



INDIANA LTAP
LOCAL TECHNICAL
ASSISTANCE PROGRAM

SPEED DEVICE POLICY CONSIDERATIONS FOR LOCAL AGENCIES

INFORMATIONAL SERIES

2025

The purpose of this document is to provide guidance to local agencies on the assessment, implementation, and maintenance of speed control devices. Items of consideration presented in this informational guide were derived through a cursory review of publications, policies, and related traffic studies from across North America. Local agencies are encouraged to review these items when considering the use of speed control devices in their communities.



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Introduction

A speed control device is defined as a piece of traffic calming equipment used to regulate, limit, or lower the speed of a vehicle. These traffic calming measures use vertical deflection to improve the safety of all road users by lowering vehicle speeds and deterring cut-through traffic. The various types of speed control devices and their uses are defined in the next section.

Before agencies deploy any speed control devices, it is important to have an established policy to guide implementation decisions and to understand the differences of each device with respect to functionality, design, installation, maintenance, and impacts to winter operations. Agencies are encouraged to develop comprehensive traffic calming policies for all such devices, which can be completed in conjunction with a Pedestrian/Bike Master Plan or similar project. However, a standalone policy for speed control devices can also be a first step. This guide will provide local agencies with the knowledge of what factors to consider and what steps to take before establishing a new speed control device policy or upgrading a current one.

Types of Speed Control Devices

The terminology for speed control devices can be confusing. Figure 1 shows the difference in design and use of each device discussed in this guide. The most effective device will vary by location.

Speed bumps, not to be confused with speed humps, are devices that can startle and cause discomfort to motorists due to their abrupt design. This drastic shift in vertical elevation may cause vehicular damage or loss of control if used improperly. In general, speed bumps should not be used on public roadways.

A **speed hump** is a raised area in the roadway pavement surface extending across the entirety of the roadway. Speed humps have geometric design features that create a gentle vehicle rocking motion that causes most vehicles to slow to approximately 15 miles per hour (mph) or less at each hump, and approximately 25 mph to 30 mph between properly spaced humps.

1 Speed bump

Used mostly in private residential developments and shopping centers.

4 to 6 inches

Speed bump
1 to 3 feet

2 Speed hump

Used mostly on residential streets with speed limits up to 25 mph.

3 to 4 inches

Speed hump
10 to 12 feet

3 Speed table

Used on more traveled residential streets with speed limits up to 30 mph.

3 to 4 inches

Speed table
22 feet

Note: Drawings not to scale

Figure 1: Speed Control Devices (Source: Harwich MI Traffic Calming Policy)

Speed cushions (Figure 2) are speed humps that provide breaks for the wider wheelbases of emergency vehicles to pass through without traversing the hump. These gaps also allow for bicycles and motorcycles to pass and can be useful where drainage may be a concern.

Speed tables (Figure 3) are often used with raised, textured crosswalks striped on top and connect directly to sidewalks on both sides.

Establishing a Speed Control Device Policy

Agencies should develop a formal process to determine the appropriate use of speed control devices and warrants for installation within their roadway network. Five key elements to consider when establishing this policy include:

1. Appropriate legislation (policies, ordinances, regulations);
2. Request procedure for installation;
3. Assessment criteria and prioritization of requests;
4. Consultation with the public and affected agencies (i.e., Fire, EMS, Police, Schools, etc.); and
5. Maintenance and/or removal procedures.

In addition to these elements, agencies should ensure appropriate policies are in place to direct the process of community involvement, device design, device location, cost sharing relationships, installation and maintenance requirements, and evaluation or modification procedures.

A review of established speed control device policies suggests agencies consider several factors and involve stakeholders when establishing new or revising existing policies. The reviewed policies commonly agree on the following requirements:

- A **petition** of directly-affected residents showing significant support for the speed control device;
- The **roadway classification** for the speed control device is a two-lane residential local road; and
- An **engineering study** to identify if a location warrants installation, the appropriate type of device and installation location(s), and any adverse effects of an installation.

