City of Lafayette

Traffic Calming Guidebook

JUNE 2023

PLACEWORKS

City of Lafayette
Traffic Calming Guidebook

Contents

Chapter 1: Introduction

The City of Lafayette Traffic Calming Program has been designed to help manage speed-related traffic concerns along local and collector streets across the city. Since the original Lafayette Traffic Calming Program Guidebook was adopted in 2003, a significant number of traffic calming measures have been implemented in the city, and a growing number of bicycle and pedestrian facilities have been and are being installed. However, concerns about speeding vehicles are still an issue in residential areas of Lafayette. This 2023 update to the Traffic Calming Program and Guidebook clarifies that traffic calming measures provided by the City are based on an objective data evaluation process through a transparent, equitable, and logical process to reach sound decisions based on best practices for traffic calming design.

Through this application-based program residents can identify vehicular speed-related concerns on their streets. Requests for local street traffic calming must be submitted on a block-by block basis with demonstrated support from more than half of the households along both sides of the street. The City will then apply a data-driven approach to evaluate the requests to determine the blocks that will be addressed and by which of the traffic calming measures available.

The purpose of this Guidebook is to:

- describe the updated process associated with the City of Lafayette Traffic Calming Program;
- provide information for residents who would like to learn more about the Program; and
- explain how to apply for traffic calming measures.

The Guidebook enumerates the steps that first residents and then City staff will take, and it lists the criteria by which streets can qualify for different types of traffic calming. Residents work together to identify vehicle speed issues, and City staff proposes solutions based on a determination of the severity of the issues identified. The Program emphasizes lower-cost measures if they can resolve safety issues, before considering higher cost measures that require engineering, design, and construction.

The information and tools presented in this document will be applicable on most local roadways in Lafayette to reduce vehicular speeds while balancing multiple uses.

*Lafayette adopted **Vision Zero** in 2021 as a strategy to eliminate traffic fatalities and severe injuries, while increasing safe and healthy mobility for all. Vision Zero acknowledges that many factors contribute to safe travel – including roadway design, speed, behavior, technology, and policies. Effective and objective traffic calming policies reflect this "Safe System" approach to safety by establishing criteria to identify streets with the greatest vehicle speed issues and promote measures that best address the unique safety conditions on each street.*

Traffic Calming Guidebook Update

In addition to streamlining the approach to handling neighborhood traffic calming requests, the updated Guidebook is intended to align with the City's overarching Vison Zero goal to eliminate traffic-related collisions that result in serious injuries and fatalities, as well as with the Lafayette Local Road Safety Plan, which supports projects and programs that go beyond traffic calming to address safety in Lafayette. Consistent with these other City efforts, the updated Program sets out an objective process to quantify speeding-related issues on streets identified by residents and uses a data driven approach to prioritize streets that may be eligible for traffic calming. The Program does not preclude efforts by City staff to proactively or reactively address traffic-related concerns and issues, such as citywide efforts to improve safety on streets around schools.

Purpose of Traffic Calming

The purpose of traffic calming is to create a safer and people-friendly environment by reducing vehicle speeds and related negative impacts, while balancing the needs of pedestrians, cyclists, and residents with mobility limitations through equitable application of City resources.

The Institute of Transportation Engineers (ITE) defines traffic calming as:

> 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.

The City of Lafayette further defines traffic calming as:

the management of vehicular traffic speeds through education and physical measures to minimize the negative impacts on residents, pedestrians, bicyclists, and school children.

More specifically, traffic calming can be used to:

- Achieve slow vehicular speeds;
- Reduce collision frequency and severity;
- Increase the safety and the perception of safety for non-motorized users of the street;
- Reduce the need for police enforcement; and
- Enhance the street environment.

By addressing vehicle speeds, traffic calming measures can improve vehicle, pedestrian and bicycle safety while preserving neighborhood character and livability.

Traffic calming measures may be addressed or complemented by educational efforts that empower residents to influence behaviors that affect safety both for drivers, cyclists, and pedestrians. Resident campaigns can take a variety of forms, such as temporary signs, flyers, and neighborhood pledge programs. In cases where resident action is not sufficient to resolve speeding issues, striping and signage measures may prove effective, such as by reminding drivers of the need to proceed slowly or visually narrowing the roadway so that drivers are less confident in going faster.

