

CITY OF PLACERVILLE
DRAFT Traffic Calming Policy and Resource Manual



Adopted by the:
Placerville City Council
XXXXXX XX, 2020

Prepared by the:
City of Placerville
Engineering Department

Welcome to the
City of Placerville
Public Meeting
for the
**DRAFT TRAFFIC
CALMING POLICY AND
RESOURCE MANUAL**

Why are we here?

- The purpose of the Traffic Calming Policy and Resource Manual is to provide a framework for community leaders, City staff, and residents for identifying the need, potential selection, funding, application, design, and implementation of traffic calming measures within the City of Placerville.
- A City-Wide Traffic Calming Program serves as process guidance for future traffic calming projects/elements.
- The mission of a Traffic Calming Program is to improve community safety, preserve community character and enhance the local neighborhoods by working with the residents.
- This manual is to be used in conjunction with and implementation of the City's General Plan, specifically Sections III, IV, V, and VII pertaining to transportation, public facilities and services, natural cultural and scenic resources, and community design (i.e. street safety, traffic hazards, emergency response time, pedestrian safety, circulation, and visual character).

What is Traffic Calming?

- 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.
- In addition, traffic calming elements are those traffic control devices and programs that regulate, warn, guide, inform, enforce and educate motorists, bicyclists and pedestrians.
- Traffic Calming elements promote safe and pleasant conditions for residents, pedestrians, bicyclists, and motorists on neighborhood streets. They assist in reducing vehicular traffic and speed on local neighborhood streets where an issue exists as supported by recorded data while preserving and enhancing pedestrian and bicycle access to neighborhood destinations.

How is Traffic Calming Implemented?

- Citizens play an integral role in developing successful traffic management programs for their streets by working with City staff, utilizing the “Three E’s” of strategies:
 - ❖ **Education** – Identifying the need for traffic calming through information-sharing and awareness raising, targeting drivers, pedestrians, and cyclists about the safest, best ways to share the road.
 - ❖ **Engineering** – Physical measures and traffic calming devices constructed to lower speeds, improve safety, or otherwise reduce the impacts of automobiles.
 - ❖ **Enforcement** – Targeted police enforcement that supports neighborhood goals.

What's the Problem We Are Trying to Solve?

The main operational objectives of traffic calming will address:

- 85th percentile travel speeds (the speed at which 85 percent of vehicles travel at or below on a particular street) are within 5 mph of the appropriate and posted speed limit.
- Reduce cut-through traffic.
- Address roads that exceed the capacity for the existing facility and where the remedy will not create a secondary problem on other streets.
- Reduce collisions and improve safety for motor vehicles and pedestrians.
- Adequate access and response times for emergency vehicles.

These objectives are met through the “Three E’s” as previously described.

Caution!! Traffic Calming Measures often have unintended consequences to adjoining streets and neighborhoods.

What is the Process to Implement Traffic Calming Devices?

- 1. Plan Initiation:** Citizen Request, Staff Review, Study Area Defined, Collect Initial Traffic Data, Determine Eligibility.
- 2. Plan Development:** Conceptual Design, Neighborhood Notification, Neighborhood Meeting, Plan Development, Consult Affected Agencies, Define the Area Impacted by the Proposed Solution.
- 3. Neighborhood Support:** Neighborhood Meeting, Planning Commission Meeting
- 4. City Council Approval and Implementation:** Funding Source, Environmental Review and Final Design, Construction, Post Project Evaluation

What is the Process to Implement Traffic Calming Devices? (Continued)

- At Plan Initiation, Staff will utilize a point system to determine if a neighborhood qualifies for traffic calming treatments based on the following elements and available points:
 - ❖ Speed (0 to 25 points)
 - ❖ ADT/Volume (0 to 25 points)
 - ❖ Accident Data(0 to 10 points)
 - ❖ Pedestrian Generators(0 to 20 points)
 - ❖ Sidewalks or Pathways(0 to 10 points)
 - ❖ Discretionary Factors(0 to 10 points)

100 points total possible with a minimum score of 51 points required to qualify for traffic calming treatments.