In general, the area identified as “directly affected” include those homes that do not have the option of avoiding the proposed device. It is important to have clear guidelines that define the affected area for evaluation to ensure that all critical elements are considered within that area. *For example, Beaverton, Oregon, defines a project area as 250 feet from the first and last speed hump.* This identification allows for proper consideration of affected parties (such as property owners) and aids in the design and location for installation of the speed control device.



Figure 2: Speed Cushion (Source: FHWA)



Figure 3: Speed Table (Source: FHWA)

Preliminary Assessment

Prior to investing time and resources into an engineering study, the agency should outline preliminary evaluation criteria to assess the merit of the speed control device request. Eligibility criteria will vary depending on the needs of each jurisdiction; therefore, each implementing agency should develop a customized request procedure with input from other potentially affected agencies (e.g., emergency services, transit agencies, etc.) to streamline the validation process of requests.

To evaluate the merit of installing speed control devices, eligible requests should be evaluated to determine the validity of the request and determine a priority level. Criteria used to evaluate and prioritize projects should contain the following elements:

- Speed;
- Traffic volumes;
- Crashes (speed-related);
- Proximity to pedestrian generators (e.g., schools, parks, and playgrounds);
- Lack of sidewalks; and
- Designated bicycle routes.

The local agency should determine a threshold value for each element above to determine a ranking or priority level. Some agencies assign points based on these elements. This preliminary evaluation process helps prioritize requests so time and resources can be directed toward higher priority locations.

During the preliminary assessment, traffic conditions in the neighborhood should be observed and data collected, such as daily traffic volume and operating speed. The type of data collection required will be determined by the evaluation criteria developed for the jurisdiction.

As part of the request evaluation, the objective of the installation request (e.g., reduce speed, reduce cut-through traffic, etc.) should be noted as this will determine placement of the device(s) and direct performance monitoring and evaluation data collection. Collection of data before and after implementation is a key part of the evaluation of devices and possible adjustment of policy criteria.

Policy Considerations

In addition to the key elements noted above, agencies may want to consider the following factors for inclusion in their speed control device policy. The reviewed example policies differed on these details as the needs of all agencies differ. The possible ideas below were gathered from the example policies reviewed.

- **Funding source:** Agency-funded, 50/50 split, or some other percentage; added to tax bill or funded up front?
- **Request process:** How is a request initiated and is there a fee?
- **Affected resident petition:** Define affected area. What percent must be contacted and what percent must agree? One signatory per household? Type of residents allowed to sign (e.g., renters, land owners)? List proposed locations and costs on the petition?
- **Who sends petition:** Is it resident-led or does it come from the agency directly?
- **Are petition signatories verifiable:** Use tax/property records, or addresses?

- **Ranking/Prioritizing point system:** If agency-funded, how to determine merit of request (e.g., crashes, data-driven, etc.)
- **Average Daily Traffic (ADT) limits:** Range from 200-2000 vehicles per day
- **85th speed:** What amount over speed limit?
- **Maximum roadway width:** Some use up to 40-44'
- **Additional approvals required:** Do fire departments, emergency medical services, school districts, or transit agencies need to sign off on affected routes?
- **Avoid specific routes:** Are emergency and transit routes avoided or accommodated?
- **Grades:** Typically less than 3-8%
- **Type and length of section:** Tangent, less than 1 mile
- **Removal process:** Petition and funding requirements for removal of existing device, and re-installation with a major project coming through
- **Frequency of requests:** [Bloomington](#) has a resident-led process that opens for requests once a year
- **Other considerations:** Nearby overhead lighting, not on snow routes, evidence of cut-through traffic, downstream of drainage inlet, used in series properly spaced (i.e., not a single installation), minimum number of fronting driveways per ¼ mile, and sufficient Stopping Sight Distance (SSD) to device.

Example Process

The following outlines a typical process for citizen-led requests for installation or removal of a speed control device. Agency-led proposals for installation or removal may differ slightly from these steps depending on agency policy and best practices.