If needed and appropriate, roadway traffic calming measures, sometimes called engineering treatments, can be used to manage vehicle speeds. These features, such as speed cushions or tables, raised crosswalks, and median islands, s have been proven to reduce speeds and improve safety. Speed humps are the most common traffic calming measures due to their effectiveness in reducing vehicle speeds and relatively low cost to install.
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The Lafayette Traffic Calming Program relies on the use of resident action, striping and signage, and roadway features to address documented speeding concerns on local and collector streets. However, this does not preclude City staff from coordinating with the Lafayette Police Department for enforcement on streets with the most egregious speeding issues. The Traffic Calming Program also reflects the “Safe System” approach to roadway safety that has been adopted by the U.S. Department of Transportation and Caltrans to reduce roadway deaths and injuries under the Vision Zero “umbrella,” with the goal to eliminate traffic-related injuries and fatalities. The Safe System approach recognizes that people will make mistakes and that these mistakes should be anticipated through the design and management of the systems (road infrastructure, vehicles, and related policies) to minimize the risks associated with the mistakes.

What Traffic Calming is Not

Traffic calming does not directly address cut-through traffic on residential streets. Cut-through traffic can be difficult to quantify and can be more of a neighborhood-scale concern if through-traffic is simply addressed by pushing the problem to another street. The intent of the Traffic Calming Program is to make Lafayette streets safer and more comfortable for all by reducing vehicle speeds.

In addition, traffic calming does not include the use of regulatory measures such as stop signs. Unlike traffic signals or stop signs at intersections, which do not reduce mid-block speeds, traffic calming measures encourage slower vehicular speeds along the length of a block rather than at intersections.

In addition, traffic calming in Lafayette does not apply to arterial (non-local) streets due to their distinct purpose to accommodate higher traffic volumes and speeds, including for public transit and emergency response vehicles. Safety improvements for these roads are pursued either in conjunction with other major capital projects or as standalone initiatives, prioritized based on identified needs.

> ***Stop signs*** *tell drivers, pedestrians, and bicyclists at an intersection who has the right of way. National guidelines, called* ***warrants****, are used to determine where stop signs can be installed. The warrants consider factors like the probability of vehicles arriving at an intersection at the same time, the length of time traffic must wait to enter, and the availability of safe crossing opportunities.* ***Stop sign warrants are not based on speeding or traffic calming.***

This Program does not replace a resident's ability to contact the City about maintenance or other issues that do not fit the definition of 'traffic calming.' These requests can be addressed by submitting a Transportation Action Request form or calling the Engineering Department at (925)284-1951.

Best Practices

The City of Lafayette employs current best practices and engineering standards to ensure that any traffic calming measures implemented are effective in addressing the identified speeding issues on local streets, including by being easy to understand for drivers and other travelers. The City also uses best practices by making applications and information about the Traffic Calming Program easily accessible and understandable, and by following an equitable decision-making process.

The Traffic Calming Program relies on vehicle-speed and collision data to analyze and inform decisions regarding appropriate traffic calming measures. Traffic engineering expertise is employed to assess the data and determine which measures are most suitable for specific areas and to align selected measures with the characteristics of individual street blocks. Data is also collected to evaluate the effectiveness of implemented measures and identify areas and tools that may require adjustment. By utilizing data-driven decision-making and conducting regular evaluations, the Traffic Calming Program in Lafayette ensures a clear and predictable approach to managing vehicle speeds.

Chapter 2: City of Lafayette Traffic Calming Program

Goals and Policies

The intent of the Lafayette Traffic Calming Program is to establish procedures to facilitate traffic calming measures that will enhance the safety and livability of residential streets by mitigating the negative impacts of vehicle speeds. Goals and policies play a crucial role in achieving these outcomes by providing a framework and guiding principles for their implementation. Additionally, goals and policies help in making informed decisions regarding the selection of appropriate traffic calming measures, resource allocation, and project prioritization.

Goal 1. Support Vision Zero objectives to eliminate traffic injuries and fatalities, and improve livability for residents and travelers by reducing vehicle speeds where they are impacting safety.

Goal 2. Encourage interaction and consensus among residents regarding whether traffic calming might be appropriate to address identified issues.

Goal 3. Ensure that requests for traffic calming are evaluated in an objective, equitable, and consistent manner with open and effective communication between City staff and residents.

Goal 4. Operate the traffic calming program consistently with, and as a complement to, other City transportation initiatives, including Safe Routes to School and the Bicycle and Walkways Master Plans.

Policy 1. Discourage traffic speeds over the posted limit on residential streets.

Policy 2. Employ a variety of measures tailored to specific street segments.

Policy 3. Design traffic calming measures using sound engineering and planning practices and to not detract from residential neighborhood character.

Policy 4. Ensure that traffic calming measures do not create traffic issues on other streets or disrupt emergency vehicle or evacuation access.

THE LAFAYETTE TRAFFIC CALMING PROCESS

The City of Lafayette Traffic Calming Program is a resident-driven, application-based program that addresses speeding on local (residential) and collector streets in Lafayette. The program seeks to enhance street safety and neighborhood livability by reducing the negative impacts of fast-moving vehicular traffic and creating safer and more comfortable streets for people walking, biking, and driving.

