City of Gilroy
Neighborhood Traffic Management Program

Adopted by the Gilroy City Council on November 18, 2019
Neighborhood Traffic Management Program

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Gilroy City Council
Gilroy Public Works
Gilroy Police Department
Gilroy Fire Department

City of Gilroy
Neighborhood Traffic Management Program
Acknowledgment

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https://yourvoice.cityofgilroy.org/neighborhood-traffic-management-program
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1. INTRODUCTION

1.1. DEFINING THE PROBLEM

It is the City of Gilroy’s policy to make residential streets as quiet and safe as possible. The measures identified in this document are intended to slow down traffic and discourage through traffic on residential streets, while keeping our neighborhoods accessible to police, fire, ambulance services, and the residents of Gilroy.

One of the most persistent and emotional concerns raised by residents of Gilroy is speeding on residential streets. Over past years, many requests have been received regarding excessive traffic speeds and/or volumes. In many respects, the physical makeup of the street determines traffic speeds. Wide streets encourage vehicles to speed where narrow streets tend to force drivers to drive more cautiously at lower speed. Long stretches of streets encourage higher speeds.

Everyone would like to live on a quiet street where there is little traffic and all motorists drive slowly. Nevertheless, the fact is we all must share our streets with our neighbors and other people. Just as we need to drive by other people’s houses on other streets on our way to work, school or shopping, other people need to use our street to get to work, school or shopping.

This document presents a programmatic approach to addressing these issues and is ultimately aimed at making residential streets more livable by providing opportunities for neighborhoods to participate in identifying and implementing solutions to their traffic concerns. The document also provides for engineering solutions, in the form of traffic calming, as a supplement to the overall neighborhood traffic mitigation efforts.

No single solution exists for the problem of speeding vehicles on all residential streets. Therefore, many different traffic calming techniques have been developed. These techniques range from the non-physical, such as radar display boards and selective police enforcement, to physical techniques such as street chokers and neighborhood traffic circles. A discussion of the major techniques is found within this document.
A major component of traffic calming is a comprehensive citizen education/participation campaign. A citizen education/participation campaign encourages the neighborhood to help identify, and then take responsibility for the solution. Experience has shown that, except for rare cases of cut through traffic, a majority of the speeding violations in a residential area are from residents who live in the neighborhood itself.

Traffic calming techniques work best when incorporated into a "traffic calming" or "neighborhood traffic management program." Successful programs include the planning process, overall community participation and local authority support. Because residents are the main initiators of traffic calming requests, they need to be part of the process as much as possible. By developing a program early on that addresses neighborhood traffic calming concerns on an area wide basis, it encourages citizens to become actively involved in the improvement process. This way, the City and the neighborhood can work together to create more livable neighborhoods.

1.2. TRAFFIC CALMING PROGRAM DEVELOPMENT

The City's Traffic Calming document was developed with input from various city departments. These include: Police, Fire, and Public Works departments. Research into existing traffic calming practices implemented by neighboring cities was first presented to the City Council on May 15, 2017. Based on input from the public and the City Council, a traffic management plan framework was drafted and presented to the City Council on November 6, 2017. This document encompasses input from the public and the City Council on the plan framework. This document represents the City’s attempt to produce a fair policy for all of Gilroy’s residents and apply these policies and procedures in a consistent manner. This document/policy will be a “living document” that continues to grow and change over time based on prevailing traffic conditions and emerging technology and /or devices to best serve the residents of our City. It will be updated as needed.

1.3. PURPOSES OF THIS DOCUMENT

The purposes of this document are to:

1. Provide educational opportunities for the public regarding neighborhood traffic management issues and mitigation methods,
2. Develop criteria for the application of traffic calming devices,
3. Define a uniform process for handling neighborhood traffic concerns.

1.4. NEIGHBORHOOD TRAFFIC MANAGEMENT

The City of Gilroy’s Neighborhood Traffic Management Program (NTMP) encompasses an overall approach to neighborhood traffic management through a balanced use of the three E’s – Education, Enforcement and Engineering. A neighborhood traffic management approach will allow Public Works staff to place greater emphasis on the education and awareness aspect of traffic management while investigating alternative solutions to a neighborhood’s traffic problems.

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1.5. GOALS OF THE NTMP

**Neighborhood Livability:** The primary goal of the NTMP is to improve neighborhood livability through a comprehensive process that provides neighbors with the resources to reduce speeding, reduce traffic volumes, and address other traffic related issues that concern them. The NTMP focuses on residential streets with the goal of allowing children and families to feel more secure in their own neighborhoods.

**Citizen Participation and Education:** This goal strives to provide an educational forum where residents can be actively involved in evaluating the advantages and disadvantages of traffic management efforts. Through the NTMP process, residents can obtain an understanding of traffic calming and traffic safety techniques available in the program.

**Implementation of the Goals and Policies of the General Plan:** The NTMP also serves to implement some of the goals and policies of the City’s current General Plan:

**GOAL 12.a:** A functional and balanced transportation system that provides access for all, is compatible with existing and proposed land uses, and minimizes emissions of air pollutants.

**POLICIES:**

12.02: System Function and Neighborhood Protection. Ensure that the existing and proposed highways, streets, bikeways and pedestrian paths serve the functions they are intended to serve, while protecting the character of residential neighborhoods.

12.03: Residential Street System Design. Design street systems in residential areas to encourage direct connections between neighborhoods; to encourage internal movement by bicycling and walking; and to provide safer and quieter neighborhoods.

1.6. BALANCING THE E’S: EDUCATION, ENFORCEMENT AND ENGINEERING

Education, enforcement and engineering – the “3 E’s” – are commonly accepted elements needed for the successful implementation of a neighborhood traffic management program. The experience of other similar programs has shown that use of only one of these E’s, without the other two, often generates a less than satisfactory result. This NTMP process takes an approach which incorporates all three elements.

**Education:** Residents will be able to work with City staff through a variety of outlets to make informed decisions about neighborhood traffic concerns and ways to positively influence driver behavior. Educational aspects of the NTMP may include a neighborhood educational forum or other outreach opportunities.

An education approach will allow City staff to work with specific groups to target specific concerns in a way that is currently not considered under the current traffic calming program.
This approach may be able to specifically address a concern without embarking on a costly and time consuming process.

- **Enforcement:** Some strategies can be put into effect through targeted police enforcement to increase community awareness of speeding problems. The police department is committed to utilizing its available resources to respond to areas experiencing traffic problems as identified by resident concerns and conditions observed by enforcement officers.

- **Engineering:** As the engineering component of a Neighborhood Traffic Management Program, traffic calming strategies, involving physical features, can be developed using a combination of sound engineering principles and community input.

It is important for neighborhoods participating in the NTMP to recognize that traffic concerns stem from a variety of sources and that the most appropriate solution may not be an engineering one. Elements of the other “E’s” such as education and enforcement are equally valuable and are viable traffic calming measures that can be implemented in a neighborhood.

### 1.7. TRAFFIC CALMING IN GILROY

**WHAT IS TRAFFIC CALMING?**

Traffic calming began in Europe around 1970 and has grown from a non-traditional approach to a widely adopted method of reducing traffic problems on residential streets. The term “traffic calming” is defined differently throughout the United States. The Institute of Transportation Engineers, an international educational and scientific association of transportation professionals, defines traffic calming as follows:

> “Traffic calming is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users (bicyclists, pedestrians, etc…).”

The purpose of traffic calming is to alter a driver’s behavior, either by forcing a vehicle to slow or to use an alternative route, through the use of engineering solutions and the installation of physical devices.

**WHAT ARE TRAFFIC CALMING MEASURES?**

Neighborhood traffic calming measures attempt to address potential speeding and/or cut-through traffic issues and preserve neighborhood character and livability. Each device has its own characteristic effects on traffic flow. The primary effects produced by these controls fall into the broad categories of speed reduction, traffic volume reduction, increased driver awareness, and increased safety.

The success of traffic calming measures depends on their use in locations and situations for which they are most effective. When appropriately implemented, they tend to be effective and self-enforcing. When implemented inappropriately, they tend to be excessively violated unless aggressive enforcement efforts are made. The City’s enforcement resources are always in high

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demand, and it cannot be assumed that there will be resources available to provide aggressive enforcement of new traffic controls.

1.8. LIVING DOCUMENT

The contents of this document include tools for use by citizens, Public Works staff, and other interested parties to help develop effective traffic mitigation plans that adequately accommodate motor vehicles, pedestrians, and bicyclists, while enhancing the neighborhood environment.

