment (Max 3 points) - for locations with unusual conditions or characteristics not captured in the aforementioned criteria

Points: _____

TOTAL Points: _____

Points	Proportion of City Funding
0 – 4	0%
5 – 8	25%
9 - 12	50%
13 - 16	75%
17 and above	100%

***Portion of City Funding:* _____**

***OVERALL RANKING:* _____**

APPENDIX B

Funding Critera

The residential share of the cost is dependent upon the nature of the traffic conditions in the neighborhood. The more severe traffic problems should receive a greater share of City funds. Since the prioritization criteria outlined in Appendix A quantifies the magnitude of the traffic problem, the higher the prioritization score, the greater the percentage of the project that will be paid by the City. The Funding Criteria is as follows:

Points	Proportion of City Funding
0 – 4	0%
5 – 8	25%
9 - 12	50%
13 - 16	75%
17 and above	100%

It is possible that none of the streets eligible for traffic calming in a given year would qualify for full city funding. When this is the case, the highest priority roadway is potentially eligible for full city funding despite the roadway's prioritization score. The City Traffic Engineer shall determine what proportion of city funding will be used for the highest ranking roadway each year.

Funding for the plan should be considered throughout the plan development process. If funding limitations will impact the range of options available, this needs to be identified early in the process and the range of appropriate devices should reflect these limitations. If a finite amount of funding is anticipated, the planning process should use this as a guideline on the number and combination of devices to be considered.

If a neighborhood feels that it has developed the best plan for the area and the plan includes a number of "high-end" options, such as landscaped, raised medians or roadway realignment, it may be necessary for the residents to participate at a higher financial level in the program. Landscaping also creates an ongoing cost of irrigation and maintenance. Maintenance agreements with homeowners and the creation of special assessment districts are options for funding these options.

Funding will play a significant role in the timing of plan implementation. Less expensive plans that have the financial support of the neighborhood and/or full City funding have an opportunity to be built more quickly than expensive plans that require the City and neighborhood to find alternative funding methods.

It is not the City's intent, nor in its capability to replicate on all residential streets the traffic environment of the short cul-de-sac. Residents must accept their willingness to live on a street of higher traffic volume when they purchase the homes on their impacted street and not expect to change the existing circulation system. The benefits of most traffic calming devices are quite localized; therefore any assessment of the costs should recognize this dynamic.

Only the top ranking streets annually will be eligible for City Funds each year. If the residents on another street wish to fund the design and construction of the devices themselves, they may do so ONLY if the street meets the minimum criteria for traffic calming as identified in Appendix A. The neighborhood is still required to follow the approval process identified in this document, and the residents would be required to hire a consultant and contractor to administer, design and construct the devices. City staff would assist in the review and approval of any proposed traffic calming plan. Any alternate traffic calming plans would still require the City Traffic Engineer and City Council approval.

Those who receive a direct benefit from the improvements will be responsible for the residents' portion of the costs. These residents will have a chance to support or oppose the program as part of the final petition process.

APPENDIX C

Policies

The following policies were developed to guide traffic calming in the City of Pleasanton:

Policy 1 - Compatibility with Various City Plans

Policy 1.1 - Traffic calming projects should be compatible with overall City transportation goals and objectives, as set forth in the Circulation Element of the City's General Plan. Specific General Plan goals that apply to neighborhood traffic calming include:

3.2 Discourage non-local and commercial traffic from using streets through residential areas.

4.5 Mohr Avenue should not be used as a truck route or primary access to industrial development to the east.

5.1 Incorporate City design standards for arterials, collectors, neighborhood collectors, and local public and private streets as part of the City's review of new developments.

5.2 Provide more than one access road (including emergency vehicle routes) to new developments, and use appropriate engineering design elements to discourage cut-through traffic.

5.5 Design new streets and alterations of existing streets to preserve the character and safety of existing residential neighborhoods.