The Program focuses on lower-cost measures that are effective at slowing vehicular speeds on local and collector streets. Traffic calming solutions through the program are resident-initiated and engineer-determined block-by-block solutions to address mid-block speeding on local and collector streets.

The Program operates on an annual cycle that will result in a more transparent, predictable, and easier to understand process for Lafayette residents than would be a program with applications accepted and evaluated on a rolling-basis. In addition, the annual cycle provides residents with more certainty regarding annual funding levels and provides shorter waiting time between acceptance into the program and implementation timelines. Finally, an annual program cycle results in a more efficient use of staff resources. The process from the time an application is submitted to the time when traffic calming is implemented is described below.

Although applications will be evaluated in the fall of each year, residents may have questions throughout the year about the traffic calming process and about whether their street might be an appropriate candidate. Lafayette Staff will be available to respond to these questions and requests. In addition, if residents submit applications in advance of the annual deadline, Lafayette staff will review the applications for completeness within 30 days of receipt and will request missing information, if applicable.

Eligible Locations for Traffic Calming

Different categories of streets serve different transportation functions. The following street types are eligible to be considered for traffic calming:

- **Local streets**, which provide direct access to properties and are often designed to discourage through traffic; and
- **Collector streets,** which carry traffic between arterial and local streets, generally providing direct access to properties.

Arterial streets are not eligible for traffic calming as described in this document. These are the major streets carrying traffic from local and collector streets to and from freeways and other major thoroughfares, with controlled intersections and generally providing direct access to properties.

Arterial streets in Lafayette include:

- Pleasant Hill Road
- Moraga Road
- Deer Hill Road
- St. Mary's Road
- Mt. Diablo Boulevard
- First Street from Deer Hill Road to Mt. Diablo Boulevard
- Glenside Drive/Reliez Station Road/Olympic Boulevard
- Oak Hill Road from Mt. Diablo Boulevard to Deer Hill Road

Efforts to slow vehicular traffic and improve the safety of pedestrians and cyclists on arterial streets in Lafayette are described in more detail in the City's Local Road Safety Plan. Further, roadway projects on arterials are subject to prioritization and funding through the City's Capital Improvement Program.

Resident action calming measures can be applied to many streets in Lafayette, while streets eligible for striping, signage, or roadway traffic calming cannot have bus routes or fire stations. Traffic calming on roadways identified as evacuation routes may be permitted but may be subject to additional review by the Contra Costa Fire Protection District and/or Lafayette Police Department.

City of Lafayette engineers evaluate the need for traffic calming on a block-by-block basis. A separate application must be submitted for any neighboring blocks. A "block" is broadly defined as a roadway segment intersected by two cross-streets. However, since many neighborhoods in Lafayette do not conform to an intersection and grid pattern, City Staff can help applicants identify the start and end points of their 'block.'

Types of Traffic Calming

Resident Action

These measures are community-driven and allow residents to take immediate action to address traffic concerns. This includes distributing educational materials, forming speed watch groups, taking neighborhood pledges, maintaining landscaping, and conducting surveys. These measures are inexpensive and can often be implemented quickly.

Striping and Signage

If determined to be appropriate by City engineering staff, these measures encompass such efforts as enhancing crosswalks, visually narrowing travel lanes, modifying speed limits, or installing high visibility crosswalks.

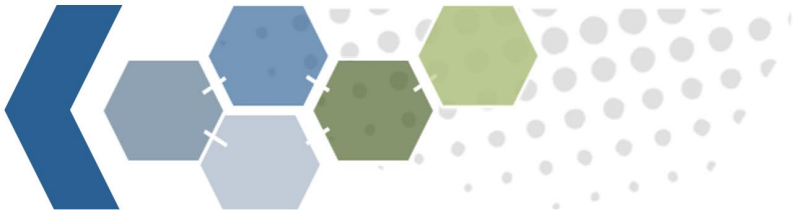
Roadway Features

The severity of a speeding issue may warrant adding materials in the street to slow traffic. These tools can be very expensive and require detailed design and engineering, substantial community input, and City Council review.

Chapter 3: Requesting Traffic Calming Improvements

Application Process

- **Step 1: Request Action.** A resident group or representative can submit a Traffic Calming Request form (see Appendix A) at any time, with projects for the next year due by September 30. Applicants must live on the block listed on the application, and City staff can help applicants define their "block". The request form requires signatures from a majority of homes (both sides of the street; one adult signature per address). Issues that affect multiple blocks or neighborhoods are not eligible for traffic calming through this program, but instead are subject to the City's long-range transportation planning and design process, which involves community-wide involvement.
- **Step 2: Evaluation and Ranking**. Once applications are received and verified, City Staff collects data and assesses traffic conditions to determine eligibility and, for those streets with a documented speeding issue, ranks requests received for the same application year (see the Traffic Calming Evaluation Worksheet, Appendix B, for details).
- **Step 3: Inform Applicants/Resident Action.** Once locations for traffic calming are approved, City staff informs applicants whether either resident action can proceed and/or if other solutions are being considered. Applications that are not approved can be re-submitted in any subsequent annual cycle, and City staff may carry



over approved applications into next year's pool if funding isn't immediately available for all current approved applications. Residents may request tools in the Resident Action category for use on their street at any time.

