CITY OF TRACY TRAFFIC CALMING PROGRAM

SEPTEMBER 2009



Think Inside the Triangle™

ADOPTED BY CITY COUNCIL ON SEPTEMBER 1ST, 2009 RESO # 2009-159

PREPARED BY
DEVELOPMENT & ENGINEERING SERVICES DEPARTMENT
TRAFFIC DIVISION

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I. INTRODUCTION

DEFINITION

Traffic Calming is a 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.

PURPOSE

The purpose of the Traffic Calming Program is to improve the livability and quality of life within residential neighborhoods through deployment of traffic control devices. This is accomplished through the following program steps:

- Define a process to evaluate neighborhood concerns.
- Identify criteria to implement various methods to calm traffic.
- Establish the means to pay for and maintain the devices.
- Prioritize the deployment of traffic control devices.
- Implement the program through the Capital Improvement Program.

II. GOALS & OBJECTIVES

The City of Tracy continuously strives to ensure overall safety, protect its neighborhoods, and improve the quality of life for its residents. Traffic conditions on a residential street affect livability and the sense of community. Traffic traveling at excessive speeds and commuter traffic inappropriately using residential streets adversely affect the quality of life in a given neighborhood.

However, implementing traffic calming measures is not a solution for all speeding and cut through traffic issues. Each neighborhood may have its own set of issues to be analyzed before identifying solutions. This program is developed not only to guide City staff but also to inform residents about the processes and procedures for implementing traffic calming measures on residential streets.

The goal of the Neighborhood Traffic Calming Program is to implement measures (identified through reaching a consensus of affected neighborhood residents) that will change driver behavior in a way that improves safety and the quality of life for residents, pedestrians, bicyclists and motorists. The Neighborhood Traffic Calming Program is designed to balance the public's need for quick emergency response times for emergency vehicles, including fire trucks, police vehicles and ambulances, against the need to calm traffic.

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- 1. Reduce vehicle speeds on residential streets.
- 2. Discourage cut through traffic.
- 3. Promote conditions that encourage walkable neighborhoods.
- 4. Reduce incidence of collisions.
- 5. Encourage citizen involvement.

III. POLICY STATEMENTS

- A combination of education, enforcement and engineering methods will be used in the
 City's traffic calming program. Traffic calming devices will be planned, designed,
 installed, and used with sound engineering and planning practices. The City Engineer
 will use this program to recommend installation of approved traffic calming devices to
 accomplish traffic calming program objectives. Installation of traffic calming devices will
 require City Council approval.
- 2. A critical concern about the use of traffic calming devices is the delay they may create for emergency response vehicles, including fire engines, ambulances, and police vehicles. The more aggressive a traffic calming device is the more that emergency vehicle response time will be lengthened. Recognizing the importance of not increasing emergency response times, all traffic calming devices will be designed to accommodate emergency vehicles. Traffic Calming devices will be recommended for Council approval after consultation with and approval by, the Fire and Police Chiefs.
- 3. Installation of traffic calming devices will require strong community support from residents living on the affected street segments. A warrant analysis for the installation of traffic calming devices will be conducted based on accident data, speed data, traffic volumes, and standard design criteria.

- 4. The primary focus of the traffic calming program is residential neighborhoods.
 Therefore, installation of traffic calming devices will only be considered on local two-lane residential streets with a posted speed limit of 25 mph. These devices shall not be used on arterial or non-residential streets.
- Reasonable automobile, pedestrian, and bicycle access should be maintained on residential streets with traffic calming devices.
- Traffic calming devices shall be designed not to inhibit or significantly impact transit,
 waste disposal trucks, and other service vehicles.
- Removal of some on-street parking spaces may be necessary to install certain types of traffic calming devices. The parking needs of residents will be balanced with the neighborhood's desire for traffic calming devices.
- 8. A complete description of the traffic calming devices and the criteria for installation of these devices is described in the Tool Box section of this Guide.
- In the event the traffic request is denied, the same request will not be considered for traffic calming for at least two years from the original request.