What are Types of Traffic Calming Devices?

- Enforcement
- Radar Feedback Signage
- Neighborhood Campaign
- Radar Trailer
- Lane Narrowing
- Edge Line
- Deviation
- Angled Slow Points
- Turn Islands and Channelization
- Gateway Treatment
- Mid-Block Median
- Modified Intersection
- Landscaping
- Neck Downs/Chokers
- One-way Streets
- Roundabouts
- Traffic Circles
- Raised Crosswalk
- Speed Humps
- Raised Intersections
- Partial Street Closure
- Full/Diagonal Diverters
- Traversable Barriers
- Full Closures/Cul-de-Sacs
- Turn Restriction & Signs
- Woonerf/Living Street

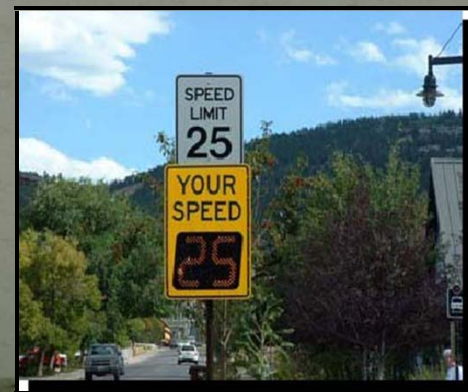
Enforcement

- **Pros:** Good temporary public relations tool, informs the public that speeding has consequences, quick implementation.
- **Cons:** Not a permanent solution, expensive tool to control long term speeding concerns.



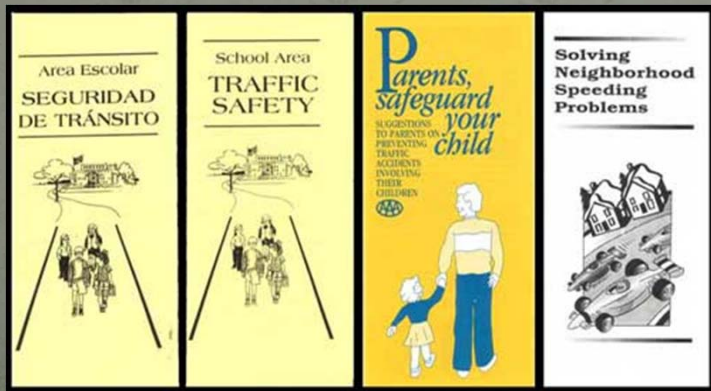
Radar Feedback Signs

- **Pros:** Real-time feedback, does not delay emergency response, permanent installation.
- **Cons:** May require power source, only effective in one-way direction, uncertain long-term effectiveness.



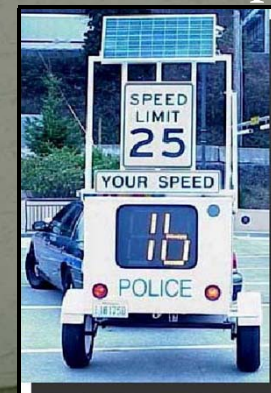
Education/Campaign

- **Pros:** Raises awareness, may offset complaints from some residents, signs can enhance the residential feel of a road.
- **Cons:** Uncertain long-term effectiveness.



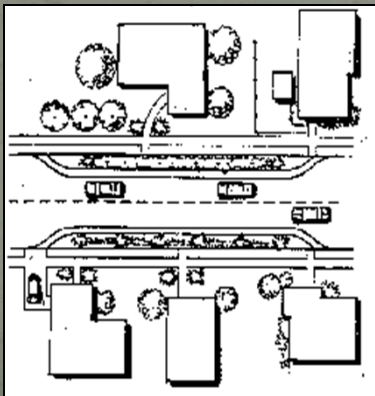
Radar Speed Trailer

- **Pros:** Educational tool, neighborhood public relations, portable, temporary speed reduction needs.
- **Cons:** Limited effectiveness and not self-enforcing, subject to vandalism, potential temporary lane closures.