To be sure, the most current industry-wide information and tools are available to the program users, this document shall be considered a “living document”. It may be updated from time to time as new neighborhood traffic management and traffic calming techniques are developed and tested, and the City and neighborhoods continue to gain more experience with the program.
2. TRAFFIC CALMING

The City receives many requests, complaints, and suggestions from residents regarding neighborhood traffic issues. City staff typically addresses these concerns by improving lane markings, clarifying or adding signs, increasing police enforcement, etc. Often, these solutions can successfully abate the neighborhood’s concern. In some cases, however, the traffic problems experienced in a neighborhood are more chronic (excessive speeding or short-cutting) and may require more permanent, engineered solutions. Generally, it is the City’s philosophy that traffic calming measures be applied to keep non-neighborhood traffic off neighborhood streets. However, this traffic must be accommodated somewhere. In most cases, this means more traffic would be diverted to arterials and collectors because these are the streets designed to carry non-neighborhood traffic. Ultimately, the City must balance neighborhood traffic concerns (speeds and volume of traffic) with overall mobility (travel times and level of service).

All streets are eligible for some type of traffic calming measures. However, some measures are more appropriate on certain types of streets than on others. For instance, imagine residents on 10th Street requesting speed cushions to reduce traffic speeds in front of their residences. This measure would severely limit the capacity of the roadway, create significant traffic congestion, cause traffic diversions onto adjacent residential streets and increase the travel times for thousands of commuters every day. This example may appear extreme, but it is useful in demonstrating that some traffic calming measures are not appropriate for some streets. For this reason, an important distinction must be made between streets eligible for certain devices and those not eligible.

To this end, the City of Gilroy has established two categories of traffic calming measures:

**Phase 1** measures can be implemented on any public City street. This category consists of easy to implement, low cost, and often less controversial tools such as: neighborhood traffic safety campaigns, radar speed display units, targeted police enforcement, most sign installations (excluding stop signs and turn-prohibition signs), and pavement striping changes. Because these measures are less involved, they can be implemented at the discretion of City staff, and do not require neighborhood consensus building.

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Phase 2 measures alter the configuration of streets, impede traffic flow, change travel patterns and can be very controversial. These measures are also considerably more expensive than Phase 1 measures. Because Phase 2 measures are designed to alter travel patterns and/or impede traffic flow, they require significant engineering study and community acceptance prior to installation. For this reason, they are not appropriate for all city streets. The streets eligible for Phase 2 measures are described in the following section. Phase 2 measures require the approval of the City Council. Typical Phase 1 and Phase 2 measures are summarized on Table 1 and described in detail in Appendix A. It is important to note that even though police enforcement is listed as a Phase 1 measure, public safety officers are an integral part of any traffic calming program and will be consulted regularly during a Phase 2 traffic calming study.

2.1. DEFINITION OF A “TRAFFIC CALMING STUDY AREA”

When conducting a Phase 2 traffic calming study, it is necessary to define the area that would be affected/impacted by the installation of a Phase 2 device. There are many ways residents can be affected by a device - they could drive on that street daily, the device may be located on their street, or the device may divert traffic to their street. All residents that live on a neighborhood street within the affected area that could potentially be impacted by the installation of Phase 2 devices must be notified and participate in any Phase 2 traffic calming study. This is what is known as a “Traffic Calming Study Area.” These geographic areas are important because they become the limits of the notification area both when a study is being proposed (the petition process) and when a study is underway (the notification and survey processes). Traffic calming study areas will be defined by the Public Works Director prior to beginning the petition process.

Typically, a traffic calming study area is defined using arterial and/or collector streets as boundaries. Sometimes, however, neighborhoods do not have appropriate arterial or collector border streets that can be identified. This results in larger traffic calming neighborhoods than is necessary. Therefore, Public Works staff will use engineering judgment to size the traffic calming neighborhood appropriately for the neighborhood area being considered given the neighborhood street layout and geometrics. In essence, traffic calming study areas are confined only to neighborhood streets that would be affected by the installation of Phase 2 measures.

2.2. STREETS NOT ELIGIBLE FOR PHASE 2 TRAFFIC CALMING

The City of Gilroy exempts three categories of public streets from Phase 2 traffic calming:

- Streets designated as “Arterials” in the City of Gilroy General Plan,
- Streets used as bus routes, and
- Streets used as truck routes.

GENERAL PLAN ARTERIALS

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These roadways provide a high degree of mobility while allowing direct access to abutting properties. In an urban setting, these roadways serve major activity centers and have the highest volume and longest trip demand within a city. They interconnect other major corridors to accommodate trips entering and leaving the city. These roads also serve demand for “intra-area” travel between the business district and outlying residential areas. An example of an arterial in Gilroy is Monterey Street.

In addition, Arterials primarily serve intra-urban or local travel, carrying traffic from Collector streets to and from other parts of the City and to limited access roadways. Access to properties bordering these streets is subordinate to the primary function of moving traffic. The typical design speed on an arterial is 45 miles per hour and it has two or four lanes. Parking is generally not provided on arterials.

Phase 2 traffic calming measures are intended for use on neighborhood streets that are not designated in the City of Gilroy General Plan as Arterials for circulation purposes (see Figure 1). The function of a neighborhood street is fundamentally different from that of an arterial, where the main priority is the efficient movement of through traffic during peak hours. On neighborhood streets, efficiency is much less of a concern because of the limited traffic demand. Instead, the primary concern is livability. Permitting Phase 2 traffic calming devices on arterial streets would undermine the effectiveness of the proposed traffic calming policies and procedures. The purpose of the Phase 2 measures is to change driving behavior within residential areas and to discourage the use of local streets by through traffic. For a residential traffic calming program to be successful, it is essential that arterial streets be defined, designed and maintained for through traffic. Sufficient capacity and appropriate operating conditions must be maintained on these more heavily traveled streets so that traffic is not forced onto local streets and into residential areas. Thus, it can be stated that the purpose of Phase 2 traffic calming, which is often to reduce traffic volumes and/or speeds, is inconsistent with the primary function of arterial streets.

GENERAL PLAN COLLECTORS

The primary function of Collector streets is a combination of access and mobility. These streets provide links between Local streets and Arterials. They are designed to serve neighborhood traffic rather than cross-town traffic, though they may include trips between adjacent neighborhoods. The design speed for collectors is typically 35 miles per hour. On-street parking is usually provided. An example of a collector in Gilroy is Church Street.

Collector streets are designated to serve as the intermediate routes connecting local streets to arterial streets. Traffic calming devices designed to address volume concerns are thus inappropriate for collector streets as they would create unwanted traffic diversions onto nearby local streets. Traffic calming devices designed to address speed concerns may be considered on collector streets provided they meet specific criteria. Device installation on collector streets
should not cause diversion to adjacent parallel streets. If there is a potential for this, streets parallel to the collector street must also be addressed with implementation of the neighborhood traffic calming plan.

GENERAL PLAN LOCALS

Unlike others categories, local roads are not intended for use in long distance travel except at the origin or destination end of a trip. These roads are typically classified by default after arterial and collector streets have been identified. Local roads provide the highest level of accessibility and carry no through traffic movement. The primary function of local streets is access to adjacent land uses. Parking is usually provided along local streets and speed limits are typically 25 miles per hour. Local streets will be the primary target for traffic calming devices to mitigate both speeding issues and cut-through traffic issues. Both physical and non-physical devices are allowed on these streets.

The City’s functional roadway classifications are identified in the General Plan Circulation Element. The roadway classification definitions are subject to the most current General Plan document.

TRUCK ROUTES

The City of Gilroy does not have designated truck routes within the current General Plan. However, there are streets within the City of Gilroy that are frequented by trucks. Future General Plan updates may include designated truck routes. These streets have design features to accommodate the special demands of truck traffic. For this reason, these streets are often wider than their counterparts and are constructed with higher load bearing pavement sections. Any attempt to divert truck traffic away from these streets would result in an increased number of trucks on local streets. This could cause pavement damage, unsafe conditions for motor vehicles, and complaints from the surrounding residences and businesses. Truck routes are mostly comprised of arterial and collector streets and are listed below:

- US 101
- SR 152 (First Street)
- Monterey Road – north of First Street, south of Tenth Street
- Leavesley Road – Monterey Street to US 101
- Railroad Street – Old Gilroy Street to Lewis Street
- Old Gilroy Street – Railroad Street to Alexander Street
- Alexander Street – Old Gilroy Street to Tenth Street
- Chestnut Street – Luchessa Avenue to Tenth Street
- Luchessa Avenue – Monterey Road to Mayock Road

These current truck routes, or future General Plan-designated truck routes, are unsuitable for Phase 2 traffic calming devices (see Figure 2).
BUS ROUTES

Streets used by the VTA bus system are not eligible for most Phase 2 traffic calming devices. Specifically, those devices that would cause a vertical displacement of the bus (speed cushions and raised surfaces), or devices that would impede the ability of a bus to maneuver (barriers, closures, diverters, and circles) would not be permitted on a designated bus route. Since Phase 2 measures impede traffic flow, they would either divert or significantly slow buses, thereby lengthening travel times for bus passengers. Over the long-term, it is counter-productive to create inefficiencies in the local transit system (which encourages the use of single occupant vehicles) while simultaneously attempting to remove automobile traffic from neighborhoods. In addition to increased travel times, traffic calming measures such as speed cushions can result in increased bus maintenance costs and cause significant discomfort for passengers. For these reasons, it is important to promote transit ridership by maintaining unobstructed routes and promoting transit efficiency. VTA bus routes in Gilroy are shown graphically in Figure 3. In most cases, these routes are located on arterial and collector streets.