IV. TRAFFIC CALMING IMPLEMENTATION PROCESS

The intent of the Traffic Calming program is to provide a clear mechanism for addressing neighborhood traffic concerns. The residential traffic calming program will be initiated by submitting the "Neighborhood Traffic Calming Request Form" for traffic calming along certain street segments. The process is divided into three distinct tiers.

TIER I - IMPLEMENTATION

When a request is initiated, staff will forward the request to the Traffic Committee for review. Staff will also review existing street conditions to ensure the street design and traffic control devices comply with City Standards and with the Manual of Uniform Traffic Control Devices. Staff may recommend modifications or traffic control devices to improve conditions on the roadway segment, if warranted. After review, if the committee makes a finding that a speeding problem exists, staff will recommend that the identified problem be alleviated with Tier I implementation measures. Tier I implementation measures are low cost tools, primarily education and enforcement.

TIER II - IMPLEMENTATION

If Tier I measures have been implemented without the desired effect, the resident may request by submitting the "Neighborhood Traffic Calming Request Form" that the request move forward to Tier II. For the request to be considered for Tier II measures, existing conditions

must meet minimum criteria set forth in this program. If the minimum criteria are not met, the request cannot proceed further.

If the street segment satisfies the minimum criteria for installation of Tier II measures, staff will coordinate and schedule a neighborhood meeting to establish neighborhood boundary areas, discuss the traffic calming program process, and explain the use of various traffic calming devices. The following three traffic calming measures will be recommended in Tier II:

- 1. Radar Speed Feedback Sign
- 2. Speed Lumps
- 3. Stop Signs *

Residential streets with a width of 40 feet or less may qualify for speed lumps. However, radar speed feed back signs may be recommended for residential streets wider than 40 feet. In addition to these requirements, the street segment must meet other requirements listed in the traffic calming device toolbox for installation. * For a stop sign, the intersection must meet the requirements established in California Manual of Uniform Traffic Control Devices.

Staff will then seek approval from affected residents for the warranted traffic calming device by mailing a survey to the residents living on the affected street segment(s). Only one vote per residential unit on the affected street segment will be applied towards the survey results. If more than one vote is received from a residential unit, the majority votes within that residential unit will determine the vote for that unit but, if no majority vote exists, then that unit's vote will not be counted. Staff will mail notification of the poll results to all residential units on the affected street segment.

This vote requires approval from at least 70% of the residential units/households on the affected street segment. If approved by 70% or more of the affected households on the affected street segment, staff will prepare a conceptual design to determine the location of the proposed traffic calming devices. If 70% of the residents do not support the proposed traffic calming device, the request will not proceed further.

Once the conceptual design is complete, to determine the location of proposed traffic calming device, staff will coordinate with the residents to obtain the expressed concurrence of at least 75% of the residents living next to a proposed traffic control device. If 75% of the residents living immediately adjacent to the proposed location of a traffic control device do not agree on the location of the device, staff will meet with the petitioner and/or affected residents and discuss alternate locations. In any case, unless 75% of the residents living immediately adjacent to the proposed traffic control device concur, the street shall not be eligible for installation of traffic control devices.

After receiving concurrence from the residents for the final location of traffic control devices, the recommended improvements will be included in the scope of the traffic calming Capital Improvement Project. Staff will prepare environmental documentation, plans and specifications, and will handle the bid process for all funded projects.

These programs will be funded on a first come, first serve basis. Staff will form a list of all projects on the basis of the date of the approved request (the date when final locations for the traffic calming devices are approved by residents living immediately adjacent to the proposed location of the traffic control device). The recommended traffic calming on a particular street will be completed only if work on previously approved traffic calming projects

is completed elsewhere in the City and sufficient funding is available in the annual traffic calming project budget. This process will be conducted once a year to allow design and construction of all traffic calming devices on various segments as one project.

The number of the street segments selected for funding will be based on the cost of traffic calming devices, the number of traffic calming devices, and the funding allocated by the City Council for each fiscal year.