Lane Narrowing

- **Pros:** Minor inconvenience to drivers and local traffic, good for pedestrians for short crossings and visibility, reduced traffic speed.
- **Cons:** May impact parking and driveway access, needs to consider cyclists.



Edge Line

- **Pros:** Inexpensive, reduces speed, increased safety for bikes and peds, low maintenance, no impact to emergency response.
- **Cons:** May not be as effective as other devices.



Chicane/Deviation

- **Pros:** Greater visual obstruction, reduced crossing distance for pedestrians, minor inconvenience to local traffic, can accommodate large vehicles
- **Cons:** Curb realignment is costly, thoughtful design to avoid head on collisions, may reduce on-street parking.



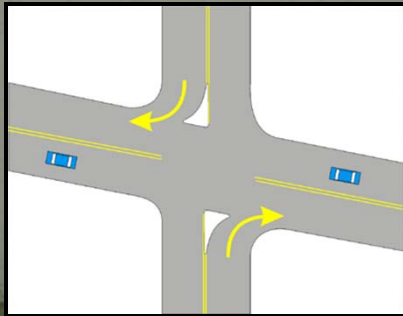
Angled Slow Points

- **Pros:** Reduces speed, effective in series, minor inconvenience to local traffic, space for landscaping, visual obstruction.
- **Cons:** Landscaping maintenance, can be hazardous to drivers and cyclists, risk of head on collisions, not effective in double lane application.



Forced Turn Barriers

- **Pros:** Reduces traffic speed and volume, reduces cut-through traffic, self-enforcing, possible landscaping.
- **Cons:** Reduces emergency vehicle access, diverts local traffic including residents, consideration to transit routes, may transfer problems elsewhere, needs bicycle access.



Gateway Treatment

- **Pros:** High visibility at roadway classification changes, discourages cut-through traffic, reduces speed.
- **Cons:** Increased need for maintenance, could reduce parking.



Mid-block Median

- **Pros:** Landscaping potential, mid-point refuge for pedestrians, can narrow travel lanes, provides a barrier between opposing traffic, works well with crosswalks.
- **Cons:** May reduce parking and driveway access, may limit visibility, increased maintenance.



Modified Intersection

- **Pros:** Reduces speed, changes driving patterns, reduces through traffic, space for landscaping
- **Cons:** Increased emergency response times, reduces access to properties, increased trip length for users, and be unattractive if not landscaped.



Landscaping

- **Pros:** Indicates change in environment from arterial to residential street, reduces entry speed, gives a neighborhood a sense of identity, allows neighborhood participation.
- **Cons:** Increased maintenance responsibility (but community could maintain.)



Neck Downs/Chokers

- **Pros:** Improved pedestrian space, protected on-street parking, reduces speeds, shorter pedestrian crossing (i.e. Main Street bulb-outs)
- **Cons:** Cyclists may have to merge with vehicular traffic, may eliminate parking, may slow turning movements.



One-Way Streets

- **Pros:** Simplify pedestrian crossings, prevents cut-through traffic, may allow for bike lanes and/or on-street parking.
- **Cons:** May increase travel speeds, inconvenience to residents and emergency response, may affect adjacent streets and intersections.



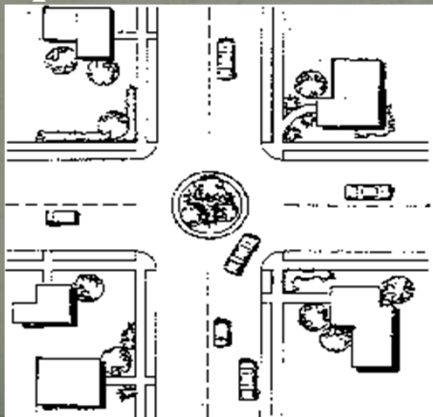
Roundabouts

- **Pros:** Moderates speed, generally aesthetically pleasing, safer than standard signalized/stop-controlled intersections, less expensive to operate.
- **Cons:** Can be difficult for large vehicles to navigate, landscaping maintenance, requires Placerville voter approval.