1. Request is made and documented (typically by submitting a provided form)
2. Preliminary assessment is completed
3. If warranted, engineering study is completed*
4. Engineer's office makes determination
5. Traffic Commission and/or elected officials approve or deny request/installation based on engineer office's recommendation (Optional: public hearing)
6. Speed Control Device(s) and required warning signs are installed
7. Speed Control Device(s) are evaluated for safety and effectiveness

*Potential outcomes of an engineering study:

- Site does not meet requirements; other options are provided
- Site meets requirements; funding needs to be found
- Site meets requirements; funding is available

If a site does not meet the requirements for the installation of a speed control device, other options for traffic calming should be explored/provided.

Requests for removal should follow the same procedure as requests for installation.

Communities may be given the option to self-fund the device installation or removal to expedite the process.

Installation and Maintenance of Speed Control Devices

Device installation may be done by the agency or installed by approved contractors using approved materials and specifications. The agency should specify and enforce the use of high-quality paving materials that meet compaction and durability standards to prevent premature wear.

Future maintenance responsibilities of installed speed control devices should be identified prior to installation. In most cases, if a device is installed on a publicly-maintained roadway, the maintenance of these items would be the responsibility of the public agency unless other formal agreements are in place.

Temporary installation is possible with rubber speed control devices, allowing them to be moved, relocated, and/or removed for winter operations or special events, making them appealing options in states with significant snowfall and local festivals. It is noted that snow plow operations should not be a deterrent to permanent installation. Properly marking the speed control device location(s) allows snowplow operators to proceed with care at those locations and lift the blade, if necessary, to properly maintain the roadway and device.

The Institute of Transportation Engineers (ITE) outlines guidelines for speed control device installation in *Guidelines for the Design and Application of Speed Humps*. A summary of recommendations is included in the Traffic Calming Fact Sheets in the Appendix.

Speed Control Device Effects and Issues

When selecting the appropriate speed control device, it's important to understand the effects and issues associated with each type. Below is a compilation from the Federal Highway Administration (FHWA) detailing this information for speed cushions. Similar information is available for speed humps and speed tables in FHWA's [Traffic Calming E-Primer](#) available online.

Effects and Issues – Speed Cushion (source: FHWA)

Vehicle Speed

Single speed cushion reduces vehicle speeds to the range of 15 to 20 mph when crossing the cushion; speed reduction effects decline at the rate of approximately 0.5 to 1 mph every 100 feet beyond the 200 foot approach and exit of a speed cushion; in order to retain slower vehicle speeds over longer distance, a series of speed cushions needed

ITE's *Guidelines for the Design and Application of Speed Humps* recommends spacing of 260' to 500' to keep 85th percentile operating speed between 25 and 30 mph; some jurisdictions have refined guidelines:

- Pennsylvania – spacing between 250 and 600 feet
- South Carolina – spacing of no less than 350 feet
- Virginia – spacing of approximately 500 feet, clear visibility of 200 feet, and placement no closer than 200 feet from an intersection

	<ul style="list-style-type: none"> Pasadena – speed cushion series only on street segment that is at least 1200 feet in length and traffic signals or Stop signs are at least 1200 feet apart <p>Proper placement of initial speed cushion in a series is significant; the first speed cushion in a series is normally located in a position where it cannot be approached at high speed from either direction; to achieve this objective, it is typically installed within 200 feet or less of a small-radius curve or stop sign or, if installed on a street with a significant downgrade, at the top of a hill.</p>
Vehicle Volume	As single installation, there is little traffic diversion from the street; as part of a series, typical volume reductions of 20 percent are observed.
Pedestrian Safety and Mobility	Not a preferred location for a crosswalk.
Bicyclist Safety and Mobility	Bicyclist safety and mobility not affected; bicyclist can pass through the speed cushion gaps.
Motorist Safety and Mobility	<p>Speed effects of a single or series of speed cushions are greater than for any other traffic calming measure with the exception of route diversions that eliminate a particular traffic movement.</p> <p>Produces sufficient discomfort to a motorist driving above the speed cushion design speed to discourage speeding.</p> <p>A motorcycle can pass through a speed cushion gap without slowing.</p>
Emergency Vehicle Safety and Mobility	Speed reduction for emergency vehicles is minimal because the larger vehicles can straddle the cushions; if the emergency vehicle has the track width of a passenger car, there is delay.
Large Vehicle Safety and Mobility	Speed reduction for large commercial vehicles is minimal because the larger vehicles can straddle the cushions.
Accessibility of Adjacent Property	On-street parking does not need to be removed and there is no reduction in accessibility of adjacent property.
Environment	Potential for increased noise due to vehicle braking and accelerating and to the vibration of loose items in truck beds or trailers.
Design Issues	<p>Placement factors include vertical and horizontal alignment of the street, proximity to the nearest intersection, location of driveways and on-street parking, presence or absence of street lighting, location of designated pedestrian crossings, drainage, and utility access points (drains, valves, etc.)</p> <p>Should not require relocation of above- and below-ground utilities</p>