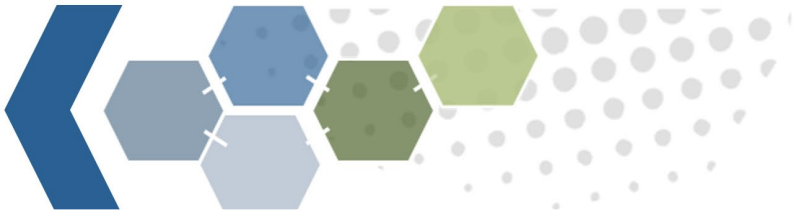
- **Step 4: Engineering and Design**. Lafayette Engineering staff works on conceptual design and cost estimates for the traffic calming measure(s) deemed most appropriate for each approved block. For locations where a recommended measure would impact on-street parking or other potential trade-offs, staff may offer to meet with interested residents to discuss options.
- **Step 5: Transportation & Circulation Commission**. City staff informs the Lafayette Transportation and Circulation Commission of each proposed traffic calming project at a regularly scheduled meeting. At these meetings community members can comment on the proposed traffic calming project and Commissioners can make recommendations to staff based on public comment.
- **Step 6: City Council**. Proposed traffic calming projects are summarized in a staff report as a Consent Calendar agenda item at a regularly scheduled City Council meeting. Any member of the public may request the item to be moved to the regular agenda for discussion among the City Council and public comment.
- **Step 7: Implementation and Monitoring**. Once project designs are finalized, construction activities can begin. The implementation timeline is based on a number of factors, including the type of measure(s), cost, and other construction in the area. Once implementation is complete, monitoring may occur, and the City may modify or remove any features determined not to be effective after six months from the time of installation. In the unlikely event that a feature creates a potentially hazardous condition or if traffic-related issues are pushed to an adjacent street as a result of a traffic calming project, the City may modify or remove a traffic calming feature at any time. Further, a new application for traffic calming can be submitted if residents desire additional City consideration beyond the measures that have been implemented.

PROCESS STEP	RESPONSIBLE PARTY	DATES
1. Request Action	Applicant	By Sept. 30 for following year
2. Evaluation and Ranking	Engineering Department	October/November
3. Inform Applicants/Resident Action	City staff	November/December
4. Engineering and Design	Engineering Department	January – April
5. Transportation & Circulation Commission	City staff	April/May
6. City Council	City staff	April/May
7. Implementation and Monitoring	City Staff	June →

Chapter 4: Traffic Calming Tools

Traffic calming tools cover a wide range of options and vary in intensity. Each tool has its own specific applications and associated costs. In some cases, addressing the issue of high speeds on a residential street may simply require increased awareness within a neighborhood.

The following table compares the relative cost of the traffic calming measures described on the subsequent pages. The Evaluation Form to be completed by City staff is included as Appendix B.



TOOLS	RELATIVE COST
RESIDENT ACTION	
Traffic Education	$
Traffic Pledge	$
Sign Campaign	$
STRIPING AND SIGNAGE	
Street Narrowing through Striping	$$
Supplemental Signs and Pavement Markers	$$
Crosswalk Enhancements	$$$
Radar Speed Signs	$$$
ROADWAY PROJECTS	
Speed Bumps	$$$
Median Island	$$$$
Gateway Treatment	$$$$
Curb Extension	$$$$
Raised Crosswalk	$$$$

Traffic Education

Neighborhood traffic safety campaigns include personalized letters, flyers, and newsletters; meetings, workshops, and school programs; and neighborhood speed awareness signs or banners. Campaigns focus on subjects such as pedestrian safety, enforcement, and speeding impacts to heighten community awareness.

$

Where to Use	
Location	Local roads
Speed	15-30 mph
Emergency Routes	Yes
Transit Routes	Yes

Positive Outcomes	
Vehicle Speed	» Raises awareness of negative impacts of speed. » Information aimed at a specific audience.
Pedestrian Safety	» Provides opportunity to discuss pedestrian safety issues.
Bicyclist Safety	» Provides opportunity to discuss bicycle safety issues.
Motorist Safety	» Provides opportunity to discuss driver safety issues.
Emergency Vehicle Safety	» Does not restrict emergency vehicle access.
Accessibility of Adjacent Property	» Does not restrict access.
Environment	» Does not negatively impact environment.