2.3. TRAFFIC CALMING CRITERIA

CRITERIA FOR PHASE 1 MEASURES

All streets qualify for Phase 1 traffic calming measures. In order to ensure that expensive Phase 2 measures are installed only where necessary, it is City of Gilroy’s policy to exhaust all applicable Phase 1 traffic calming measures before applying Phase 2 measures. Because Phase 1 measures are non-controversial and relatively inexpensive, they can be implemented at the discretion of the Public Works Director and do not require public outreach. This allows City staff to respond quickly to neighborhoods where chronic traffic problems exist. Phase I measures can easily be implemented within a neighborhood so long as they are used in moderation, meet the threshold for some Phase I devices, and do not significantly impact maintenance costs to the City.

CRITERIA FOR PHASE 2 MEASURES

Phase 2 measures may result in significant consequences beyond the street in question. For this reason, the City of Gilroy has developed special minimum criteria for the installation of Phase 2 measures. Changes in these criteria are subject to approval from the City Council. These are described in the next section.

The City of Gilroy does not recognize stop sign installations as a traffic calming measure. Stop signs should be installed per standards and specifications outlined in the California Manual of Uniform Traffic Control Devices (CA MUTCD), which provides uniform standards and specifications for all official traffic control devices in California. Per CA MUTCD, stop signs should not be used for speed control. The City has a standard procedure for responding to stop sign requests that is outside the purview of the NTMP.
GENERAL CRITERIA FOR ALL PHASE 2 MEASURES

ALL of the following general criteria must be met to consider the installation of any Phase 2 traffic calming measure:

- The street must be residential in nature, and be classified as a local street or collector street. (Note: Phase 2 measures to address speeding concerns are permitted on collector streets. Phase 2 measures to address cut-through traffic are not permitted on collector streets.)
- The street must not be a bus route, used by a VTA bus route, or identified as an arterial in the City of Gilroy General Plan.
- An appropriate street location for the device(s) shall be available. Appropriate distance from driveways, manholes, drain inlets, water valves, street monuments, fire hydrants, and other appurtenances shall be considered. Devices shall be installed only where a minimum safe stopping sight distance can be provided. Specific guidelines for speed cushions and round-a-bouts are described later in this chapter.
- A majority of the impacted residents or businesses must support the installation, with higher response rates and support rates on the streets where the traffic calming devices are proposed. This is measured from those who respond to a neighborhood survey. The City will make a good faith effort to survey all impacted residents and property owners within the traffic calming study area of the proposed Phase 2 traffic calming plan. The boundaries of the affected areas as well as the identification of the impacted residents for the survey will be determined by the Public Works Director.
- Installation must not result in traffic diversions to other neighborhood streets greater than what is allowed on the Portland Impact Threshold Curve (see Figure 4). The Portland impact curve is designed to ensure that any traffic diversion from one neighborhood street to another would be “non-noticeable,” with a couple caveats. It states that streets with almost no daily traffic (100 or less daily trips) could see considerable percentage increases and still have a livable neighborhood and streets that are already heavily impacted by traffic (3,000 trips or more) should not have to deal with even more traffic.
- Though a traffic calming neighborhood is addressed as a whole, engineering judgment must be used when identifying when to use physical traffic calming devices. Thus, unless determined otherwise, only those streets within the neighborhood that meet the Phase 2 thresholds may be considered for physical traffic calming devices. Other streets within the neighborhood may be treated with Phase 1, non-physical, devices.

These criteria are designed to ensure that those most affected by traffic calming measures are supportive and that suitable locations for the devices exist. Please note that these are minimum criteria. Satisfying the criteria does not necessarily mean that a device will be installed.

PHASE 2 – SPEED CONTROL CRITERIA

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Traffic calming measures designed to reduce speeds include: speed cushions, round-a-bouts/traffic circles, chokers, raised intersections, etc. In addition to the General Criteria stated for all Phase 2 measures, the following criterion must be met to consider the installation of Phase 2 measures intended to slow traffic speeds:

- The 85th percentile speed on a residential or collector streets must be greater than 7 miles per hour over the posted speed limit, or 70% of the measured traffic must exceed the posted speed limit.

85th Percentile Speed – The 85th percentile speed is defined as, “the speed at or below which 85 percent of all vehicles are observed to travel under free-flowing conditions past a monitored point.” Traffic Engineers use the 85th percentile speed as a standard to set the speed limit at a safe speed, minimizing crashes and promoting uniform traffic flow along a corridor. It is common for vehicles to exceed the posted speed limits on residential streets. Nationwide studies have shown that the average 85th percentile speed on a residential street is 32 miles per hour, or 7 mph over the most commonly used posted speed limit of 25 mph.

70% Criteria – A recent study has shown that there is a direct correlation between the measured 85th percentile speed and the number of vehicles that are known to be exceeding the speed limit. The results of the study indicate that roadways with the 85th percentile speed measured at 32 miles per hour roughly experience 70% of the measured vehicles exceeding the posted speed limit of the roadway.

Therefore, a street would qualify for speed related traffic calming improvements if the measured speed for any stretch of the street meets or exceeds either the “speed limit + 7 mph” threshold, or the 70% threshold. Satisfying the criteria does not necessarily mean that a device will be installed.

The City of Gilroy allows traffic calming measures designed to reduce speeds to be placed on both local streets and collector streets. For collector streets, a six-month pilot period is required prior to permanent placement of physical devices. City of Gilroy Public Works staff will conduct a before-and-after study to determine whether the pilot device on the collector street is effective in reducing the travel speed below the threshold. Permanent devices will be installed on collector streets only if the pilot period proves that the device is effective. For this situation, effectiveness occurs when the device reduces the 85th percentile speed below the “speed limit + 7 mph” threshold, or 70% of vehicles no longer exceed the posted speed limit.

**PHASE 2 – TRAFFIC DIVERSION CRITERIA**

Traffic calming measures designed to create diversions include: turn restrictions, diverters, median islands, etc. In addition to the General Criteria stated for Phase 2 measures, the following criteria must be met to consider the installation of Phase 2 measures intended to divert roadway traffic:

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- The street must be classified as a “Local” street by the City of Gilroy General Plan.
- The Average Daily Traffic (ADT) volume on the street must exceed 1,000 trips per day.
- At least 25% of the daily traffic on a residential street must be “cut-through.”

Cut-through traffic is defined as traffic with neither an origin nor a destination within the neighborhood that the street is designated to serve. The neighborhood area varies based on the designation of the street. The neighborhood area used to identify cut-through traffic will be determined by Public Works staff.

The 1,000 trips per day ADT threshold and the 25% “cut-through” threshold are based on research of other cities in the Bay Area with similar traffic calming policies. These are minimum criteria for screening eligible streets. Satisfying the criteria does not necessarily mean that a device will be installed.

If a street has less than 1,000 daily trips, regardless of the origins and destinations of its traffic, the City of Gilroy deems it is carrying a reasonable amount of traffic and does not qualify for Phase 2 measures. The 25% “cut-through” criterion is designed to separate residential streets that, by their design, will carry more than 1,000 daily trips. In these cases, it is important to determine the percentage of traffic generated from within the neighborhood versus that which “cuts-through” the neighborhood.

PHASE 2 – HIGH COLLISION RATE CRITERIA

Streets that experience high speeds also have a tendency to exhibit a high rate of vehicle collisions. For this reason, collisions will be used to justify the installation of Phase 2 traffic calming devices when either speed or volume thresholds are not met. For the collision criteria to be met, the street segment in question must exhibit more than five (5) reported or documented collisions within the past three years. These collisions must be considered preventable with the implementation of Phase 2 traffic calming devices. The accident rate along the street segment, over the past three years, and how it compares with regional standards for similar types of roadways, will also be considered.

ADDITIONAL PHASE 2 CRITERIA

A number of traffic calming improvements are identified in this document as Phase 2 devices. They include physical improvements, both horizontal and vertical in nature, that either divert traffic or cause vehicles to slow. It should be noted that no traffic calming program will be permitted to incorporate any device that affects the ability of the Fire and/or Police Departments to provide effective and efficient emergency services to the community. All traffic calming plans will be reviewed by Fire and Police and specific devices approved on a case by case basis depending on the programs effect on the delivery of emergency services.
Appendix A describes a number of these devices. Of the Phase 2 devices, the most commonly used are the speed cushion and the traffic circle. These devices require further consideration in addition to the general speed and diversion criteria. Below is a listing of the additional considerations that must be met for the safe and successful installation of a speed cushion or traffic circle.