Example: Speed Cushion Installation

Speed cushions can be used on one-way or two-way streets; however, they are not recommended on streets with more than two travel lanes. In addition, the pavement should have good surface and drainage qualities. The location of speed cushions will depend on the presence of on-street parking, driveways, intersections, and other roadway features.

If no curb is present, measures will need to be taken to prevent drivers from circumventing the speed cushions. A barricade, cones, or sign installation can be used to discourage this driver behavior.

Speed cushion installation locations should be no more than 500 feet apart where the desired 85th percentile operating speed is between 25 and 30 mph.

Vertical speed control elements should be designed to the following criteria, per the National Association of City Transportation Officials (NACTO):

- Slopes should not exceed 1:10 or be less steep than 1:25,
- Side slopes on tapers should be no greater than 1:6,
- The vertical lip should be no more than a quarter-inch high, and
- Located where there is sufficient visibility and lighting.

Maintenance of Speed Control Devices

While speed control devices are typically durable, they still require regular maintenance to ensure they remain effective over time. Cracks, wear, or damage can reduce the effectiveness of a speed control device. Conduct periodic inspections to identify any issues with the physical condition of the device and surrounding pavement, pavement markings, and signs. Necessary repairs should be made promptly.

Typical maintenance requirements include:

- **Inspection:**
Conduct regular inspections to identify damage or wear, such as cracked pavement, and assess compliance with tolerances for grade and thickness. Remove any debris accumulation around the device.
- **Repair & Replacement:**
Promptly repair or replace damaged speed control devices that exceed specified tolerances or are affected by weather conditions.
- **Pavement Maintenance:**
Address pavement degradation around the speed control device, including maintaining a clean surface and repairing any issues to ensure smooth passage over the device.
- **Marking & Signage:**
Maintain clear, visible signs indicating the presence of a speed control device and ensure proper road markings are in place and visible during the day and night. Thermoplastic markings are recommended on the device.
- **Drainage:**
Proper installation should not cause drainage issues; however, pavement degradation and debris accumulation may produce drainage concerns. Regular inspection should note and resolve any issues affecting proper drainage.
- **Seasonal Management:**

Manage the installation and removal of temporary speed control devices as needed. Winter removal is an option for temporary rubber devices.

Winter Operations

Speed humps, cushions, and tables are designed to allow snow plows to traverse them smoothly with no significant impedance to winter operations. Signs installed next to each speed control device ensures that adequate warning of its location is maintained during snow events, allowing drivers and plow operators to safely navigate these areas in inclement weather conditions.

Although winter operations are a common concern among agencies when considering speed control devices, a [Canadian study](#) evaluated the impact of these devices on winter operations, with a focus on speed humps, and concluded the following:

“A consultation with municipalities that had speed humps installed for many years reported that winter conditions and winter maintenance generally do not cause major problems for the majority of municipalities studied: speed humps maintain their ability to control speed, exhibit little deterioration and cause few problems for snow removal operations. This has also been reported by a variety of Canadian provinces and U.S. states. Certain precautions must be taken, however.

The design of the speed hump plays a significant role. A progressive slope with a sinusoidal shape is easier for snow removal vehicles to negotiate. Operators must adapt their methods, properly positioning the blade of their equipment and taking the time to remove snow from the areas on and around the speed hump where it tends to accumulate. The blade must be raised slightly in order to avoid damaging speed humps, but care must also be taken to remove all of the snow and ice that has built up. Removing snow from speed humps therefore requires adjusted methods and possibly additional time.