Traffic Pledge

This program promotes safe and courteous driving through the use of two elements: a pledge and a bumper sticker. Residents are asked to sign a pledge and implement it into their own driving habits and lifestyles. A bumper sticker promotes courteous driving and identifies the person as a "pace" car driver.

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Where to Use	
Location	Local roads
Speed	15-30 mph
Emergency Routes	No
Transit Routes	No

Positive Outcomes	
Vehicle Speed	»Heightens awareness of vehicle travel speeds. »Residents set the "pace" for drivers behind them. »Demonstrates neighborhood support for safe driving habits.
Pedestrian Safety	»Increases driver mindfulness which can improve safety for pedestrians.
Bicyclist Safety	»Increases driver awareness which can improve safety for bicyclists.
Motorist Safety	»Can increase community awareness of traffic issues and driver concerns.
Emergency Vehicle Safety	»Does not restrict emergency vehicle access.
Accessibility of Adjacent Property	»Does not restrict access.
Environment	»Does not negatively impact environment.

Sign Campaign

The City loans yard signs to a neighborhood on a short-term basis to encourage motorists to respect the neighborhood and to drive responsibly. Every few days, residents move the signs around the neighborhood to different yards so drivers and pedestrians notice the newly placed signs.

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Where to Use	
Location	Minor roads and collector streets
Speed	15-30 mph
Emergency Routes	Yes
Transit Routes	Yes

Positive Outcomes	
Vehicle Speed	»New signs keeps message fresh and supports reduced speeds. »Short duration of sign placement helps remind drivers to slow down.
Pedestrian Safety	»Increases driver mindfulness which can improve safety for pedestrians.
Bicyclist Safety	»Increases driver awareness which can improve safety for bicyclists.
Motorist Safety	»Can increase community awareness of traffic issues and driver concerns.
Emergency Vehicle Safety	»Does not restrict emergency vehicle access.
Accessibility of Adjacent Property	»Does not restrict access.
Environment	»Does not negatively impact environment.

Street Narrowing Through Striping

Lane striping and markings can be used to modify traffic lane widths, add center lines, and reinforce safety zones. Striping is usually used to create narrow lanes - often about 10 feet wide. A centerline stripe helps drivers stay on the "right" side of the road and not use the entire roadway width as a travel lane. On wide roadways, the "unused" pavement created by restriping can sometimes be used to stripe a bicycle lane, a parking lane, or a pedestrian shoulder.

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Where to Use	
Location	Any major road that has overly wide lanes or any minor road that does not have a center lane.
Speed	Any
Emergency Routes	Yes
Transit Routes	Yes

Positive Outcomes	
Vehicle Speed	» The primary benefit of narrowing lanes through striping is to delineate lanes and to slow vehicle speeds. » Narrower lanes require more focus to stay within the lane, which lowers speeds. » Hardening the centerline with short raised element can also encourage adherence to traffic rules and reduce speeds.
Pedestrian Safety	» Slower vehicle speeds can increase pedestrian safety.
Bicyclist Safety	» Narrower driving lanes can increase room for bicycles on streets.
Motorist Safety	» Reduced lane width can increase focus on driving and safety for drivers.
Emergency Vehicle Safety	» Emergency vehicles would still be able to use full roadway as necessary.
Accessibility of Adjacent Property	» Would not restrict access.
Environment	» Does not negatively impact environment.

Supplemental Signs and Pavement Markers

Additional signage or pavement markings can assist in drawing motorist attention to particular roadway conditions. Advance warning signs (e.g., pedestrian crossing ahead), supplemental regulatory signs (e.g., an added speed limit sign), and pavement markings (e.g., “Keep Clear”, “Ped Xing”) can be used.

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Where to Use	
Location	Installed on ground along any road that already has markings.
Speed	Any
Emergency Routes	Yes
Transit Routes	Yes

Positive Outcomes	
Vehicle Speed	» Reduces vehicle speed ahead of crossing locations. » Increases driver awareness of pedestrian crossings.
Pedestrian Safety	» Provides pedestrians with increased comfort and safety. » Increased awareness of crossing increases pedestrian safety.
Bicyclist Safety	» Increased driver mindfulness can improve safety for bicyclists.
Motorist Safety	» Increased clarity around crossing locations increases predictability of pedestrian and driver actions.
Emergency Vehicle Safety	» Increased clarity around crossing locations increases predictability of pedestrian and driver actions.
Accessibility of Adjacent Property	» Does not restrict access.
Environment	» Does not negatively impact environment.