**ADDITIONAL PHASE 2 CONSIDERATIONS – SPEED CUSHIONS**

In addition to the General and Speed Control criteria, the following guidelines should be considered for the installation of speed cushions along with engineering judgment:

- The street should have adequate existing curb and gutter on each side to prevent ponding of water in the area of the speed cushion.
- The affected street segment should be of an adequate length for a speed cushion to be effectively installed. Typically, a minimum length of 300 - 500 feet is desirable.
- Speed cushions shall not be installed on streets with posted speed limits greater than thirty (30) miles per hour.
- The first speed cushion in a series should be located in a position where it cannot be approached at high speed in either direction. To achieve this, the first hump ideally should be located approximately 200 feet from an intersection stop sign.
- Where possible, speed cushions should not be placed on curves, but on tangent stretches of roadway. However, in areas where placement on curves is unavoidable, proper horizontal and vertical sight distance should be provided.
- Speed cushions should be located at or near residential property lines and away from driveways, when possible.
- Speed cushions should be located near street lights to illuminate them for safe bike and pedestrian activity at night.
- Speed cushions should be accompanied by the appropriate advanced signage and street markings.
- Spacing between speed cushions should be as even as possible to produce uniform speed along an entire street. Speed cushions in a series should be placed between 200 and 600 feet apart, which may vary depending on the length of the street segment where the devices are placed. Typically, speed cushions are placed farther apart on longer segments than shorter segments. Spacing should allow at least one speed cushion on each block.
- The existence of Class II or Class III bicycle facilities should be taken into consideration when placing speed cushions in a neighborhood.

As a practical matter, these guidelines cannot always be met. For this reason, these guidelines are subject to review by the Public Works Director, who may modify these criteria in a particular situation to achieve the desired result – the safe and effective application of the speed cushion(s).
ADDITIONAL PHASE 2 CONSIDERATIONS - TRAFFIC CIRCLES AND ROUNDBOATS

In addition to the General and Speed Control criteria, the following guidelines should be considered for the installation of roundabouts and traffic circles along with engineering judgment (see also Figure 5):

❖ The intersection should be a minimum of 55 feet diagonally across (both directions, measured from the curb face).
❖ Crosswalks should be located a minimum of 12-feet from the interior circle (measured from the curb face of the circle to the white stripe of the crosswalk).
❖ The circle should allow for a minimum 22-foot wide travel lane for circulating traffic (measured from the curb face of the interior circle to the curb return).
❖ The interior diameter of the circle should be a minimum of 10 feet (measured curb face to curb face).
❖ Traffic circles should not be used in conjunction with stop signs at a given location.
❖ The intersection should meet minimum approach volume criteria as prescribed by established traffic engineering publications.
❖ The circle should be installed with vertical curb when fire department, or large vehicle, circulation is not affected. For other locations mountable, or rolled, curbs are preferred.
❖ The circle should allow for proper sight distance across the intersection.
❖ Existing utilities and access to maintenance facilities, such as manholes, should be accommodated when determining what material is to be used within the traffic circle or roundabout.

As a practical matter, these guidelines cannot always be met. For this reason, these guidelines are subject to review by the Public Works Director, who may modify these criteria in a particular situation to achieve the desired result – the safe and effective application of traffic circles and roundabouts.

2.4. PROGRAM THRESHOLDS

Since distinct traffic calming devices are available to address either speed or volume issues within a neighborhood, staff has the flexibility to use discretion on the exact threshold limits. Either threshold, either speed or diversion, may be used when developing a traffic calming program to better pinpoint the concerns of a neighborhood and directly concentrate on a solution to address the concern. Thus, a neighborhood that has speeding concerns, and which meets the speed threshold, may develop a program that only includes speed control devices.
2.5. **MEASUREMENT CRITERIA**

Typically, mid-week traffic counts, when any nearby school is in session, will provide results that show the highest values for speed and volume on a neighborhood street. Thus, to determine the worst case for traffic on a neighborhood street, traffic counts will be collected for a three-day, mid-week period when an adjacent school (if any) is in session.

2.6. **CEQA REVIEW OF TRAFFIC CALMING PLAN**

Depending on which Phase 2 traffic calming devices are used in a traffic calming plan, diversion may occur on adjacent streets, or in adjacent neighborhoods. For programs where extensive diversion is expected, an environmental and traffic mitigation study may be conducted in accordance with the California Environmental Quality Act (CEQA). The City Council must approve the environmental review document prior to the review and approval of the traffic calming plan.

2.7. **POLICE AND FIRE DEPARTMENT REVIEW OF TRAFFIC CALMING PLAN**

The City of Gilroy Fire Department and Police Department are supportive of the neighborhood traffic management and traffic calming plan. However, it is also imperative that the timely delivery of and accessibility of emergency services are maintained. All proposed Phase 2 traffic calming device installations will be reviewed by the Fire Department and Police Department to ensure they are acceptable.
3. TRAFFIC CALMING PROCEDURES

One of the primary interests in developing a neighborhood traffic calming policy is to provide a clear structure for addressing the concerns of the city’s neighborhoods while spending an appropriate amount of staff time to address neighborhood traffic concerns. Traffic concerns may exist throughout an entire neighborhood or may be specific to a particular street, roadway segment, or spot location. The process developed by the City of Gilroy allows for the timely implementation of non-controversial Phase 1 traffic calming measures and a comprehensive public outreach effort for requests of a more controversial nature. The overall traffic calming process is outlined on Figure 6.

3.1. PROCESS INITIATION

The traffic calming process begins with a specific request to the Public Works Department from a neighborhood resident by letter, phone call, or email. After determining the nature of the request, City staff will undertake the following procedure:

1. Forward a copy of the city’s Neighborhood Traffic Management Program to the resident and ask the resident to file a traffic calming request form (see Figure 8). This will help staff understand the nature of the resident’s concern.

2. After receipt of the completed form, staff will review the street in question, collect traffic counts, analyze reported collisions over the past three years, and conduct an analysis of the current traffic conditions using traffic engineering industry-standard best practices.

3. If the traffic analysis indicates that no traffic calming thresholds were met (speed, volume or collisions), staff may recommend the installation of Phase 1 traffic calming improvements to address the resident’s concerns. The requesting party will be notified of the results of the traffic analysis and the installation of any recommended improvements. The resident must wait a minimum of one year to again request traffic calming improvements.

4. If the traffic analysis indicates that one or more traffic calming thresholds are met, staff will identify and install appropriate Phase 1 devices in the area of concern. The requesting party will be notified of the results of the traffic analysis and the recommended improvements to be installed.

5. Following a period of time for traffic to normalize given the installation of the Phase 1 improvements (usually 1 to 3 months), staff will conduct a follow-up traffic
analysis to determine if the traffic calming thresholds are still being met. If the resident’s concerns are abated through the use of Phase 1 traffic calming measures during this trial phase, no further action is then necessary. If this is done, the resident must wait a minimum of one year to again request traffic calming improvements.

6. If one or more traffic calming thresholds are met, City staff will rank the neighborhood based on a priority ranking system and place the neighborhood into a priority list with other ranked neighborhoods.

7. Once the neighborhood is at the top of the priority list, the traffic calming neighborhood support process is commenced as described below.

8. If the petition process is successful, City staff conducts additional traffic analysis to determine if any of the other streets within the defined traffic calming study area meet the thresholds for Phase 2 traffic calming devices. Only those streets that meet the thresholds are eligible for the installation of physical Phase 2 traffic calming devices. Phase 1 improvements may be applied to non-qualifying streets within the study area.