6.5 Particular sensitivity should be given to new development on streets which are projected to carry more than 2,000 average daily trips, and with existing houses which front such streets.

Policy 1.2 - The City will develop guidelines for the incorporation of traffic calming devices into the City's Roadway Design Standards and Standard Plans. Neighborhood collector streets longer than 1,200' should be considered for installation of neighborhood traffic calming devices.

Policy 1.3 - The implementation of traffic calming plans will be in accordance with the procedures set forward in this document, in keeping with sound engineering practices and within the limits of available resources.

Policy 2 - Emergency Response

Policy 2.1 - A critical concern about the use of traffic calming devices is the delay it may create for emergency response vehicles, including fire engines, ambulances and law enforcement vehicles. It is important to be aware of the trade-offs when making decisions about the use of traffic calming devices. The more aggressive devices for slowing traffic will slow emergency vehicle response as well, and in some cases may cause safety concerns.

Policy 2.2 - It is important to point out that fire trucks respond to many life threatening medical emergencies, such as heart attack victims, in addition to fire emergencies. Often, a fire truck is the first to respond to a medical emergency, since there are fire stations located throughout the City. Fire stations have been spaced as far apart as is practical, while still meeting the response time goal, so as to avoid having too many fire stations. Thus, to areas at the limits of current response times, any significant traffic calming devices will increase response time.

Policy 2.3 - Recognizing the importance of achieving this emergency response time goal as a necessary service to the public, all traffic calming devices will be designed to accommodate all emergency vehicles and to minimize its impacts on emergency vehicle response times. Most arterial and collector streets are considered primary emergency vehicle response routes and are used to access various parts of the city from the fire stations. In order to minimize impacts to emergency vehicle response times, particular attention should be paid to the types of devices used on collector streets. Devices that considerably limit or restrict emergency vehicle access on collector streets will not be allowed.

Policy 2.4 - The Staff Traffic Committee will identify emergency response and access concerns within each neighborhood prior to the first neighborhood meeting. These will include primary routes within the neighborhood, special need facilities in the neighborhood, access issues and necessary clearances.

Policy 3 - Neighborhood focus

Policy 3.1 - This program is focused on residential areas since the purpose of the program is to improve quality of life of residents. Only local residential and 2-lane residential collector streets will be considered in this program. Arterial streets are specifically excluded from this program because the nature of arterial streets is to move large numbers of vehicles in a relatively free-flowing manner. Non-neighborhood traffic is encouraged to use arterial streets in order to reduce cut-through traffic in the neighborhoods. Neighborhood traffic calming is not designed to address hazardous arterial intersections, mitigate noise from major arterials, redesign the overall transportation/street classification system or effect a modal shift.

Policy 3.2 - Diverted traffic must also be considered when evaluating traffic calming measures. In developing a solution for one traffic problem, it is important not to shift the problem to another neighborhood or other residential streets within the neighborhood. Therefore, it is necessary to identify a neighborhood boundary to study the effects of proposed traffic calming devices.

Policy 3.3 - Neighborhood participation is critical to develop a consensus of the issues that adversely affect the neighborhood, evaluate the pros and cons of the various traffic calming measures and ensure that the issues are adequately addressed. It is essential to consider a wide range of perspectives and observations in addition to engineering data. The program is designed so that residents can become actively involved in defining the problem(s) and in the decision-making process in order to have a sense of ownership of the outcome.

Policy 3.4 - In addition to neighborhood participation, it is critical that the process reflects the opinions of a majority of the residents and not just a few vocal residents. This is implemented

through the use of a petition that must be signed by at least 50% of the households within the proposed project limits to initiate the traffic calming process. A preliminary neighborhood meeting will be held to discuss the traffic calming program prior to requiring the 50% petition. If the local neighborhood approves the traffic calming process, a neighborhood work group will work with city staff to develop a traffic calming plan. A second petition is required to proposed traffic calming plan. This second petition may also solicit approval of an assessment district (if needed). At least 67% of the residences within 500' of each proposed device must indicate their support for the device. In addition, the proposed device MUST be approved by all of the property owners fronting each device. This is discussed in more detail under funding.