Crosswalk Enhancements

These can consist of new crosswalks or providing higher visibility crosswalks. Higher visibility crosswalks can be created by painting "zebra" stripes in lieu of or between the crosswalk's outer boundary stripes. New crosswalks, when warranted, designate pedestrian crossing areas. The primary benefit of enhanced crosswalks is to increase crosswalk visibility to drivers. Much more expensive solutions that include flashing lights are also available.

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Where to Use	
Location	Any existing crosswalk, with priority to those that are in disrepair or are not high visibility.
Speed	Any
Emergency Routes	Yes
Transit Routes	Yes

Positive Outcomes	
Vehicle Speed	» Reduces vehicle speed by emphasizing crossing locations.
Pedestrian Safety	» Provides pedestrians with highly visible location to cross street. » Increased visibility and number of pedestrians increases safety.
Bicyclist Safety	» Increased driver mindfulness can improve safety for bicyclists.
Motorist Safety	» Increased clarity around crossing locations increases predictability of pedestrian and driver actions.
Emergency Vehicle Safety	» Increased clarity around crossing locations increases predictability of pedestrian and driver actions.
Accessibility of Adjacent Property	» Does not restrict access.
Environment	» Does not negatively impact environment.

Radar Speed Signs

The most common form of radar speed signs is a portable trailer equipped with a radar unit that detects the speed of passing vehicles and displays it on a reader board, often with a speed limit sign next to the display. The primary benefit of speed display units is to discourage speeding along residential streets and provide data for review of traffic calming assessments.

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Where to Use	
Location	Any
Speed	All
Emergency Routes	Yes
Transit Routes	Yes

Positive Outcomes	
Vehicle Speed	»Increased awareness and education about speeding reduces traffic speed. »Increased data on driver speed can improve City response to traffic issues.
Pedestrian Safety	»Increased driver mindfulness can improve safety for pedestrians. »Can inform pedestrians how fast drivers are traveling.
Bicyclist Safety	»Increases driver awareness which can improve safety for bicyclists.
Motorist Safety	»Provides immediate feedback to drivers and encourages speed compliance.
Emergency Vehicle Safety	»Does not restrict emergency vehicle access.
Accessibility of Adjacent Property	»Does not restrict access.
Environment	»Does not negatively impact environment.

Speed Bumps

Speed humps, speed cushions, and speed tables are all elongated mounds in the roadway pavement surface extending across the travel way to slow traffic. A speed cushion consists of two or more raised areas placed laterally across a roadway with gaps to allow wide axle vehicles to pass through. A speed table is a raised area with a long enough flat top to accommodate the entire wheelbase of most passenger cars.

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Where to Use	
Location	Can be used on a single-lane, one-way street or two-lane, two-way street.
Speed	30 mph or less.
Emergency Routes	No, though speed cushion could be appropriate.
Transit Routes	No, though speed cushion could be appropriate.

Positive Outcomes	
Vehicle Speed	»Single speed hump reduces vehicle speeds to the range of 15 to 20 mph when crossing the hump; in order to retain slower vehicle speeds over longer distance, series of speed humps is needed. »Average speeds for tables and cushions are typically higher than for a speed hump.
Pedestrian Safety	»Not a preferred location for a crosswalk. »Reduced vehicle speed improves pedestrian comfort and safety.
Bicyclist Safety	»Bicyclist safety is not affected.
Motorist Safety	»Produces sufficient discomfort to a motorist driving above the designed speed to discourage speeding. »Series of speed humps can be more effective than any other traffic calming measure.
Emergency Vehicle Safety	»Typical delay for a fire truck is in the 3 to 5 second range; for an ambulance with a patient delay can be as much as 10 seconds. Tables and cushions create less delay for emergency vehicles.
Accessibility of Adjacent Property	»Should not affect accessibility of nearby driveways.
Environment	»Potential for increased noise due to vehicle braking and accelerating.

Median Island

A median island is a raised landscaped area along the street centerline that narrows the travel lanes at that location. The visual appearance of narrowed lanes encourages motorists to slow down.

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Where to Use	
Location	Can be placed at a mid-block location or on the approach to an intersection.
Speed	Any speed limit, requires adequate distance between travel lane and median island curb.
Emergency Routes	Yes, though requires that adequate turning radius is maintained.
Transit Routes	Yes, though requires that adequate turning radius is maintained.

Positive Outcomes	
Vehicle Speed	» Traffic speeds are likely to decrease slightly, typically up to 5 mph.
Pedestrian Safety	» Safety of a pedestrian crossing collector or arterial street can be significantly improved without substantial delay to vehicular traffic.
Bicyclist Safety	» Can reduce space in roadway for bicyclist. Shared lane markings recommended.
Motorist Safety	» Likely to have minimal effect on motorist mobility and safety. » Minimal impact on motorist comfort.
Emergency Vehicle Safety	» May obstruct emergency vehicle from making turn directly at destination driveway, but retains sufficient room for travel.
Accessibility of Adjacent Property	» May require removal of some on-street parking and can slightly reduce the accessibility of adjacent property.
Environment	» Can be used as a landscaping opportunity provided visibility of pedestrian in crossing is not compromised.