TIER III - IMPLEMENTATION

If Tier I and Tier II measures have been implemented and residents do not see the desired effect, neighborhood residents may request by submitting the "Neighborhood Traffic Calming Request Form" that the traffic calming request move forward to Tier III. Tier III measures will be funded by the residents through assessment district fees or another funding mechanism. Tier III measures can be requested after completion of Tier I measures by the residents. However the extent of the Tier III improvements requested will require City's approval. The City decision will be final. All costs associated with Tier III planning, design, and construction improvements will be paid by the neighborhood group. An assessment district may be formed to pay for all costs of implementation of traffic calming measures in Tier III.

If the street segment satisfies the minimum criteria for installation of Tier III measures, staff will coordinate and schedule a neighborhood meeting. A preliminary neighborhood meeting will be held and all of the residents within the boundaries of the affected neighborhood will be notified. The purpose of this first meeting is to: (1) listen to the concerns of the residents; (2) discuss the traffic calming program and process; (3) discuss the use of

traffic calming devices; and (4) discuss funding methodology. This preliminary neighborhood meeting will mostly be educational, not only for staff to learn the concerns of the residents, but also for the residents to learn about the traffic calming program and its implications. This meeting will additionally be used to circulate the initial petition (described in more detail below).

At this preliminary meeting, staff will ask for volunteers to serve on a Neighborhood Working Group. The Neighborhood Working Group involvement is vital. This Group will coordinate the future outreach efforts within the neighborhood. Committee members who serve on the committee must be residents living on the affected street segment(s).

Neighborhood Petition

Tier III Traffic Calming Measures may impact many people in the neighborhood. Also, these traffic calming measures are paid for by the residents of the neighborhood. As such, it is prudent to determine if adequate support exists for traffic calming measures before continuing. Therefore, a petition requesting initiation of the Traffic Calming process must be signed by 60% of the affected households' owners within the neighborhood boundaries along with an acknowledgment of the cost burden to the residents. If at least 60% of the households' owners do not sign the petition, the process may not proceed. For the purposes of the Traffic Calming Program, a household is defined as any unit with its own address, regardless of how many people live in each unit. Only one signature per household will be counted on said petition.

Development of Alternatives (Possible Solutions)

Based on the information gathered from the preliminary neighborhood meeting, Staff will develop alternatives for traffic calming devices and will determine the fiscal impacts of those alternatives. Staff will discuss the alternatives with the Neighborhood Working Group to try to develop solutions for the neighborhood.

Discussion of Alternatives – Second Neighborhood Meeting

A second neighborhood meeting will be held to discuss the study results and alternatives. This meeting will allow staff to identify the neighborhood's preferred alternative. This meeting will also allow the residents an opportunity to provide input to Staff about the proposed alternatives and discuss any issues that were not addressed in previous meetings. When at all possible, Staff, the Neighborhood Working Group and the majority of the residents should support the proposed solution.

If significant changes are made to plans or alternatives presented at the second neighborhood meeting, a third neighborhood meeting will be conducted to present revised conceptual plans and alternatives to residents.

Polling and Notification

A post card survey will then be mailed to the property owners of the affected street segment(s) to determine their most favored solution(s) or alternative(s). Only one vote per residential unit on the affected street segment will be applied towards the survey. Staff will mail notification of the poll results to all property owners on the affected street segment.

This vote requires approval from at least 70% of the property owners on the affected street segment.

Project Funding and Approval

Upon recommendation of the City Engineer and approval by City Council, staff will process the formation of an assessment district or work out another funding program to collect funds from residents for all costs associated with planning, design, and construction of the improvements.

Funding for all costs associated with planning, design, and construction of the project must be approved by the property owners through formation of an assessment district or some other funding mechanism. Formation of assessment district will be required and voting for assessment district creation and fees will be held prior to the design and construction of Tier III Traffic Calming Measures.

When such funding is in place, staff will prepare the environmental documentation, plans and specifications, and will handle the bid process for all funded projects.