Policy 4 – Traffic Calming Devices

There are a few basic types of traffic calming devices that have different effects on the motoring public. It is important to understand how each type of device works and its impacts on motorists and emergency vehicles. The following discussion is divided to explain each type of device and the associated policies.

Horizontal shift devices include traffic circles, chicanes, medians, and other devices that deflect traffic laterally. These include ***constriction devices*** such as curb extensions, neckdowns and chokers. Both horizontal shift and constriction devices slow traffic by physically forcing motorists to maneuver around the devices. The use of landscaping within these devices not only enhances the aesthetics of the streetscape but also increases their effectiveness by breaking up the motorist's line of sight, which reduces the comfortable speed of travel. Therefore, these devices, when used in conjunction with one another, are effective for a longer stretch of roadway rather then just in the immediate vicinity of the device. These devices also tend to have relatively low impacts on emergency response times in that the vehicles can continue to move around the devices without stopping. However, use of these devices usually requires prohibition of on-street parking adjacent to the device.

Policy 4.1 - Horizontal Shift and Constriction Devices**:**

- Horizontal shift and constriction devices such as medians, traffic circles, chokers and chicanes are acceptable traffic calming devices.
- Homeowners fronting the proposed devices must approve any required parking restrictions.

Vertical deflection devices include speed lumps, speed humps, speed tables, and raised crosswalks and intersections. The only vertical deflection device that is included in this program is the speed lump. Speed lumps are similar to speed humps, except they are divided into three lumps with one foot of space between each lump. The space between the lumps is specifically designed to accommodate the axle width of fire trucks. All other vehicles with smaller axle widths have to go over the humps from at least one side of the vehicle. Speed lumps are typically 12 feet long and 3 inches high.

One of the concerns associated with speed lumps is the potential increased noise in the immediate area where the speed lumps are installed because of braking and accelerating vehicles. It is important that residents immediately adjacent to the speed lumps concur to their installation. Speed lumps should be placed as close as possible to existing street lights whenever feasible to improve

nighttime visibility of the devices. Additional street lights may be necessary when speed lumps cannot be placed in front of existing street lights.

Policy 4.2 - Vertical Deflection Devices:

- Speed lumps are the only approved vertical deflection device.
- Homeowners fronting any proposed speed lump must approve the installation.
- Homeowners fronting any proposed street light must approve the installation

Diverters, street closures, and turn restrictions are measures that alter the existing transportation circulation system. In developing a solution it is important not to shift the problem to another neighborhood. Turn restrictions and street closures can cause a tremendous amount of traffic diversion over a wide area. These types of measures have impacts that would need to be evaluated in a greater scope than just within a particular neighborhood. Many other cities have policies that ban or discourage street closures. The impacts would include the environmental impacts due to changing the transportation circulation system. For these reasons, diverters, closures and turn restrictions should be pursued with caution. The use of diverters, street closures and turn restrictions will be evaluated as part of a larger area-wide study if their use is to be considered.

Policy 4.3 - Diverters and Closures:

- Limit the use of diverters, street closures and turn restrictions as traffic calming devices.

Stop signs are not approved traffic calming devices. Residents, however, often request stop signs in an effort to calm traffic. Although residents believe that stop signs will reduce vehicle speeds, studies have shown that vehicle speeds after the vehicle has passed through the stop controlled intersection are as high, and occasionally higher, than without a stop sign, as motorists try to "make up" time lost at the stop sign. The acceleration and deceleration near stop signs generates noise and adversely affects air quality.