Gateway Treatment

Gateway entrance treatments may consist of physical, textural, and visual changes to streets and are located at key entryways into a neighborhood. Planted medians or constructed features can create the appearance of a narrower street. The primary benefit of gateway treatments is speed reduction. They provide visual cues that tell drivers they are entering a low-speed local residential area.

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Where to Use/ Location/Applications	
Location	Installed on sidewalk or median.
Speed	Requires a slow approach by vehicles; appropriate only for streets with relatively low-speed limits.
Emergency Routes	Not appropriate along a primary emergency vehicle route or on a street that provides access to a hospital or emergency medical services.
Transit Route	Not appropriate along a primary transit vehicle route.

Impacts/Outcomes/Effects	
Vehicle Speed	» Can reduce traffic speed by indicating a residential area and encouraging slower speeds.
Pedestrian Safety	» Minimal impact on pedestrian comfort.
Bicyclist Safety	» Minimal impact on bicyclist.
Motorist Safety	» Minimal impact on motorist comfort.
Emergency Vehicle Safety	» Gateway design should consider requirements of emergency vehicles to ensure it does not restrict access.
Accessibility of Adjacent Property	» Parking should not be permitted close to or in front of gateway. » Should not affect accessibility of nearby driveways.
Environment	» Opportunity for landscaping.

Curb Extension

A curb extension is a horizontal extension of the sidewalk into the street resulting in a narrower roadway section. This device may be used at either a corner or mid-block. A curb extension at an intersection is called a corner extension or bulbout. A curb extension located mid-block is called a choker.

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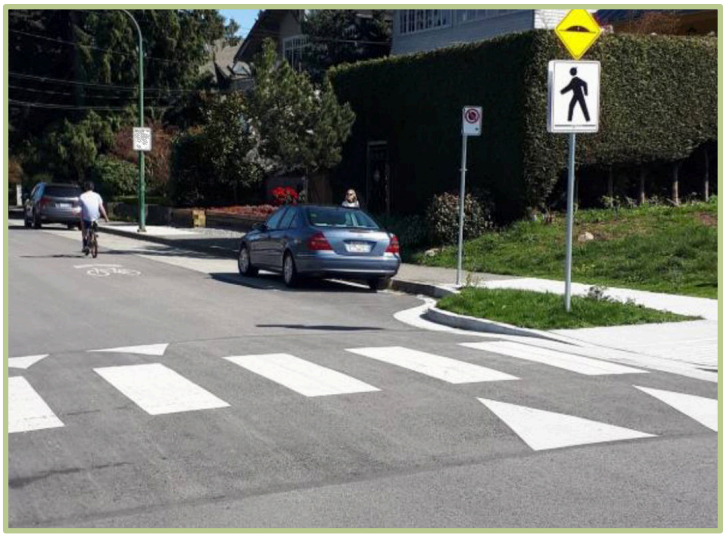
Where to Use	
Location	Applicable at an intersection, though can also be placed a mid-block locations as choker.
Speed	Any
Emergency Routes	Yes, as long as required turning radii are preserved.
Transit Routes	Yes, as long as required turning radii are preserved.

Positive Outcomes	
Vehicle Speed	» Can slow traffic by funneling through narrower street opening than is provided in upstream cross-section; speeds likely to decrease slightly; amount of speed reduction depends on volume and distribution of traffic.
Pedestrian Safety	» Shortens intersection crossing distance for a pedestrian; shorter distance reduces the potential for pedestrian-vehicle conflict and likely improves pedestrian safety.
Bicyclist Safety	» Should not extend into bicycle lane if possible.
Motorist Safety	» Minimal impact on motorist comfort, mobility or safety.
Emergency Vehicle Safety	» Retains sufficient width to allow for continued easy flow of emergency vehicles.
Accessibility of Adjacent Property	» May require removal of some on-street parking immediately adjacent to intersection.
Environment	» Opportunity for landscaping.



Raised Crosswalk

A raised crosswalk is a variation of a flat-topped speed table. A raised crosswalk is marked and signed as a pedestrian crossing. The 10 foot flat top on a typical speed table conforms to a standard crosswalk width.

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Where to Use	
Location	Applicable at an intersection or mid-block crossing.
Speed	30 mph or less.
Emergency Routes	No
Transit Routes	Yes, if transit typically travels at 25 mph or less. Should not be located near bus stop.