FOLLOW-UP STUDIES

Follow up studies will be conducted to evaluate the success of the traffic calming measures and to learn more about how traffic calming measures affect driver behavior. The information will determine whether, and to what degree, desired outcomes were achieved and to determine the appropriateness of specific devices for future applications. This study may also determine whether the traffic problem has moved to other neighborhood streets as a result of the traffic calming measures.

V. MINIMUM CRITERIA

The minimum criteria to be used to determine if a street is eligible for Tier II / Tier III traffic calming devices as established in this program are as follows:

- 1. Street Classification residential street
- 2. Speed 85th percentile speed (critical speed) is at least 33 mph
- 3. Volume average daily traffic is at least 800 vehicles
- 4. Posted speed limit of 25 mph

VI. TRAFFIC CALMING DEVICE REMOVAL PROCESS

Although many steps are incorporated in the program to avoid this scenario, a neighborhood group may want traffic calming devices removed. Staff will consider removal of the traffic calming devices if supported by 70% or more of the residents (households/residents in Tier II and Property Owners in Tier III) living on the affected street segment.

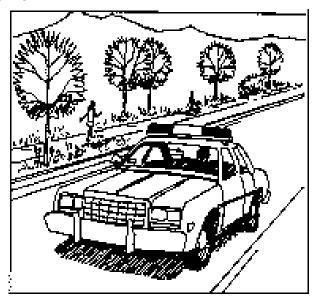
VIII. TOOL BOX OF TRAFFIC CALMING MEASURES

TARGETED SPEED ENFORCMENT (TIER I)

Description: Police presence to monitor speeds and issue formal or courtesy citations.

Application:

- Streets with documented speeding problem and need for quick mitigation
- Locations where restrictions are being violated



Advantages

- Effective while officer actually monitoring speeds
- Flexible measure that can be implemented in almost any location at short notice
- Personal contact with educational opportunity
- Visibility of marked patrol car encourages compliance

Disadvantages

- Not self enforcing; temporary measure
- Fines do not typically cover cost of enforcement
- Disrupts efficient traffic flow on high volume streets
- Short "memory effect" on motorists when enforcement officers no longer present

Special Consideration

- Often helpful in school zones
- May be used during "learning period" when new devices or restrictions first implemented
- Demand for enforcement is greater than available resources

Cost:

• High cost primarily due to the staffing requirements

SPEED MONITORING RADAR TRAILER (TIER I)

Description: Mobile trailer mounted radar display that informs drivers of their speed.

Application:

Any street where speeding is a problem

Advantages:

- Educational tool
- Good public relations
- Effective for temporary speed reduction needs

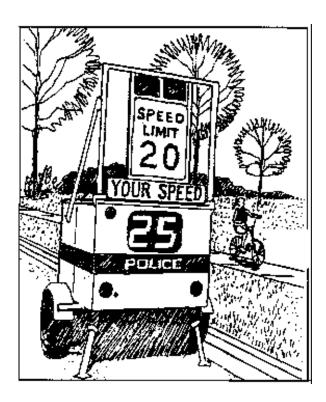
Disadvantages:

- Duration of effectiveness may be limited
- Not self enforcing

Special Considerations:

• Should not be used in remote areas

- Moderate cost to use due to staffing requirements
- Expensive to enforce



NEIGHBORHOOD SPEED WATCH (TIER I)

Description:

The purpose of the program is to increase motorist awareness of the 25 mph speed limit on local streets and reduce speeds in our neighborhoods. The program includes:

- Neighborhood Speed Awareness Signs
 - Unique messages and graphics mounted on garbage cans by residents
- Targeted Police Enforcement, TEAM (Traffic Education and Management)
 - Neighborhood Watch groups are trained to use radar guns and work with Tracy Police to identify repeat speeders and the best time for targeted enforcement
 - Police using license plate numbers mail offenders a letter (not citation) asking for cooperation to drive 25 MPH
 - Police enforce and issue citations during identified problem times

Application:

Any residential street where speeding is a problem

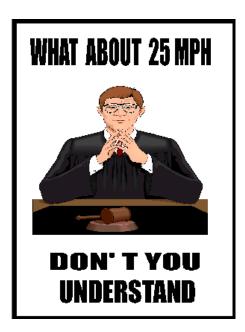
Advantages:

- Educational tool
- Directly involves residents in the solution
- Effective for temporary speed reduction needs

Disadvantages:

Duration of effectiveness may be limited

- Expensive to enforce
- Reduces costs by using citizen volunteer labor to identify problems



SPEED LIMIT SIGN (TIER I)

Description:

Signs that define the legal driving speed under normal conditions.