Snow removal for speed cushions is more difficult because of the space between the cushions and the possibility that snow can accumulate.”

Appendix

Speed Cushion Design Specification

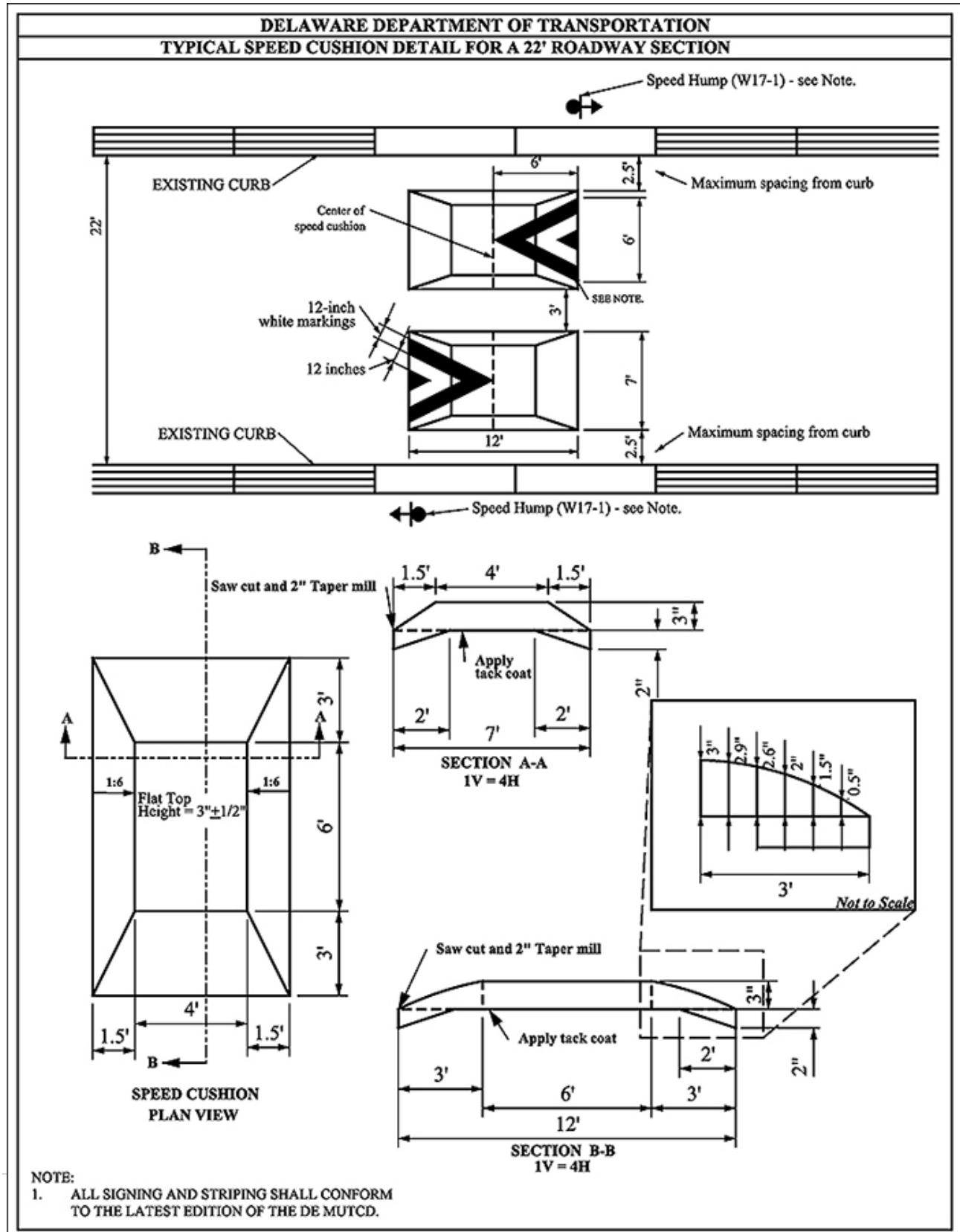
Indiana Policy Examples

Out-of-State Policy Examples

ITE Speed Device Fact Sheets

Speed Cushion Design Specification

Sample Design for a Speed Cushion without a median



Indiana Policy Examples

	Hamilton County	Tippecanoe County	Evansville	Carmel	Fort Wayne	Indy	Avon
Petition form	Signed by 75% of verifiable residents	70% residence concurrence (more if less warrants are met)	55% of directly impacted (within 100 yards); one vote per household	75% within 2000' radius of proposed hump; City Council can also decide w/o signatures	75% of affected residents	75% of affected property owners; one signature per address	75% of affected property owners
Approvals by	Fire Dept, School District						
Engineering study completed	Yes, by agency or designee; considers diversion effects			Approved by City Engineer	Yes, by agency		
Roadway Class	Local streets	Local street, residential in nature	2-lane or residential		Local streets, residential		
Maximum roadway width	40'						
Grades	Less than 7%	Less than 8%; free of curves					3% or less
Speed Limit	Posted; 30mph or less	30mph or less		30mph or less			30mph or less
ADT	200-3000 veh/day	< 3000 veh/day		200-3000 veh/day	300-800 veh/day		<2000 veh/day
85th	Exceeds posted by more than 15mph (special consideration given)	10mph or greater than posted				35mph or greater	10mph or greater than posted
Funding	100% residents		City with demonstrated need and prioritized; residents can defray costs	City funded; Point system; Residents can fund removal with additional requirements.	City	City	50/50
Other requirements	Tangent section; SSD is met	Not transit or primary emergency route; SSD is met; min. segment length of 1000'	Adequate SD, d/s of inlet, near OH lighting, not on snow routes	Not placed on City blocks or cul-de-sac streets less than 500' in length. Spaced between 250-600' apart.	Traffic calming policy; many options for mitigation	Evidence of cut-thru traffic needed plus 85 th	Tangent section; SSD is met

Out-of-State Policy Examples

