

Neighborhood Traffic Calming

What is Traffic Calming?

According to the Federal Highway Administration (FHWA), traffic calming reduces automobile speeds or volumes, mainly through the use of physical measures, to improve the quality of life in both residential and commercial areas and increase the safety and comfort of walking and bicycling.

Traffic Calming programs involve:

- Applying road design and engineering measures to obtain appropriate speeds;
- Setting speed limits that are safe and reasonable;
- Applying enforcement efforts and appropriate technology that effectively address speeders and deter speeding.

Safety Benefits of Traffic Calming

Speed impacts crash severity

- Lower speeds result in greater survivability when crashes occur.

Slower speeds save lives

- Average risk of death for a pedestrian at impact rises as speed increases.
- A person walking struck by a person driving 40 mph is 8x's more likely to die than one struck by person driving 20 mph.

Slower speeds

- Promote safety in residential neighborhoods
- Prevent crashes
- Safer for pedestrians and cyclists, specifically where infrastructure does not exist.



DEATH DUE TO SPEED

U.S. DEPARTMENT OF TRANSPORTATION. LITERATURE REVIEWED ON VEHICLE TRAVEL SPEEDS AND PEDESTRIAN INJURIES. MARCH 2000.
[HTTP://WWW.NHTSA.GOV/ABOUT-NHTSA/TRAFFIC+TECHS/
CURRENT/LITERATURE+REVIEWED+ON+VEHICLE+TRAVEL+SPEEDS+AND+PEDESTRIAN+INJURIES](http://www.nhtsa.gov/about/nhtsa/traffic+techs/current/literature+reviewed+on+vehicle+travel+speeds+and+pedestrian+injuries)

Traffic Calming Tools

- Vertical Deflection countermeasures create a change in roadway height that forces a vehicle to reduce speed. Examples include:
 - Speed Humps
 - Speed Bumps
 - Speed Tables
 - Speed Cushions
- Horizontal Deflection countermeasures create a horizontal shift in the roadway so that a vehicle cannot travel in a straight line and must reduce speed. Examples include:
 - Curb Extensions
 - Chicanes
 - Mini Roundabouts/Traffic Circles

Vertical Deflection

Speed Bumps

- Raised areas of pavement primarily used in parking lots
- They pose a safety hazard for vehicles traveling too fast and can be more damaging to vehicles.
- Emergency Response Impact - unknown as bumps are used primarily in parking lots



Vertical Deflection

Speed Humps

- Rounded raised areas of pavement typically 12 to 14 feet long, often placed in a series (spaced 260 to 500 feet apart) at mid-block locations
- Appropriate for residential streets and residential collectors that are on-lane/two-lane and have posted speed of 35 mph or less
- Not typically used on major roads, bus routes, or primary emergency response routes.
- Series of speed humps may result in traffic diversion
 - Comprehensive traffic calming approach needed to ensure problem isn't moved to another roadway.
- Emergency Response Impact - Approximately 3 and 5 seconds delay per hump for fire trucks and up to 10 seconds for ambulances with patients



Vertical Deflection

Speed Tables

- Raised speed humps with flat section on top and ramps on the ends
- Serve as raised crosswalks when placed at pedestrian crossings
- Appropriate for residential streets and residential collectors that are on-lane/two-lane and have posted speed of 35 mph or less
- Can be implemented at mid-block or intersection locations
- Series of speed tables may result in traffic diversion
 - Comprehensive traffic calming approach needed to ensure problem isn't moved to another roadway.
- Emergency Response Impact - less than 3 seconds of delay per speed table



Vertical Deflection

Speed Cushions

- Two or more raised areas placed laterally across a roadway with gaps between raised areas, often placed in a series at mid-block locations
- Appropriate for residential streets and residential collectors that are on-lane/two-lane and have posted speed of 35 mph or less
- Gaps allow emergency vehicles to pass at higher speeds
- Series of speed cushions may result in traffic diversion
 - Comprehensive traffic calming approach needed to ensure problem isn't moved to another roadway.
- Emergency Response Impact - less than a one-second delay experienced by most emergency vehicles



Horizontal Deflection

Curb Extensions

- Horizontal extension of the sidewalk into the street, which visually and physically narrows the roadway and creates shorter crossings for pedestrians
- Can create protected on-street parking
- Emergency Response Impact – limited

Chicanes

- Alternating curbs or lane shifts that force a vehicle to reduce speed and veer back and forth out of a straight travel path.
- Appropriate for residential streets and residential collectors that are on-lane/two-lane and have posted speed of 35 mph or less.
- Alternating on-street parking can serve as a chicane.
- Emergency Response Impact - limited



Horizontal Deflection

Mini Roundabout or Traffic Circle

- A raised island that forces vehicles to reduce speed when traveling through an intersection
- Fits within an existing intersection and can be landscaped.
- Emergency Response Impact - limited