Application:

 Any residential street where speeding is a problem

Advantages:

- Provides clear definition of legal speed limit
- Provides context for enforcement efforts
- Provides goal for traffic calming efforts



Disadvantages:

- Typically not effective in and of themselves
- Not self enforcing
- Requires on-going police enforcement
- Unrealistically low speed limits are difficult to enforce and tend to be disregarded
- More visual pollution from signs in the neighborhood

Special Consideration:

• Speed limits set by an engineering analysis tend to be higher than limits set by political pressures

- Low, inexpensive to install
- High, expensive to enforce

RESTRICTED MOVEMENT SIGNING (TIER I)

Description:

Signs that prohibit certain movements at an intersection.

Application:

 Major arterials at locations with a demonstrated collision history associated with turning movement

Advantages:

- Redirects traffic to main streets
- Reduces cut-through traffic
- Addresses time-of-day problems



Disadvantages:

- Not self enforcing
- May increase trip length for some drivers
- More visual pollution from signs in the neighborhood

Special Consideration:

- Can be used on a trial basis
- Has little or no affect on speeds for through vehicles
- Not to be used where turn lane exists

- Low to medium cost to install
- High, expensive to enforce

SPEED FEEDBACK SIGNS (TIER II)

Description: Speed feedback signs are signs speed radar and display that inform drivers their speed.

Application:

 Any street where speeding is a problem

Advantages:

- Can be mounted on existing street light poles
- Does not slow emergency vehicles
- Effective in reducing speeds in short period of time.

Disadvantages:

- Requires power source
- Only effective for one direction of travel
- Not self enforcing
- Subject to vandalism

Cost:

- Low to medium cost to install
- High, expensive to enforce

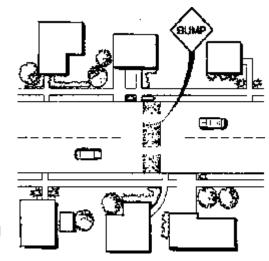


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SPEED LUMPS (TIER II)

Description:

Speed lumps are similar to speed humps except they are divided into three lumps with one foot of space between each lump. The space between the lumps is specifically designed to accommodate the axle widths of fire vehicles. All other vehicles with smaller axle widths have to go over the humps from at least one side of the vehicle. Speed lumps are typically 12 to 14 feet long and three inches high.



Application:

- Any two-lane residential street where speed control is desired.
- Shall be used only on streets with street width 40 feet or less.
- The street segment shall be improved with curb and gutter and at least 750 feet long.
- Shall not be installed within at least 150 feet of the beginning or ending of curve.
- Shall be spaced 300 to 600 feet apart
- Could be used in conjunction with other approved traffic calming devices
- The roadway longitudinal grade is 5% or less

Advantages:

- Effective in reducing speed
- Does not require parking removal
- Can reduce vehicular volume

Disadvantages:

- Increased noise and air pollution near lumps
- May cause slight delay on emergency response vehicles other than fire trucks
- Not aesthetically pleasing
- May divert traffic to parallel streets
- May cause discomfort to motorists/passengers

Special Consideration:

- Require advance warning signs and object markers at lumps
- Should be located adjacent to existing street lights
- Difficult to construct precisely.

- Low to medium cost to install
- High, expensive to enforce

ALL WAY STOP SIGN (TIER II)

Description:

Stop signs at intersections can be considered as traffic calming device only if the establishment of stop sign meets the criteria established in California MUTCD.

Application:

 Non arterial street intersections where intersection meets latest requirements established by California Manual of Uniform Traffic Control Devices (CA MUTCD).