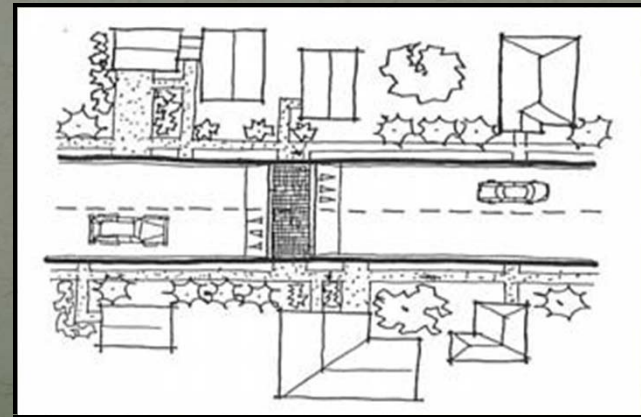
Traffic Circles

- **Pros:** Reduces collisions compared to stop signs, aesthetically pleasing, enhanced safety.
- **Cons:** Can be difficult for large vehicles to navigate, potential wrong way left turns, landscaping maintenance, requires Placerville voter approval.



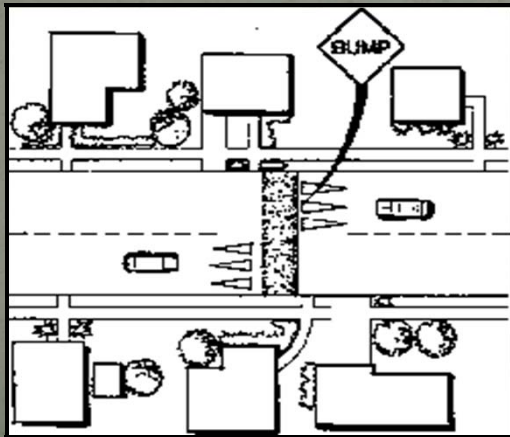
Raised Crosswalks

- **Pros:** Improved safety for pedestrians and vehicles, effective at reducing speeds.
- **Cons:** Can be expensive to place, additional drainage considerations needed, may increase noise and pollution.



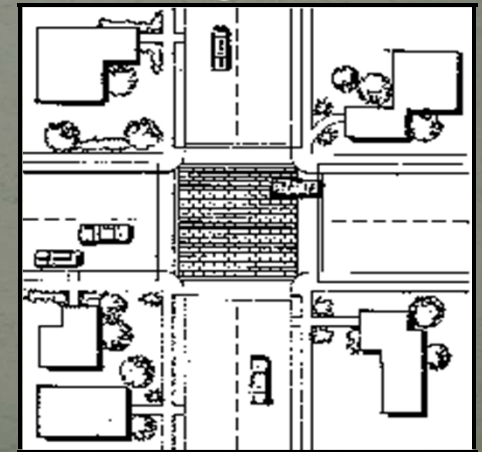
Speed Humps

- **Pros:** Relatively inexpensive, effective in speed reduction.
- **Cons:** Forces large vehicles (i.e. fire trucks) to travel at slower speeds, may increase noise and pollution, questionable aesthetics.



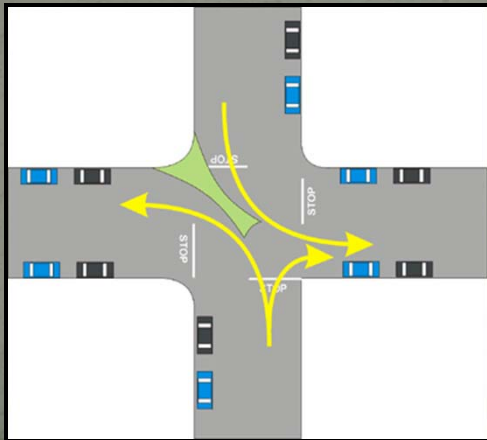
Raised Intersections

- **Pros:** Improved safety for both pedestrians and vehicles, can have positive aesthetic value, calms 2 streets at once, doesn't affect parking.
- **Cons:** Expensive to build, can have impacts to drainage, less effective.