### 3.2. PRIORITIZING TRAFFIC CALMING REQUESTS

Due to funding and limited traffic staff resources, all neighborhoods that meet Phase 2 traffic calming thresholds will be placed into a priority list based on a priority ranking system. This is a common approach used by many other cities in the Bay Area to efficiently utilize city resources to prioritize projects so that neighborhoods with greater problems are addressed first. The priority ranking system scores a neighborhood using the following metrics:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Traffic Speed</strong>&lt;br&gt;(85th Percentile)</td>
<td>2 points for each mph difference between the 85th percentile speed and the posted or prima facie speed limit</td>
</tr>
<tr>
<td><strong>Volume</strong></td>
<td>1 point for each 500 vehicles over 1,000 vehicles per day</td>
</tr>
<tr>
<td></td>
<td>5 points if 40-65% or more ADT on local street is cut through traffic between arterials or collectors</td>
</tr>
<tr>
<td></td>
<td>10 points if cut through is higher than 65%</td>
</tr>
<tr>
<td><strong>Crash History</strong>&lt;br&gt;(# of accidents in last 3 years)</td>
<td>2 points – 1 to 2 accidents&lt;br&gt;4 points – 3 to 5 accidents&lt;br&gt;8 points – Over 6 accidents&lt;br&gt;5 points – Each crash involving a pedestrian or a cyclist in past 3 years&lt;br&gt;5 points – Each crash resulting in a significant injury&lt;br&gt;10 points – Each crash resulting in a fatality</td>
</tr>
<tr>
<td><strong>Pedestrian Generators</strong>&lt;br&gt;(15 pts. max)</td>
<td>5 points for each school, park, library or community center along roadway&lt;br&gt;3 points if within 1 block</td>
</tr>
<tr>
<td></td>
<td>2 points if within 2 blocks</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td><strong>Support</strong></td>
<td>3 points for 80% petition support</td>
</tr>
<tr>
<td></td>
<td>2 points for 70% petition support</td>
</tr>
<tr>
<td><strong>Unique Conditions (15 pts. max)</strong></td>
<td>5 points for designation as a bike facility</td>
</tr>
<tr>
<td></td>
<td>5 points for unique roadway geometry that substantially restricts visibility</td>
</tr>
<tr>
<td></td>
<td>5 points for high crash rate</td>
</tr>
</tbody>
</table>

### 3.3. **NEIGHBORHOOD SUPPORT PROCESS**

Traffic calming studies require considerable staff resources at taxpayer expense. For this reason, it is important that a significant portion of the neighborhood supports the undertaking of a study. The neighborhood support process is reserved for Phase 2 concerns that meet Speed Control, Traffic Diversion, and/or Collision thresholds. Neighborhood endorsement is demonstrated through a residential petition. These are described below.

**TRAFFIC CALMING NEIGHBORHOOD DETERMINATION AND STUDY AREA PETITION**

The petition process is necessary to determine whether a resident’s concern is widespread. When conducting a petition, City staff will work with the resident to define the traffic calming study area, which becomes the designated notification area boundaries for all future contact with the residents within the study area. Though the limits of the study area are determined through a collaborative process with staff and the neighborhood, the Public Works Director shall make the final determination of the traffic calming neighborhood boundary limits should the need arise. The study area is typically bounded by arterials and collectors, but staff may use engineering judgment to limit streets from the neighborhood that are far removed from the problem area or would not be impacted by any proposed improvements. Staff will supply the resident with a highlighted map identifying the limits of the petition area and a neighborhood-specific petition form (see Figure 9).

It is the resident’s responsibility to collect signatures from as many residents and property owners in the study area as possible. One signature is collected per property, except in the case of multi-family residential buildings, where each tenant is allowed one signature per unique address, in addition to that of the property owner. A petition is deemed successful if more than 60% of the eligible signees within the designated traffic calming study area sign the petition, and the petition is returned within one month. Additional priority is given for a higher level of neighborhood support.

*City of Gilroy*

*Neighborhood Traffic Management Program*
3.4. PHASE 2 PROGRAM DEVELOPMENT

OUTREACH AND PUBLIC PARTICIPATION

The City of Gilroy recognizes that resident participation is a critical element of the Phase 2 plan development. For this reason, staff will conduct an outreach forum inviting the residences and businesses in the affected area to a neighborhood meeting to introduce traffic calming program concepts.

At the first outreach forum, staff will introduce the concepts of Neighborhood Traffic Management, various traffic calming concepts including the functions of various traffic calming devices, provide an overview of the process with associated timelines, and address any questions. Through this meeting, staff will identify the significant traffic calming interests of the neighborhood.

TRAFFIC CALMING PLAN DEVELOPMENT

Based on the input received during the outreach forum, Public Works staff will develop a draft neighborhood traffic calming plan to meet community needs and address their concerns. Staff will use engineering judgment to determine the most efficient devices, and the most effective placement, to address the neighborhood issues. Every effort will be made to develop the traffic calming program that addresses the neighborhood’s interests, while considering excessive device and sign clutter. When placing devices within a neighborhood, staff will make every effort to limit device impacts on driveways, and visual effects to the adjacent resident.

DEPARTMENT REVIEW OF TRAFFIC CALMING PLAN

The draft plan developed by Public Works staff must be reviewed by the various City departments that may have an interest in the elements of the program. These departments include:

- Public Works Engineering – Evaluation of the traffic plan elements on the City right-of-way, evaluation of any landscaping and irrigation contained within plan elements, and review of the plan costs to determine if within available budget.
- Planning Division – CEQA Evaluation (if necessary)
- Police Department – Evaluation to determine if the plan elements can be implemented without any detrimental effect to the delivery of emergency services. Review to determine the level of enforcement needed for the plan elements.
- Fire Department – Evaluation to determine if the plan elements can be implemented without any detrimental effect to the delivery of emergency services.
- Public Works Maintenance Division – Evaluation to determine plan’s effect on street sweeping, access to utilities and/or maintenance facilities (manholes).
Through review of the plan by the various City departments, the following issues may be considered by City staff and discussed with the program proponents:

- Effectiveness of the selected traffic calming devices
- Effects on the ability of Police and Fire to successfully provide emergency services to the area
- Noise impacts
- Loss of parking
- Liability exposure implications
- Visual impacts and aesthetic concerns
- Increased maintenance costs

Any comments on the traffic calming plan must be addressed through appropriate modification to the traffic calming plan. The plan may not proceed forward unless supported by all interested City departments.

**NEIGHBORHOOD MEETING TO INTRODUCE TRAFFIC CALMING PLAN**

Once the traffic calming plan has been approved by all interested City departments, a second neighborhood meeting is scheduled to introduce the plan and answer any questions. Based on the comments obtained from the meeting regarding the draft traffic calming plan, Public Works staff may elect to revise the plan accordingly and request a subsequent review from all affected City departments, or decide to move forward if the comments are not substantive.

**SURVEY OF NEIGHBORHOOD FOR PROGRAM SUPPORT**

As the final stage in the public outreach process, the affected streets within the traffic calming neighborhood are polled using a mailed secret ballot to determine support for the Phase 2 traffic calming plan. Voting on a Phase 2 traffic calming plan shall be as follows:

- One vote per single family residence
- One vote per multi-family residence
- One vote per apartment unit

One vote is allowed for each owner of property within the neighborhood who is a non-resident (one vote regardless of the number of developed or undeveloped properties owned). The neighborhood will have two weeks to return their ballots.

**CITY COUNCIL REVIEW OF NEIGHBORHOOD TRAFFIC CALMING PLAN**

The results of the traffic calming survey are then summarized in a staff report and presented to the City Council for consideration. Notice of the meeting is provided to the traffic calming neighborhood area, and the meeting is posted through our social media outlets.

*City of Gilroy*
*Neighborhood Traffic Management Program*
For staff to recommend approval of the neighborhood traffic calming program, the following survey results must be achieved:

- The survey receives at least a 50% response rate
- 60% of those responding must approve the program
- A significant majority of the properties within 100 feet of proposed device locations must respond and vote to approve the program

Should the results of the traffic calming survey not meet the above criteria, staff will recommend denial of the traffic calming program to the City Council.

CITY COUNCIL APPROVAL OF PROGRAM FUNDING

During each budget cycle, approved programs will be placed into the City’s Capital Improvement Program (CIP), and funding will be sought from the City Council. Staff will recommend approved programs on a prioritized basis using the priority ranking system. Any approved program that does not receive Council approval for implementation funding will have to compete with other approved projects requesting funding during the next budget funding cycle.

3.5. SCHEDULE

Neighborhood traffic calming studies do not lend themselves to predictable schedules. The timing of events varies considerably from case to case. Considerations that affect program timing include:

- Level of community interest in the program, and number of requests
- Size of area and complexity of plan alternatives,
- Time necessary to obtain required petition signatures,
- Difficulty in scheduling community meetings,
- Scale and complexity of final design and construction contract requirements,
- Funding availability,
- Weather effects on construction season, and
- Competing demands on staff resources.

Although it is conceivable that a relatively simple project could be completed in as little as 12 months from qualifying petition to installation, as a practical matter, a project duration in excess of 18 months to two years would not be uncommon. Figure 6 shows an example schedule for traffic calming measure installation.
3.6. **TRAFFIC CALMING BUDGET**

Funding for all costs related to the NTMP, including but not limited to data collection costs, potential consultant costs, plan development, and device installation/removal costs will come from the City of Gilroy General Fund.

3.7. **DEVICE REMOVAL**

The neighborhood must petition the City to have devices removed. The ensuing process to remove the devices would be very similar to the initial traffic calming program development in terms of public outreach, engineering study, and neighborhood support. Should a neighborhood successfully manage a request for removal of a traffic calming device through this process, the device will be removed once funding becomes available.