	Jefferson County, CO	Douglas County, GA	Louisville, KY	Lynwood, CA
Petition form	Signed by 90% with 75% in favor. Option to oppose. Option to contribute funds. Form must show placement & costs. One signature per household.	70% of all owners (not renters); strict requirements on signing	70% approval; can vary with waivers for crash history, volumes, speeds, and school zone/park locations. 1 vote per household.	70% (50% + 1 must be homeowners in defined segment); applicant must contact 100% of abutting property owners.
Approvals by			Police, Fire, EMS	Police, Fire, EMS comments considered
Engineering study completed	Yes, by agency	Yes, by agency	Yes, by agency	Yes, by agency
Roadway Class	Local, residential	Local, residential	Local, low-density residential	Local, residential
Maximum roadway width	44'			40'
Grades	Less than 6%	Less than 8%	8% or less	5% or less
Speed Limit		Residential = 25mph	25mph	25mph
ADT			150-3000 veh/day	500-1600 veh/day
85th		11mph over	11mph over	10mph over
Funding	50/50 split; resident must collect and deliver funds	100% residents; added to annual tax bill (\$12/yr)	100% applicant	Agency-funded; private funding will be considered
Other requirements	12 or more fronting driveways per ¼ mile	Only in series; less than ¾ mile section	Not in alleys; paved roads only, sight distance checks	Point system for prioritization; no more than 5% trucks; not on emergency or transit routes

ITE Fact Sheets

Traffic Calming Fact Sheets

May 2018 Update

Speed Hump

Description:

- Rounded (vertically along travel path) raised areas of pavement typically 12 to 14 feet in length
- Often placed in a series (typically spaced 260 to 500 feet apart)
- Sometimes called road humps or undulations

Applications:

- Appropriate for residential local streets and residential/neighborhood collectors
- Not typically used on major roads, bus routes, or primary emergency response routes
- Not appropriate for roads with 85th-percentile speeds of 45 mph or more
- Appropriate for mid-block placement, not at intersections
- Not recommended on grades greater than 8 percent
- Work well in combination with curb extensions
- Can be used on a one-lane one-way or two-lane two-way street