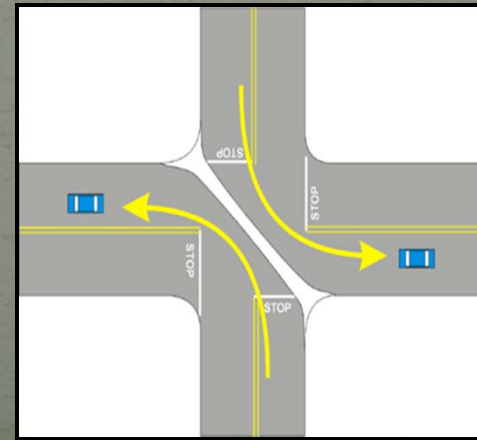
Partial Street Closure

- **Pros:** Reduces volume, maintains access for residents, reduces cut-through traffic, Ok for emergency vehicles.
- **Cons:** May divert traffic on to parallel streets, may increase trip length, may lose parking.



Diagonal Diverters

- **Pros:** Reduces speed and volume, reduces cut-through traffic, self-enforcing.
- **Cons:** Reduces emergency vehicle access, increased trip times and lengths, not suitable on transit routes.



Traversable Barriers

- **Pros:** Reduces volume, maintains two-way traffic for street, improves safety for all street users.
- **Cons:** Reduces emergency vehicle access with increased response times, reduces access for residents, may increase volumes on other streets.



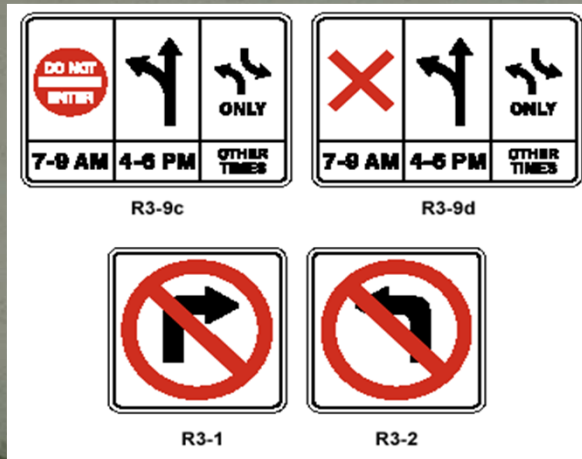
Street Closure / Cul-de-sac

- **Pros:** Reduces volume, reduces cut-through traffic, improves safety for all street users.
- **Cons:** Legal procedures required for closure, reduces emergency vehicle access, may increase traffic on other streets.



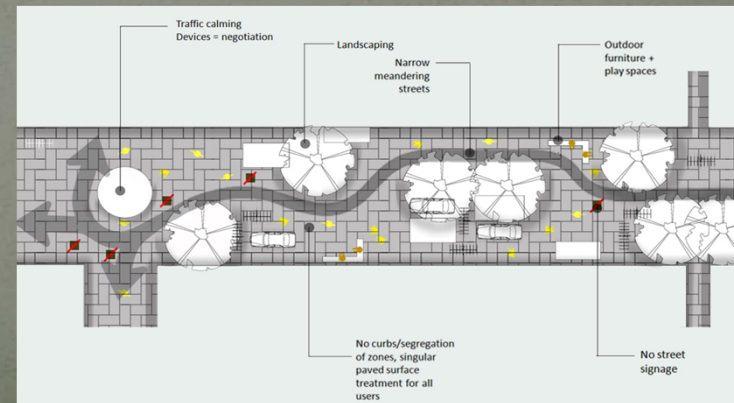
Turn Restrictions/Signage

- **Pros:** Can prevent cut through traffic, relatively low cost, most effective at peak hours.
- **Cons:** Enforcement challenges, may affect adjacent streets, inconvenience to public and emergency response.



Woonerf/Living Street

- **Pros:** Can prevent cut through traffic, reduced traffic speed, good for access to residential neighborhoods.
- **Cons:** Costly, requires low traffic volume, restricts to one-way traffic, impacts adjacent streets, affects emergency response.





Questions?