---

**TABLES AND FIGURES**

City of Gilroy  
*Neighborhood Traffic Management Program*
<table>
<thead>
<tr>
<th>Method</th>
<th>Phase</th>
<th>Reduces Speed</th>
<th>Reduces Volume</th>
<th>Increase Noise</th>
<th>Parking Loss</th>
<th>Restricts Access</th>
<th>Impacts Emergency Response</th>
<th>Increase Street Maintenance</th>
<th>Potential Cost *</th>
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<tbody>
<tr>
<td>Community Outreach/Education</td>
<td>1</td>
<td>Possible</td>
<td>Possible</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<td>Varies</td>
</tr>
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<td>Police Enforcement of Speed Limits</td>
<td>1</td>
<td>Yes</td>
<td>Possible</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Varies</td>
</tr>
<tr>
<td>Speed Display Units</td>
<td>1</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>$250 per day</td>
</tr>
<tr>
<td>High Visibility Crosswalks</td>
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<td>Possible</td>
<td>No</td>
<td>No</td>
<td>Possible</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>$1,500 - $30,000</td>
</tr>
<tr>
<td>Speed Limit Signs</td>
<td>1</td>
<td>Possible</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>$280 - $350</td>
</tr>
<tr>
<td>Narrow Lane Striping</td>
<td>1</td>
<td>Possible</td>
<td>Possible</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Bott’s-Dots/Rumble Strips</td>
<td>1</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Turn Restriction Signs</td>
<td>2</td>
<td>No</td>
<td>Yes</td>
<td>Possible</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>$280 - $350</td>
</tr>
<tr>
<td>Curb Extensions**</td>
<td>2</td>
<td>Yes</td>
<td>Possible</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Possible</td>
<td>$15,000 - $30,000</td>
</tr>
<tr>
<td>Speed Cushions****</td>
<td>2</td>
<td>Yes</td>
<td>Possible</td>
<td>Yes</td>
<td>Possible</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>$7,500</td>
</tr>
<tr>
<td>Traffic Circles &amp; Round-a-bouts***</td>
<td>2</td>
<td>Yes</td>
<td>Possible</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>$35,000 - $115,000</td>
</tr>
<tr>
<td>Median Barriers</td>
<td>2</td>
<td>Possible</td>
<td>Yes</td>
<td>No</td>
<td>Possible</td>
<td>Yes</td>
<td>Yes</td>
<td>Possible</td>
<td>$7,500 - $45,000</td>
</tr>
</tbody>
</table>

* These costs represent potential device construction and/or installation costs on a typical street. They do not include program development or CEQA review.
** Requires significant commitment of Police Department staff resources to enforce on a regular basis to maintain effectiveness.
*** Cost does not include any long term maintenance of green infrastructure, landscaping or irrigation.
**** Speed cushions shall not be installed on streets with the posted speed limits greater than 30 MPH.

City of Gilroy
*Neighborhood Traffic Management Program*
Figure 1: Gilroy General Plan Functional Street Classification
Figure 2: Gilroy Truck Routes
Figure 3: Gilroy VTA Route Map
Figure 4: Portland Impact Threshold Curve

The purpose of an impact threshold curve is to help determine whether the "secondary" impacts of diversions caused by traffic calming projects are acceptable. The curve specifically addresses impacts in the form of increased traffic on adjacent, non-project, local service streets. The impact threshold curve identifies the range of traffic diversion that is acceptable. Impact limitations are expressed as a curve because the level of impact that is considered acceptable will vary, depending on the characteristics of the street that is affected by the project.

Use of the curve assures residents of adjacent non-project streets that traffic problems on one local service street will not be solved simply by shifting the problem to other local service streets. The impact curve provides a quantifiable and objective standard for measuring secondary impacts of diversions.

The following guidelines are followed in establishing numeric impact limitations on non-project local service streets:

1. The standard impact curve is expressed in terms of total traffic volume - i.e., vehicles per day (vpd). The parameters of the curve are:

2. Because of the margin of error inherent in traffic volume data (resulting from machine error and daily volume fluctuation), a range of plus or minus 50 vehicles per day, or 10 percent of the measured pre-calming volume, whichever is greater, is allowed. An increase in traffic volume that falls between the curve and the lower margin of error would ordinarily be acceptable. An increase that falls between the curve and the upper margin of error might possibly be acceptable. An increase that falls above the upper margin would clearly not be acceptable.

*This chart does not apply to streets exempted from Step 2 traffic calming measures (collectors, arterials, emergency & truck routes)
Figure 5: Traffic Circle and Roundabout Criteria

**Geometric Criteria**

- Intersection should be a minimum of 55 feet diagonally across (both directions, measured from curb face).

- Crosswalk should be located a minimum of 12-feet from the interior circle (measured from curb face of circle to white stripe of crosswalk).

- Device should allow for a minimum 22-foot wide travel lane for circulating traffic (measured curb face of interior circle to the curb return).

- Interior diameter of circle should be a minimum of 10 feet (measured curb face to curb face).
Figure 6: Traffic Calming Procedure

1. **Initial Request** (Traffic Calming Request Form)
   - Initial Study & Data Collection
   - Implementation of Phase I Improvement
   - Follow-Up Studies and Performance Verification
   - Yes – Problem Abated
   - No – Calming Thresholds are still met
     - Neighborhood Ranked and Placed on Priority List
     - Neighborhood Petition
       - Petition Not Met – No Further Action
       - Petition Met – Traffic Analysis and Define Study Area for Phase II

2. **Outreach and Public Participation**
   - Traffic Calming Plan Development
   - Department Review
   - Neighborhood Meeting
   - Neighborhood Survey for Program Support
   - City Council Review and Approval
   - Implementation

City of Gilroy
Neighborhood Traffic Management Program
Figure 7: Traffic Calming Procedure Timeline

**Phase I**
- Initial Request
- Implementation of Phase I Improvement
- Follow-Up Studies and Performance Verification
- Neighborhood Ranking and Prioritization

5 to 8 Months
- Initial Study & Data Collection
- Normalization Period
- Threshold Determination

**Phase II**
- Neighborhood Petition
- Public Outreach and Participation
- Department Review
- City Council Review and Approval

5 to 9 Months
- Define Study Area and Traffic Analysis
- Traffic Calming Plan Development
- Neighborhood Survey for Program Support
Figure 8: Traffic Calming Request Form

The purpose of this form is to enable neighborhoods to request the possible initiation of a traffic calming study in accordance with the City of Gilroy’s Neighborhood Traffic Management program. The form must be filled out in its entirety and submitted to:

The City of Gilroy
Public Works Department
Attn: City Engineer
7351 Rosanna Street
Gilroy, CA 95020

Feel free to attach additional sheets containing pictures, maps, or additional text if the space provided is insufficient. Petitions will not be considered part of the application process.

1. Requesting Individual’s Contact Information

Name: _____________________________________________

Address: __________________________________________

Phone Number: _____________________________________

Email: _____________________________________________

2. Please describe the location of the traffic concern (feel free to draw a picture or attach a map):

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

3. Please describe the nature of the neighborhood traffic problem you are concerned with (attach additional sheets if necessary):

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

4. Please describe what changes you would like to see on your street and/or what traffic calming measures would be acceptable to you:

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
Figure 9: Neighborhood Petition Form (Prepared by Staff)

City of Gilroy

Petition for Neighborhood Traffic Calming Measures

THE UNDERSIGNED BELOW AGREE TO THE FOLLOWING:

1. All persons signing this petition do hereby certify that they reside within the impacted area, which is hereby defined as the street segments of (also see attached map):

   This Section is Prepared by Staff

2. All persons signing this petition request that the City of Gilroy investigate the possibility of installing physical traffic calming devices on my street in this neighborhood:

   This Section is Prepared by Staff

3. All persons signing this petition do hereby agree that the following contact person(s) represent the neighborhood as facilitator(s) between the neighborhood residents and City of Gilroy staff in matters pertaining to items 1 and 2 above:

   Name: __________________________
   Address: _________________________
   Phone: __________________________

   Name: __________________________
   Address: _________________________
   Phone: __________________________

   Name: __________________________
   Address: _________________________
   Phone: __________________________

   Name: __________________________
   Address: _________________________
   Phone: __________________________


   ONLY ONE SIGNATURE PER ADDRESS

   Name: __________________________
   Address: _________________________
   Phone #: _________________________
   Signature ________________________

   Name: __________________________
   Address: _________________________
   Phone #: _________________________
   Signature ________________________

   Name: __________________________
   Address: _________________________
   Phone #: _________________________
   Signature ________________________

   Name: __________________________
   Address: _________________________
   Phone #: _________________________
   Signature ________________________

   Name: __________________________
   Address: _________________________
   Phone #: _________________________
   Signature ________________________

   Name: __________________________
   Address: _________________________
   Phone #: _________________________
   Signature ________________________


[Note: Attach additional sheets as necessary]

City of Gilroy
Neighborhood Traffic Management Program
Appendix A: Traffic Calming Tool Box
Community Outreach/Education

**Phase 1**

**Description:** Community outreach involves neighborhood awareness and education campaigns on traffic and traffic safety issues. Campaigns can consist of neighborhood meetings, written correspondence, school safety workshops, or other programs that help inform and educate the public.