(Source: City of Boulder, Colorado)



(Source: PennDOT Local Technical Assistance Program)

ITE/FHWA Traffic Calming EPrimer: https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm

Design/Installation Issues:

- ITE recommended practice - "Guidelines for the Design and Application of Speed Humps"
- Typically 12 to 14 feet in length; other lengths (10, 22, and 30 feet) reported in practice in U.S.
- Speed hump shapes include parabolic, circular, and sinusoidal
- Typically spaced no more than 500 feet apart to achieve an 85th percentile speed between 25 and 35 mph
- Hump heights range between 3 and 4 inches, with trend toward 3 - 3 ½ inches maximum
- Often have associated signing (advance warning sign before first hump in series at each hump)
- Typically have pavement markings (zigzag, shark's tooth, chevron, zebra)
- Taper edge near curb to allow gap for drainage
- Some have speed advisories
- Need to design for drainage, without encouraging means for motorists to go around a hump

Potential Impacts:

- No impact on non-emergency access
- Average speeds between humps reduced between 20 and 25 percent
- Speeds typically increase approximately 0.5 to 1 mph midway between humps for each 100 feet Beyond the 200-foot approach and exit of consecutive humps
- Traffic volumes diversion estimated around 20 percent; average crash rates reduced by 13 percent

Emergency Response Issues:

- Impacts to ease of emergency-vehicle throughput
- Approximate delay between 3 and 5 seconds per hump for fire trucks and up to 10 seconds for ambulances with patients

Typical Cost (2017 dollars):

- Cost ranges between \$2,000 and \$4,000

Traffic Calming Fact Sheets

May 2018 Update

Speed Cushion

Description:

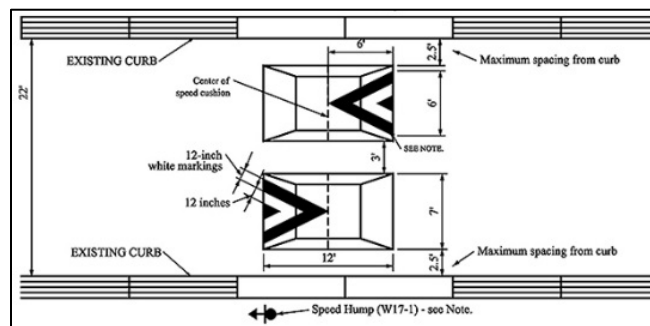
- Two or more raised areas placed laterally across a roadway with gaps between raised areas
- Height and length similar to a speed hump; spacing of gaps allow emergency vehicles to pass through at higher speeds
- Often placed in a series (typically spaced 260 to 500 feet apart)
- Sometimes called speed lump, speed slot, and speed pillow

Applications:

- Appropriate on local and collector streets
- Appropriate at mid-block locations only
- Not appropriate on grades greater than 8 percent



(Source: James Barrera, Horrocks, New Mexico)



(Source: Delaware Department of Transportation)

ITE/FHWA Traffic Calming EPrimer: https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm

Design/Installation Issues:

- Two or more cushions at each location
- Typically 12 to 14 feet in length and 7 feet in width
- Cushion heights range between 3 and 4 inches, with trend toward 3 - 3 ½ inches maximum
- Speed cushion shapes include parabolic, circular, and sinusoidal
- Material can be asphalt or rubber
- Often have associated signing (advance-warning sign before first cushion at each cushion)
- Typically have pavement markings (zigzag, shark's tooth, chevron, zebra)
- Some have speed advisories

Potential Impacts:

- Limited-to-no impact on non-emergency access
- Speeds determined by height and spacing; speed reductions between cushions have been observed averaging 20 and 25 percent
- Speeds typically increase by 0.5 mph midway between cushions for each 100 feet of separation
- Studies indicate that average traffic volumes have reduced by 20 percent depending on alternative routes available
- Average collision rates have been reduced by 13 percent on treated streets