Positive Outcomes	
Vehicle Speed	» Single raised crosswalk reduces vehicle speeds. To retain slower vehicle speeds over a longer distance, a series of speed tables or raised crosswalks is needed.
Pedestrian Safety	» Pedestrian safety is improved because (1) vehicle speed is lowered at crosswalk; (2) pedestrian in a raised crosswalk is more visible to an oncoming motorist; and (3) pedestrian has an elevated view of oncoming traffic. Raised crosswalk could be combined with a curb extension to provide additional visibility for pedestrian.
Bicyclist Safety	» Bicyclist safety is not affected.
Motorist Safety	» Produces sufficient discomfort to a motorist driving above the designed speed to discourage speeding.
Emergency Vehicle Safety	» Minimal delay for emergency vehicles. Less speed delay than for a speed hump.
Accessibility of Adjacent Property	» May result in the removal of on-street parking adjacent to raised crosswalk, on both sides of the street. Typically placed at least five feet from a driveway but can be designed to accommodate a driveway.
Environment	» Potential for increased noise due to vehicle braking and accelerating.

Appendix A: Traffic Calming Request Form

Traffic Calming Request Form

Primary Contact Information

_____ _____ _____
Name *Email Address* *Phone Number*

_____ _____
Street Address *Zip Code*

Specify the Location and Concerns

The City of Lafayette will evaluate the need for traffic calming on a block-by-block basis; a separate application must be submitted for any adjacent blocks. Please define your block:

_____ from _____ to _____
Your Street *Cross Street* *Cross Street*

The City of Lafayette Traffic Calming Program addresses mid-block speeding on residential streets. Feel free to provide more detailed information about concerns on your street:

_____

_____

_____

_____

Neighborhood Petition

To be considered for traffic calming, the application must include signatures from an adult resident of at least half of the distinct addresses on both sides of your block, using the petition form attached. One signature is allowed per address.

Community Contacts (Optional)

Please use the attached sheet to provide the names, addresses, and primary contact information for any schools, community centers or senior centers on your block, and list any parks or playgrounds. *Locations near schools and other community oriented facilities will receive increased consideration. However this sheet is an optional form to your application.*

Traffic Calming Request Petition

We the undersigned hereby petition the City of Lafayette to perform the necessary evaluation to consider whether, and if so, which, traffic calming measures are appropriate for:

_____ from _____ to _____

Your Street *Cross Street* *Cross Street*

By signing this petition, I agree agree to have an appropriate traffic calming measure installed in front of my residence if deemed the most appropriate solution by City of Lafayette staff.

	Print Name	Sign (agree to statements above)	Address (one signature will be counted per unit)	Email Address
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
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20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

Traffic Calming Request Community Contacts (*OPTIONAL*)

Please provide the names, addresses, and primary contact information for any schools, community centers, senior centers, parks and playgrounds on

_____ from _____ to _____.
Your Street *Cross Street* *Cross Street*

Contact information for parks and playgrounds is not needed. Locations near schools and other community oriented facilities will receive increased consideration when evaluating your location.

Name of Facility	Type of Facility (eg Pre-School, Senior Center, High School)	Address	Contact Person & Title (e.g. Principal)	Email Address

Appendix B: Traffic Calming Evaluation Worksheet

This worksheet will be completed by the City of Lafayette staff in accordance with the City's Traffic Calming Program. It will be used to prioritize the potential initiation of specific neighborhood traffic calming processes.

Date: _____

Location of Concern: _____

	Criteria	Score
Traffic Volumes (mid-week volumes within the last two years)	Greater than 2,000 vehicles per day = 8 points 1,500 to 2,000 vehicles per day = 6 points 1,000 to 1,500 vehicles per day = 4 points Fewer than 1,000 vehicles per day = 0 points	
Reported Collision History on Local or Collector Streets	More than five collisions in a three-year period = 12 points Two to four collisions in a three-year period = 9 points One to three collisions in a three-year period = 6 points	
Travel Speeds	85th percentile speed ≥ 10+ MPH over speed limit = 10 points 85th percentile speed ≥ 6+ MPH over speed limit = 6 points 85th percentile speed ≥ 3+ MPH over speed limit = 3 points	
Active Transportation Facilities	There is essentially no pedestrian or bicycle space available = 5 points The pedestrian or bicycle space needs improvement = 3 points	
Adjacent Land Uses	The street segment is adjacent to parks, school, transit stop(s), shops, community facilities, etc. = 3 points for each school, 2 points for each other activity center destination (10 points maximum total)	
Unique Conditions	Unique conditions prevail such as sight distance constraints, parking on sidewalks, high truck volumes = 1 point for each unique condition (5 points maximum total)	

Total Score: _____

Prepared By: _____