Stop signs are traffic control devices that should be used when appropriate to assign right-of-way to conflicting traffic movements, not to calm traffic. Stop signs should be installed only at locations where conditions meet established criteria, which is the current practice of the City. Studies have shown that stop signs that do not meet established criteria (known as unwarranted stop signs) have a higher violation rate. Unwarranted stop signs also create disrespect of traffic control devices in general and affect behavior at other stop controlled intersections. It is for these many reasons that unwarranted stop signs are not to be used in this program.

Policy 4.4 - Stop Signs:

- Unwarranted stop signs shall not be used as a part of this program.

Policy 5 - Maintenance

Many traffic calming devices alter the geometry of the roadway. Poorly designed traffic calming devices could interfere with street sweeping and other existing maintenance activities. This could have a negative affect on the appearance of the neighborhood and the residents' quality of life.

Policy 5.1 - Maintenance Policies:

- Traffic calming devices shall be designed to minimize adverse impacts to street sweeping and other maintenance activities.
- The development of traffic calming devices should be coordinated with the Maintenance Department.

Policy 6– Minimum Criteria and Prioritization Criteria

The need to prioritize projects arises when the demand for traffic calming exceeds City resources. This includes staff time to work on the project as well as construction funding. A common approach to efficiently utilize city resources is to prioritize projects so that the neighborhoods with the greater problems are addressed first. Since most neighborhood traffic problems involve speeding vehicles or a high volume of vehicles relative to the street type, these criteria are weighted heavier in the ranking. Another factor that is considered in defining the extent of the problem is the average annual reported accidents. Also, the impact traffic will have on a neighborhood depends upon the character of the street in the neighborhood and the amount of pedestrian activity within the neighborhood. Streets that have a greater percentage of fronting homes, schools, parks or other public facilities are impacted more than streets that are lined with backing lot treatments. Neighborhoods that have a higher number of pedestrian generators, such as parks, schools and other public facilities, will be impacted greater than those neighborhoods without pedestrian generators. Due to the high concentration of school-aged pedestrians and localized traffic congestion associated with elementary, middle and high schools, these pedestrian generators are weighted double that of other non-school pedestrian generators. The prioritization criteria are also used to determine how the project should be funded. This is discussed in more detail under funding.

In addition to prioritizing projects, it is necessary to provide some minimum criteria that must be met in order for a neighborhood to qualify for traffic calming measures. These minimum criteria ensure that City staff and financial resources are used efficiently by not spending resources on streets that do not have a significant traffic problem and to avoid creating unmet expectations by having a long list of projects that may never get built. These minimum criteria are based on vehicle speeds and volumes.

For the purposes of the minimum and prioritization criteria, the data collected will be rounded up to the nearest whole number.

Policy 6.1 - Minimum Criteria and Prioritization Scoring Criteria:

- The minimum criteria to be used to determine if a street is eligible for traffic calming devices is as follows:

  Speed – 85th percentile speed (critical speed) is at least 32 mph

  Volume – Average daily traffic is at least 1000 vehicles. If vehicles speeds are in excess of 35 mph, then the average daily traffic shall be at least 750 vehicles

- The prioritization scoring criteria allows 35 maximum points and is as follows:

Speed

85th percentile speed (critical speed)	Points
34 mph	2
35 mph	4
36 mph	6
37 mph or more	8 maximum

Speed

85th percentile speed (critical speed)	Points
8 mph or more above posted speed limit	1
9 mph of more above posted speed limit	2
10 mph or more above posted speed limit	3 maximum

Volume (Average Daily Traffic)

Local Street	Residential Collector Street	Collector Street	Points
1000 – 1200	2000 – 2300	3000 - 3500	1
1201 – 1400	2301 – 2600	3501 - 4000	2
1401 – 1600	2601 – 2900	4001 – 4500	3
1451 – 1800	2901 – 3200	4501 – 5000	4
1801 and above	3201 and above	5001 and above	5

Accident History - One point per accident susceptible to correction by traffic calming device over a recent 2-year period (5 points maximum)

Fronting Homes - Engineering judgment shall be used when determining if adjacent land uses qualify as a fronting home. For example, homes with side street access and offset from the requested street may not qualify. Apartments and other high density residential housing typically do not qualify UNLESS they provide direct or primary unit access to the fronting street.