Emergency Response Issues:

- Speed cushions have minimal impact on emergency response times, with less than a 1 second delay experienced by most emergency vehicles

Typical Cost (2017 dollars):

- Cost ranges between \$3,000 and \$4,000 for a set of rubber cushions

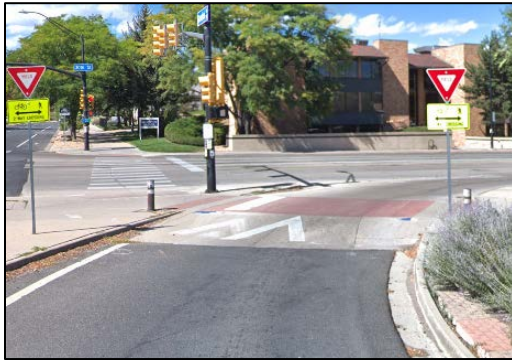
Speed Table/Raised Crosswalks

Description:

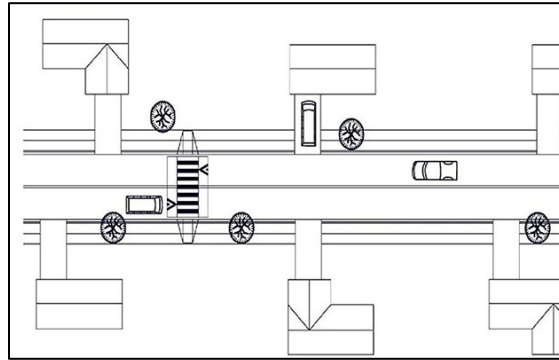
- Long, raised speed humps with a flat section in the middle and ramps on the ends; sometimes constructed with brick or other textured materials on the flat section
- If placed at a pedestrian crossing, it is referred to as a raised crosswalk
- If placed only in one direction on a road, it is called an offset speed table

Applications:

- Appropriate for local and collector streets; mid-block or at intersections, with/without crosswalks
- Can be used on a one-lane one-way or two-lane two-way street
- Not appropriate for roads with 85th percentile speeds of 45 mph or more
- Typically long enough for the entire wheelbase of a passenger car to rest on top or within limits of ramps
- Work well in combination with textured crosswalks, curb extensions, and curb radius reductions
- Can be applied both with and without sidewalks or dedicated bicycle facilities
- Typically installed along closed-section roads (i.e. curb and gutter) but feasible on open section



(Source: Google Maps, Boulder, Colorado)



(Source: Delaware Department of Transportation)

ITE/FHWA Traffic Calming EPrimer: https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm

Design/Installation Issues:

- ITE recommended practice – “Guidelines for the Design and Application of Speed Humps”
- Most common height is between 3 and 4 inches (reported as high as 6 inches)
- Ramps are typically 6 feet long (reported up to 10 feet long) and are either parabolic or linear
- Careful design is needed for drainage
- Posted speed typically 30 mph or less

Potential Impacts:

- No impact on non-emergency access
- Speeds reductions typically less than for speed humps (typical traversing speeds between 25 and 27 miles per hour)
- Speeds typically decline approximately 0.5 to 1 mph midway between tables for each 100 feet beyond the 200-foot approach and exit points of consecutive speed tables
- Average traffic volumes diversions of 20 percent when a series of speed tables are implemented
- Average crash rate reduction of 45 percent on treated streets
- Increase pedestrian visibility and likelihood of driver yield compliance
- Generally not appropriate for BRT bus routes

Emergency Response Issues:

- Typically preferred by fire departments over speed humps, but not appropriate for primary emergency vehicle routes; typically less than 3 seconds of delay per table for fire trucks

Typical Cost (2017 dollars):

- Cost ranges between \$2,500 and \$8,000 for asphalt tables; higher for brickwork, stamped asphalt, concrete ramps, and other enhancements sometimes used at pedestrian crossings



INDIANA LTAP

1281 Win Henschel Blvd, Suite 2111
West Lafayette, IN 47906

www.purdue.edu/inltap
inltap@purdue.edu
(765) 494-2164