Advantages:

- Requires through traffic to stop at an intersection
- Increase opportunities for pedestrian to cross the roadway
- May discourage cut through traffic

Disadvantages:

- Mid block speeds may increase as motorists try to make up for lost time.
- Unwarranted stop signs are not supported by traffic engineers
- May increase emergency response and ambulance transport times.
- May require removal of on street parking.

Special Consideration:

The Stop sign must meet the requirements for stop sign as established by CA MUTCD

- Low, inexpensive to install
- High, expensive to enforce

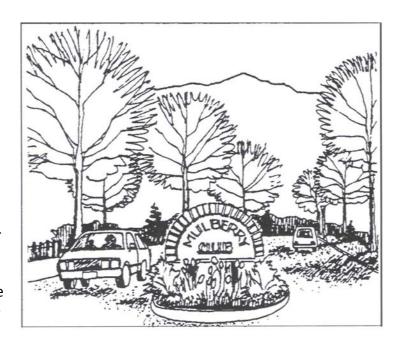
ENTRY ISLAND – NEIGHBORHOOD IDENTIFICATION ISLAND (TIER III)

Description:

A raised island in the center of a two-way street adjacent to an intersection at the perimeter of a neighborhood that identifies the entrance

Application:

 Placed in a roadway to define the entry to a residential area and/or to narrow each direction of travel and interrupt sight distance along the center of the roadway



Advantages:

- Notifies motorists of change in roadway character
- Helps slow traffic
- Opportunity for landscaping and/or monumentation for aesthetic improvements
- May discourage cut-through traffic

Disadvantages:

- Need for maintenance (and irrigation)
- May necessitate removal of parking
- Creates physical obstruction in the travel-way

Special Consideration:

- Can incorporate neighborhood identification signing and monumentation
- Care should be taken not to restrict pedestrian visibility at adjacent crosswalk

Cost:

• Low to medium cost to install, landscape and maintain

MEDIAN ISLAND (TIER III)

Description:

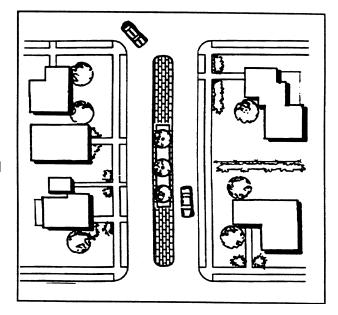
Raised island in the center of the roadway with one-way traffic on each side.

Application:

 Used on wide streets to narrow each direction of travel and to interrupt sight distances down the center of the roadway

Advantages:

- Narrowed travel lanes provide "friction" and can slow vehicle speeds
- Significant opportunity for landscaping and visual enhancement of the neighborhood
- Can utilize space which otherwise would be "unused" pavement
- Can be used to control traffic access to adjacent properties if desired



Disadvantages:

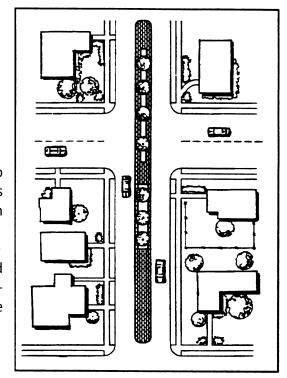
- Long medians may impact emergency access potential
- May interrupt driveway access and result in U turns
- Will require removal of parking if lane is less than 18 feet
- May require circuitous access to driveways by residents
- Creates a physical obstruction in the travel-way

Special Consideration

- Vegetation should be carefully designed not to obscure visibility between motorists, bicyclists and pedestrians at intersection and pedestrian crossing areas
- Maintain 12 foot wide lane minimum on each side
- Maximum length between access points should be 200' to accommodate emergency response turning radius for a fire truck should be maintained at these breaks
- May impact bicycle safety

Cost:

High cost to construct, landscape and maintain



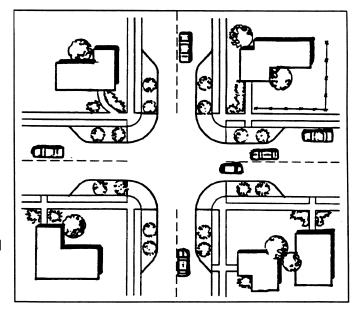
NECKDOWNS OR CURB EXTENSIONS (TIER III)

Description:

Segments of roadway narrowing where roadway edges or curbs are extended toward the center of the roadway.