Studies have generally shown that people speeding in neighborhoods tend to be local residents.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>◦ Provides a forum for residents to discuss their concerns.</td>
<td>◦ Cultural and language barriers may dissuade resident participation.</td>
</tr>
<tr>
<td>◦ Helps city staff and neighborhood representatives identify traffic problems in the community.</td>
<td>◦ Potentially time consuming.</td>
</tr>
<tr>
<td>◦ Educates the community on traffic calming.</td>
<td></td>
</tr>
</tbody>
</table>

**Special Considerations**

- Neighborhood meetings are typically held in convenient locations and during after-work hours.
- The meetings are intended to promote discussion among residents and city staff.
- When necessary, interpreters should be provided.

**Evaluation Considerations**

<table>
<thead>
<tr>
<th>Reduces Speed</th>
<th>Reduces Volume</th>
<th>Increases Noise</th>
<th>Parking Loss</th>
<th>Restricts Access</th>
<th>Impacts Emergency Response</th>
<th>Increases Street Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible</td>
<td>Possible</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Objective:** To educate and inform the community of traffic calming measures and traffic safety in their neighborhoods.

**Potential Cost:** Varies.
Police Enforcement of Speed Limits

**Phase 1**

**Description:** Enforcement encourages motorists to change their driving behavior through the issuance of citations. The police department deploys officers to target neighborhood streets with reported speeding problems.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ Increases driver awareness. ♦ Targets speeding areas. ♦ Can reduce speeding occurrences. ♦ Highest impact on speeding offenders. ♦ Can be implemented immediately. ♦ Provides Police enforcement visibility in neighborhood</td>
<td>♦ Long term beneficial impacts may diminish if not regularly enforced. ♦ Requires frequent police presence, which may not be feasible.</td>
</tr>
</tbody>
</table>

**Special Considerations**

♦ Requires frequent enforcement to be successful. ♦ Police units may not be readily available. ♦ Often beneficial in school zones. ♦ Typically, only streets with documented speeding problems should be monitored. ♦ May be used in combination with recently implemented control devices.

**Evaluation Considerations**

<table>
<thead>
<tr>
<th>Reduces Speed</th>
<th>Reduces Volume</th>
<th>Increases Noise</th>
<th>Parking Loss</th>
<th>Restricts Access</th>
<th>Impacts Emergency Response</th>
<th>Increases Street Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Possible</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Objective:** To increase driver awareness of speed limits through police enforcement.

**Potential Cost:** Varies.
Speed Display Units

**Phase 1**

**Description:** A radar unit that displays the speed limit and motorists' actual speeds. These devices may be movable or permanent.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ Increases driver awareness of their actual speeds.</td>
<td>♦ Limited effectiveness.</td>
</tr>
<tr>
<td>♦ Can be implemented immediately.</td>
<td>♦ Display units must be relocated weekly.</td>
</tr>
<tr>
<td>♦ Conveys illusion of police presence.</td>
<td>♦ Not a substitute for Police enforcement.</td>
</tr>
</tbody>
</table>

**Special Considerations**

♦ Can cause motorists to speed up to register a higher speed.
♦ Not suitable for remote areas.
♦ Usually not effective on high volume streets.
♦ Helps alert drivers of their actual speed and provides an opportunity for drivers to reduce speeds without being penalized.
♦ Permanent units usually only considered around schools

**Evaluation Considerations**

<table>
<thead>
<tr>
<th>Reduces Speed</th>
<th>Reduces Volume</th>
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<th>Increases Street Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Objective:** To reduce speeding by altering drivers of their actual speeds.

**Potential Cost:** Temporary units: $250 per day.
Permanent units: $10,000 per installation.
High Visibility Crosswalks

Phase 1

Description: A crosswalk incorporating a striped pattern that catches motorists’ attention. These high-visibility crosswalks can also be placed mid-block, but will require pedestrian-activated beacons (RRFB) to alert drivers of crossing pedestrians. Mid-block crosswalks should be placed only after an engineering study.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ Increases crosswalk viability.</td>
<td>♦ Could create a false sense of pedestrian security.</td>
</tr>
<tr>
<td>♦ Could help to reduce speeds.</td>
<td></td>
</tr>
<tr>
<td>♦ Indicates preferred crossing location.</td>
<td></td>
</tr>
</tbody>
</table>

Special Considerations

♦ Pedestrian may ignore traffic and place a greater reliance on the crosswalk.
♦ More difficult to maintain than regular crosswalks.
♦ Should be well lit
♦ Additional signage, markings and devices are required for mid-block crosswalks
♦ While less expensive than raised crosswalks, they are less effective.
♦ Not suitable for all locations.

Evaluation Considerations

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</thead>
<tbody>
<tr>
<td>Possible</td>
<td>No</td>
<td>No</td>
<td>Possible</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Objective: To increase crosswalk visibility to drivers.

Potential Cost: $1,500 to $5,000 each. Mid-block crosswalks: $25,000 to $30,000 each.
**Speed Limit Signs and Legends**

*Phase 1*

**Description:** Speed limit signs and legends installed on residential streets.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ Can help reduce speeding if enforced.</td>
<td></td>
</tr>
<tr>
<td>♦ Clearly defines speed limit.</td>
<td></td>
</tr>
<tr>
<td>♦ Acceptable by neighborhood.</td>
<td></td>
</tr>
<tr>
<td>♦ Relatively inexpensive to install.</td>
<td></td>
</tr>
<tr>
<td>♦ Can be ignored by motorists.</td>
<td></td>
</tr>
<tr>
<td>♦ Requires on-going enforcement.</td>
<td></td>
</tr>
<tr>
<td>♦ Added signage to neighborhood.</td>
<td></td>
</tr>
</tbody>
</table>

**Special Considerations**
- An engineering analysis is needed to establish speed limits higher than 25 mph.
- Requires enforcement to remain effective.
- Motorists have a tendency to disregard unrealistically low speed limits.
- Should be used only on streets with identified speeding problems.
- Speed limit signs will not be posted less than 25 mph.
- To provide additional device effectiveness, associated 25 mph legends can be installed adjacent to sign locations.

**Evaluation Considerations**

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</tr>
</thead>
<tbody>
<tr>
<td>Possible</td>
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<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Objective:** To reinforce proper speeds on neighborhood streets.

**Potential Cost:** $280 to $350 per sign or legend.
Narrow Lane Striping

**Phase 1**

**Description:** Narrowing lanes requires restriping the pavement to reduce the width of the lanes (usually to 10 feet wide).

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ May slow travel speeds.</td>
<td>♦ Increased maintenance costs and frequency.</td>
</tr>
<tr>
<td>♦ Easy to modify and implement.</td>
<td>♦ Adds striping to neighborhood streets.</td>
</tr>
<tr>
<td>♦ Edge striping may function as Class II Bicycle Lanes</td>
<td>♦ May affect emergency response.</td>
</tr>
</tbody>
</table>

**Special Considerations**

♦ The remaining portion of the road can be used to create bicycle or parking lanes.
♦ Additional striping helps define neighborhood streets by adding centerlines and edge lines.
♦ Can be altered over time.
♦ Possible to use as an intermediate Phase to more definite traffic control devices.
♦ Most effective when there is sufficient opposing traffic.
♦ Effectiveness dwindles as opposing traffic volume drops.

**Evaluation Considerations**

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<tr>
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<th>Reduces Volume</th>
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<tbody>
<tr>
<td>Possible</td>
<td>Possible</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Objective:** To slow vehicle speeds by narrowing traffic lanes.

**Potential Cost:** $1,500 to $3,000. Dependent on length of street.
Botts’-dots/Rumble Strip

**Phase 1 (Rural location only)**

**Description:** Bott's-dots/Rumble strip are raised pavement marker that provide tactile and auditory feedback to driver.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Increases driver awareness.</td>
<td>• Can create obstructions for bicycles.</td>
</tr>
<tr>
<td>• Provides tactile and auditory feedback to driver at desired location (nearby speed limit signs, pedestrian crossing, and etc.).</td>
<td>• Requires regular maintenance.</td>
</tr>
<tr>
<td></td>
<td>• Produces high level of noise to adjacent properties so should not be used next to sensitive receptors.</td>
</tr>
</tbody>
</table>

**Special Considerations**

• May become obstacle for bicyclists.
• Makes it difficult for bicycles and pedestrian access.
• Require other measures such as signage and pavement marking.
• Not a standalone devise.