0 points - No fronting residential land uses

1 point - Minor residential land use - typically 25% or less of street.

2 points - Minor to moderate residential land use - residential is typically secondary land use on street - less than 50% of street.

3 points - Moderate residential land use with occasional alternative land use - typically less than 75% of street.

4 points - Primarily residential land use - up to 100%.

5 points - Exclusive and uninterrupted residential land use

Pedestrian Generators (such as parks, schools, public facilities, not including homes)*

Number of pedestrian generators within neighborhood boundary	Points
1	1
2	2
3	3
4	4
5 or more	5 maximum

* Elementary, middle and junior and senior high schools will be weighted double points in this category.

Engineering Judgment (Max 3 points) - for locations with unusual conditions or characteristics not captured in the aforementioned criteria.

Policy 7 – Funding

Policy 7.1 - Administration Costs
Administration costs include staff time to collect and analyze data, prioritize requests, conduct neighborhood meeting and design the traffic calming devices. These costs would be covered under normal operating budgets using existing staff.

Policy 7.2 - Capital Financing
The construction costs of traffic calming devices may be shared between the residents and the City of Pleasanton as outlined below. The cost sharing concept has several advantages. It ensures that residents have buy-in and a sense of ownership in the project, and traffic calming devices are less likely to be removed in the future. The issue of traffic calming removal should not be dismissed as minor. Some agencies that have had traffic calming programs for several decades have now implemented traffic calming removal programs. The shared funding concept helps to avoid this situation by ensuring that the traffic calming devices are really necessary. Another advantage of the shared funding approach is that the residents will be fiscally responsible in the development of the traffic calming plan. The City can stretch its budget to cover more projects to more neighborhoods.

The residential share of the cost is dependent upon the nature of the traffic conditions in the neighborhood. The more severe traffic problems should receive a greater share of City funds. Since the prioritization criteria quantifies the magnitude of the traffic problem, the higher the prioritization score, the greater the percentage of the project that will be paid by the City. If a project scores 21 or more points, the City would fund 100% of the construction costs.

Policy 7.3 - Operations and Maintenance Financing

The resident share of the traffic calming project may be collected through a Lighting and Landscaping Assessment District. This requires setting up an assessment district to levy fees to be added to the property owners' property tax bill. Some neighborhoods (about 15% of residential areas in the City) already have Lighting and Landscaping Assessment Districts that could be used to assess the cost of constructing and maintaining traffic calming devices if the neighborhood boundary coincides with assessment district boundary. If the boundaries do not coincide, then a new Lighting and Landscaping Assessment District would be formed. The main advantage of this method is that the cost of the project can be spread over several years (up to 5 years) to minimize the annual fiscal impact to each homeowner. The homeowners within the project boundary will be billed an equal share of the project. In order to impose this fee, a 51% majority vote of the voting homeowners is required. Approximately $5,000 to $10,000 would be spent by the City in "soft costs" such as administration and legal expenses to prepare the engineers report, and to put the assessment to a vote. If the assessment district vote fails, these soft costs would be taken out of the annual traffic calming budget. If the assessment district passes, these costs would be incorporated into the assessment.

It is the City's policy that traffic calming devices will be landscaped when applicable. Landscaping improvements associated with traffic calming require ongoing maintenance and irrigation costs. Agreements can be made with residents and homeowner associations to maintain the landscaping and pay for water taps where necessary in the improvements.