Application:

- Typically used adjacent to intersections where parking is restricted
- Can be used to narrow roadway and shorten pedestrian crossings



Advantages:

- Pedestrian visibility increased and crossing distance reduced
- Narrowed roadway section may contribute to vehicular speed reduction
- Can "reclaim" pavement for pedestrian and streetscape amenities
- Breaks up drivers' line-of-sight

Disadvantages:

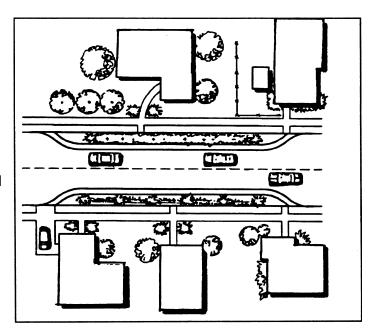
- Creates drainage issues where curb and gutter exist
- Creates physical obstruction in the travel way
- May create hazard for bicyclists
- Will require removal of parking

Special Consideration:

• Curb extensions should not extend into bicycle lanes where present

Cost:

 Medium to high cost depending on landscaping, pavement treatments, and storm drainage considerations



CHOKERS (TIER III)

Description:

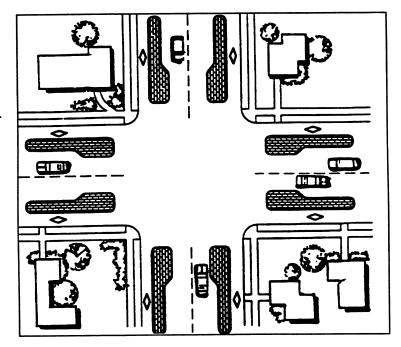
Raised islands built to narrow the roadway. The islands are detached from the curb line, allowing bike lanes to continue behind the choker.

Application:

 Can be used to narrow roadway and shorten pedestrian crossings

Advantages:

- Pedestrian crossing distance reduced
- Narrowed roadway section may contribute to vehicular speed reduction
- Breaks up drivers' line-of-sight



Disadvantages:

- May create hazard for bicyclists who are less visible to cross street and turning traffic
- Creates physical obstruction in the travel way
- Will require the removal of parking

Special Consideration:

- Significant problems with maintenance
- Debris builds in bike lane between the choker and the curb line, creating hazard for bicyclists

Cost:

High cost to construct

CHICANE (TIER III)

Description:

A curved street alignment can be designed into new developments or retrofitted in existing rights-of-way. The curvilinear alignment requires additional maneuvering and reduces drivers' line-of-sight.

Application:

- Any street where speed control is desired
- Any street where reduced line-of-sight is desired

Advantages:

- Aesthetically pleasing
- Provides landscaping opportunities
- Minimal impact on emergency response

Disadvantages:

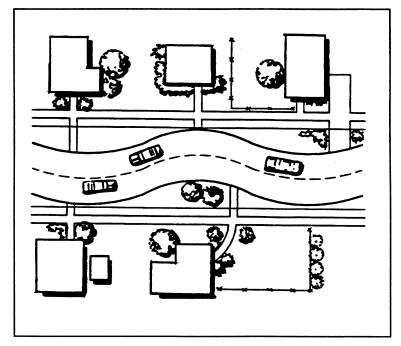
- Expensive
- May have little or no impact on cut-through traffic
- Needs to be combined with narrowing or other traffic calming tools to have significant impact on speeds
- May require additional right-of-way access to be effective

Special Consideration:

- Cannot be used where right-of-way is limited
- May require removal of on-street parking

Cost:

High cost to construct, landscape and maintain



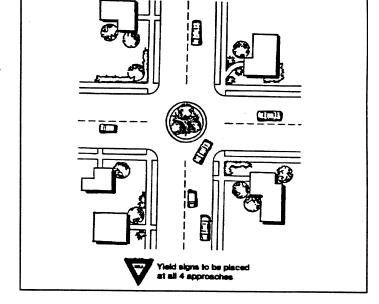
TRAFFIC CIRCLE (TIER III)

Description:

Traffic circles are raised circular medians in an intersection with counterclockwise traffic flow. Vehicles must change their travel path to maneuver around the circle and are typically controlled by "Yield on Entry" on all approaches.