**Evaluation Considerations**

<table>
<thead>
<tr>
<th>Reduces Speed</th>
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<tr>
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<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Objective:** To reduce traffic speed on neighborhood streets by increasing driver aware at nearby signs and markings.

**Potential Cost:** $2,000 to $4,000. Dependent on length and installation interval.
Turn Restriction Signs

*Phase 2*

**Description:** Turn restriction signs prohibit specified turn movements on neighborhood streets. Examples of restrictive signage include: "No Left Turns", "No Right Turns", or "Do Not Enter".

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ Cost-effective method of reducing cut-through traffic.</td>
<td>♦ Possible traffic diversion to other neighborhood streets.</td>
</tr>
<tr>
<td>♦ Redirects traffic to main streets where higher traffic volumes are acceptable.</td>
<td>♦ Success requires on-going enforcement.</td>
</tr>
<tr>
<td>♦ Can be directed towards certain times of the day.</td>
<td>♦ Adds signage to the neighborhood.</td>
</tr>
<tr>
<td>♦ Can reduce noise.</td>
<td>♦ Limits access to the neighborhood.</td>
</tr>
<tr>
<td>♦ No increase to street maintenance.</td>
<td>♦ Applies to all traffic, including neighborhood traffic.</td>
</tr>
</tbody>
</table>

**Special Considerations**

♦ Little or no effect on vehicle speeds.
♦ Best when used on major or collector streets.
♦ More effective when applied to certain peak hours.
♦ May cause access impacts to neighborhood.
♦ Possible diversion of traffic to other neighborhood streets.
♦ Can be difficult to enforce in some areas.

**Evaluation Considerations**

<table>
<thead>
<tr>
<th>Reduces Speed</th>
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<tbody>
<tr>
<td>No</td>
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<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Objective:** To reduce traffic volumes on neighborhood streets and redirect traffic to main roadways.

**Potential Cost:** $280 - $350 per sign.
Curb Extensions

Phase 2

Description: Curb extensions narrow a portion of the roadway by extending a portion of the curb into the street. Curb extensions are commonly referred to as “bulb-outs”, which are at the entrance of a roadway, and “chokers”, which are placed mid-segment. Curb extensions also include “Chicanes”, which are a series of alternating mid-segment extensions.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ Shorter pedestrian crossings.</td>
<td>♦ May require loss of on-street parking.</td>
</tr>
<tr>
<td>♦ Can decrease vehicle speeds entering a narrowed roadway.</td>
<td>♦ Can create a hazard for bicyclists.</td>
</tr>
<tr>
<td>♦ Creates an opportunity for landscaping and green infrastructure.</td>
<td>♦ May impede emergency response vehicles and other trucks.</td>
</tr>
<tr>
<td>♦ Allows better pedestrian visibility around parked cars.</td>
<td>♦ Increased maintenance.</td>
</tr>
<tr>
<td></td>
<td>♦ Drainage can be a problem.</td>
</tr>
</tbody>
</table>

Special Considerations

♦ Expensive to remove if permanent
♦ Curb-extensions can be installed mid-block.
♦ May require additional landscaping.
♦ Can be expensive.
♦ Curb-extensions should not extend into designated bicycle lanes.
♦ At transit stops, curb-extensions enhance service.
♦ Bulbouts need to be designed to accommodate emergency response vehicles, larger vehicle and common truck turning path.

Evaluation Considerations

<table>
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<tr>
<th>Reduces Speed</th>
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<td>Yes</td>
<td>No</td>
<td>Possible</td>
<td>Possible</td>
</tr>
</tbody>
</table>

Objective: To reduce traffic speeds and reduce pedestrian exposure to vehicles.

Potential Cost: $15,000 to $30,000 per extension.

City of Gilroy
Neighborhood Traffic Management Program
Speed Cushions

Phase 2

Description: Speed cushions are asphalt mounds constructed on the roadway surfaces. The City of Gilroy uses speed cushions that are 4 inches high and have a parabolic profile. Speed cushions differ from other raised speed control devices (i.e. speed bump, speed hump, or speed table) because speed cushions typically have wheel cut-outs that allow unimpeded passage by emergency vehicles. Most passenger cars have narrower wheel bases than emergency vehicles and would not be able to pass unimpeded through speed cushions.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>✦ Effectively slow vehicles.</td>
<td>✦ Increases noise near speed cushions.</td>
</tr>
<tr>
<td>✦ Can result in decrease of traffic volumes.</td>
<td>✦ May result in traffic diversion to other neighborhood streets.</td>
</tr>
<tr>
<td>✦ Can improve pedestrian safety.</td>
<td>✦ Device, signage and advanced striping can be somewhat aesthetically displeasing.</td>
</tr>
<tr>
<td>✦ Are designed to accommodate fire truck wheel base widths.</td>
<td>✦ Possible problem for bikes.</td>
</tr>
<tr>
<td></td>
<td>✦ Will affect passage of ambulances and other standard wheel based emergency vehicles.</td>
</tr>
</tbody>
</table>

Special Considerations

✦ Speed cushions are usually placed 300 to 600 feet apart.
✦ Speed cushions need Fire Department and Police Department approval to ensure adequate delivery of emergency vehicles.
✦ Require advanced warning signs and pavement markings.
✦ Speed cushions shall not be installed on streets with posted speed limits greater than 30 MPH.
✦ May be installed using temporary rubberized devices.

Evaluation Considerations

<table>
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<tr>
<th>Reduces Speed</th>
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<tbody>
<tr>
<td>Yes</td>
<td>Possible</td>
<td>Yes</td>
<td>Possible</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Objective: To reduce vehicle speeds on neighborhood streets.
Potential Cost: $7,500 per speed cushion.
### Roundabouts & Traffic Circles

**Phase 2**

**Description:** Roundabouts and traffic circles are raised circular islands placed in the center of an intersection. They require vehicles to slow down to a comfortable speed in order to maneuver around the circle.

**Advantages**
- Effectively reduces vehicle speeds.
- Reduces potential for collisions.
- Provides increased access for side streets.
- Opportunity for landscaping.
- Minimal noise impacts.
- Can be attractive, if well maintained.

**Disadvantages**
- Loss of parking.
- Can disrupt access for large vehicles.
- Very expensive
- Possible decrease in emergency response times.
- Can increase conflicts between bicycles and automobiles.
- Can require increased maintenance.
- May require additional right-of-way.

**Special Considerations**
- Requires additional signage and pavement markings.
- Not recommended at T-intersections and offset intersections.
- Most effective when used in combination with other devices or placed in series on short blocks.
- Requires curbside parking prohibition within 30 feet of circle.
- At slow speeds, buses can maneuver around traffic circles.
- Not used at 4-way stop intersections
- Installed with vertical curb where vehicle circulation allows; otherwise curbs are designed to be mountable.

**Evaluation Considerations**

<table>
<thead>
<tr>
<th>Reduces Speed</th>
<th>Reduces Volume</th>
<th>Increases Noise</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Possible</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Objective:** To reduce vehicle speed by requires drivers to slow down to maneuver around the circle.

**Potential Cost:** $35,000 to $115,000 depending on island treatment and right-of-way requirement.

City of Gilroy
*Neighborhood Traffic Management Program*
Median Barriers

Phase 2

Description: Median barriers are raised islands that prevent certain movements at an intersection.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ Reduces cut-through traffic.</td>
<td>♦ Impedes emergency response times.</td>
</tr>
<tr>
<td>♦ Opportunity for landscaping.</td>
<td>♦ May divert traffic to other neighborhood streets.</td>
</tr>
<tr>
<td>♦ Provides refuge area for pedestrians.</td>
<td>♦ High installation costs.</td>
</tr>
<tr>
<td>♦ Reduce vehicle conflict points at intersection.</td>
<td>♦ Creates obstacle for motorists.</td>
</tr>
<tr>
<td>♦ Provides location for placement</td>
<td>♦ Can create obstructions for pedestrians and bicycles.</td>
</tr>
<tr>
<td>♦ of visible signs.</td>
<td></td>
</tr>
</tbody>
</table>

Special Considerations

♦ Restricts full access to and from neighborhood streets.
♦ May become obstacle for motorists to drive into.
♦ More permanent measure.
♦ Difficult to alter or remove.
♦ May divert traffic to other neighborhood streets.
♦ Can result in increased emergency response times.
♦ Possibility for varied designs, such as restricted left turns only on major streets.
♦ Requires environmental assessment, CEQA compliance.
♦ Makes it difficult for bicycles and pedestrian access.

Evaluation Considerations

<table>
<thead>
<tr>
<th>Reduces Speed</th>
<th>Reduces Volume</th>
<th>Increases Noise</th>
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<td>No</td>
<td>Possible</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Objective: To reduce cut-through traffic on neighborhood streets by restricting left-turn movements.

Potential Cost: $7,500 to $45,000. Dependent on length.
Appendix B: Neighborhood Traffic Management Program Public Outreach Brochure