Policy 7.4 - Funding Policies -

- The shared funding concept is implemented to share the construction costs between the City and the residents, with a greater City share being contributed to address the more severe traffic problems.
- The City will not directly collect funds from the residents for the neighborhood share.
- The residents shall be responsible for all associated maintenance costs through existing or new assessment districts.
- The Funding Criteria is based on the Prioritization Score. The proposed street must meet minimum traffic calming speed and volume criteria to be eligible for traffic calming. The higher the score the more the City will contribute to funding. The Funding Criteria is as follows:

Points	**Proportion of City Funding**
0 – 4	0%
5 – 8	25%
9 - 12	50%
13 - 16	75%
17 and above	100%

- When none of the streets eligible for traffic calming in a given year qualify for full city funding, the highest priority roadways may be eligible for full city funding despite the roadway's prioritization score. The City Traffic Engineer shall determine what proportion of city funding will be used for the highest ranking roadways each year.

Policy 8 - Traffic Calming Device Removal

Although there are many policies and steps incorporated in the program to avoid the scenario whereby a neighborhood requests to have traffic calming devices removed, it is acknowledged that this may occur. In order for traffic calming devices to be removed from a neighborhood, the same process of neighborhood meetings and consensus requirements should be met. A neighborhood meeting would be held to discuss the issues and the impacts of traffic calming removal. A petition to garner 67% approval of residents within 500 feet of each device would need to be circulated within the original neighborhood boundary that installed the traffic calming device initially. The costs of removing traffic calming devices would be paid 100% by the residents. Therefore, it would require a 51% approval of the property owners to pass an assessment district vote to fund the removal costs.

Police 8.1 - Removal Policies -

- Require a positive response from at least 67% of the households within 500 feet of each device to remove the traffic calming device. All locations within a neighborhood boundary must be approved in order to remove the traffic calming devices.
- Residents shall pay for 100% of the costs to remove traffic calming devices.

APPENDIX D

Petition to Initiate
Neighborhood Traffic Calming Program

Location: XXXXXXXX

A resident of XXXXXXXX has requested that the City of Pleasanton Neighborhood Traffic Calming Program be initiated to address concerns about speeding on XXXXXXXX. In order to commence this process, this petition must be signed by 51% of the households on XXXXXXXX between XXXXXXXX and XXXXXXXX. This level of neighborhood support is needed to justify further analysis, and development of a traffic calming plan.

Please sign the attached petition, include your address and telephone number, and indicate whether you support (yes) or oppose (no) this proposal. **Note that support for the current petition only initiates the data collection and plan development process. Due to limited funding, each year Traffic Calming requests are prioritized based on criteria such as speed, volume, number of collisions, and proximity to public facilities.**

If this petition receives the necessary support of the neighborhood, City of Pleasanton staff will collect data about traffic conditions on XXXXXXXX, and will assist a resident steering committee to analyze and select traffic calming devices. The resulting plan would be presented to area residents at a neighborhood meeting. Installation of any traffic calming devices, such as speed lumps or radar speed signs, would require another petition receiving support from at least 67% of residents living within 500 feet of each device.

XXXXXXXX

Please indicate whether you support (Yes) or oppose (No) the attached proposal:

Name (signature)	Address (print)	Phone #	Yes	No
Name (signature)	Address (print)	Phone #	Yes	No
Name (signature)	Address (print)	Phone #	Yes	No
Name (signature)	Address (print)	Phone #	Yes	No
Name (signature)	Address (print)	Phone #	Yes	No
Name (signature)	Address (print)	Phone #	Yes	No
Name (signature)	Address (print)	Phone #	Yes	No
Name (signature)	Address (print)	Phone #	Yes	No
Name (signature)	Address (print)	Phone #	Yes	No
Name (signature)	Address (print)	Phone #	Yes	No
Name (signature)	Address (print)	Phone #	Yes	No
Name (signature)	Address (print)	Phone #	Yes	No
Name (signature)	Address (print)	Phone #	Yes	No
Name (signature)	Address (print)	Phone #	Yes	No
Name (signature)	Address (print)	Phone #	Yes	No