Application:

- Streets where speed control is desired
- Intersections where improved side-street access is desired



Advantages:

- Provides increased access to street from side street
- Slows traffic as it drives around median
- Breaks up sight lines on straight streets
- Opportunity for landscaping in the intersection

Disadvantages:

- Definition of right-of-way is contrary to the "yield to the vehicle on the right" rule
- May impede emergency response and ambulance transport
- Relatively expensive if curb extensions are required
- May impede left turns by large vehicles
- On streets with bicycle facilities, bikes must merge with traffic around circle
- Creates physical obstruction in the travel way

Special Consideration:

- Need to be used in series or in conjunction with other traffic calming devices
- Requires special approval by the Fire Department for use on critical emergency response routes
- May require extensive signing
- Minimum 20' clearance is required around circle
- May require educational campaign and learning period
- Should be constructed with mountable curb face to accommodate emergency and large vehicles

Cost:

High cost to construct, landscape and maintain

RAISED INTERSECTION (TIER III)

Description:

A raised section of roadway at an intersection where the pavement is elevated to be flush with the top of the curbing and the approaches are ramped like speed humps.

Application:

- Streets where speed reduction is desired
- Streets where discouragement of cut-through traffic is desired

Advantages:

- Effective speed mitigation
- Opportunity for attractive pavement treatments
- Improved pedestrian safety at intersection

Disadvantages:

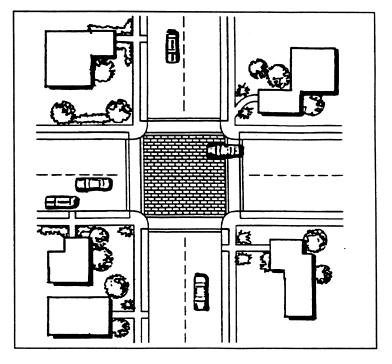
- Requires storm drainage
- May require bollards to define the corners of the intersections
- May reduce emergency response and ambulance transport time

Special Consideration:

- Special signing required
- Requires special approval by the Fire Department for use on critical emergency response routes

Cost:

High cost of construction and storm drainage



Neighborhood Request For Traffic Calming Study

We, the residents of, would like the Department of Development and Engineering Services to initiate a Traffic Calming Study in our neighbor to address the following concern.				
(Please provide brief description of the co	oncern)			
_	tudy involves active participation of our community. us to set and attend neighborhood meetings			
Please sign the attached form and mail it	back to			
City of Tracy Development and Engineering Ser Attention: Traffic Division 333 Civic Center Plaza Tracy, CA 95376	vices			
Please note: One signature per household	only. Make additional copies of Page 2 as necessary			
For Official Use Only				
Date Received:	Tier I Measures Taken: Tier II Measures Taken:			

NEIGHBORHOOD REQUEST FOR TRAFFIC CALMING STUDY

No.	Name	Address	Phone	Signature
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REFERENCES

- I. CITY OF PLEASANTON, TRAFFIC CALMING POLICY
- II. CITY OF LIVERMORE, NEIGHBORHOOD TRAFFIC CALMING PROGRAM
- III. CITY OF FREMONT, RESIDENTIAL TRAFFIC CALMING PROGRAM
- IV. CITY OF STOCKTON, TRAFFIC CALMING GUIDELINES
- V. CITY OF MODESTO, SPEED HUMP POLICY
- VI. CITY OF SACRAMENTO, TRAFFIC CALMING PROGRAM
- VII. TRAFFIC CALMING, STATE OF THE PRACTICE, EWING REID H. PUB AUG
 1999