

Traffic Calming



Hamden, CT

January 27, 2010



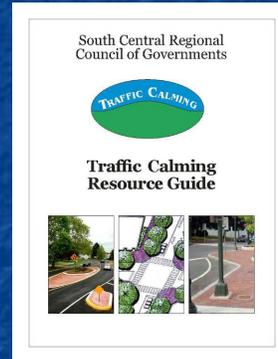
Presentation Outline

1. Traffic Calming Definition
2. **Traffic Calming Process**
3. Traffic Calming Measures



Who Are We?

- Fitzgerald & Halliday, Inc. (FHI)
 - Mary Manning and
 - Carla Tillery
- Traffic Calming Guide - South Central Regional Council of Governments (SCRCOG)



Did you know?

- The chance of a pedestrian being killed by an automobile accident increases from **5% at 20 mph** to **45% at 30 mph** and **85% at 40 mph.**

Source: Mean Streets - Pedestrian Safety and Reform of the Nation's Transportation Law, Environmental Working Group, Surface Transportation Policy Project., April 1997



What is Traffic Calming?

- The Institute of Transportation Engineer's (ITE) Definition:

The use of mainly physical measures to:

- Alter driver behavior
- Reduce the negative impacts of motor vehicle use
- Improve conditions for non-motorized street users



Traffic Calming



Traffic Calming Aims To:

- Strike a balance between the needs of the vehicle and all other uses along the street
 - Pedestrian and bicyclists
 - Adjacent property
- Create safe and attractive streets
- Improve quality of street environment



The Traffic Calming Project Process

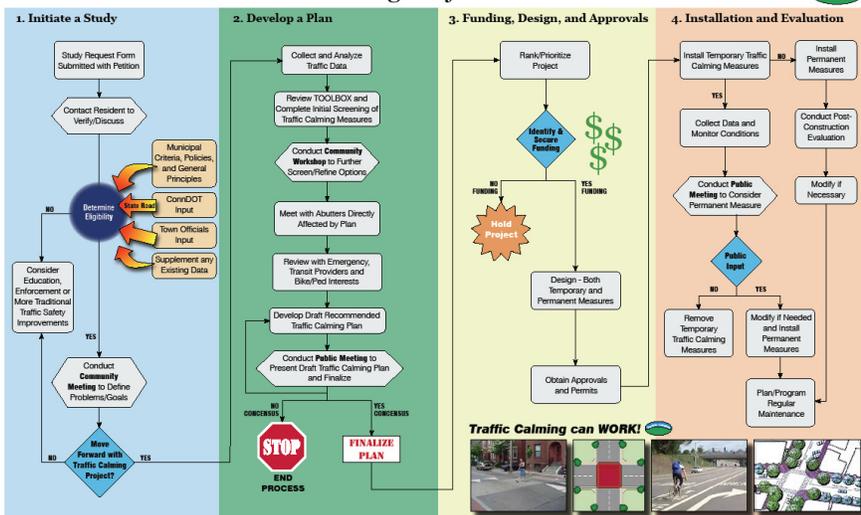


The Basic Steps

1. Initiate a study
2. Develop a plan
3. Funding, design, and approvals
4. Installation and evaluations



◆ The Process of a Traffic Calming Project...



Initiate a Study

1. Complaint or study request received (w/petition)
2. Determine eligibility - policies, data, input
3. Conduct public meeting to define issues and project goals - determine if traffic calming is appropriate approach



Develop a Plan

1. Collect data - volumes, speed, safety
2. Evaluate and screen available tools
3. Outreach with various stakeholders
4. Develop draft recommendations
5. Develop final plan



Traffic Calming Toolbox

Traffic Calming Tool	PROS	CONS	COMMUNITY FEEDBACK	COMMENTS
Enhanced signing and pavement markings	Heighten awareness Low cost – generally easy to install	Generally will not solve problem alone Additional maintenance Aesthetics	Residents strongly support enhanced signing and pavement markings, as well as increased police enforcement.	Consider immediate implementation.
Radar speed signs	Heighten awareness Low cost "Big Brother" Can move them around	Aesthetics How fast can I drive? Not typically permanent	Residents support radar speed signs.	Consider immediate implementation.
Entry islands	Physically narrows the pavement Gateway feeling – makes statement Aesthetics Pedestrian refuge Can try out with painted island	Small island due to 29' width Emergency vehicle access Aesthetics Potential parking loss Maintenance	There is support for an entry island at Second Avenue, but not at First Avenue. There is some concern that entry islands may make conditions more dangerous. Also, entry islands would have to be combined with other measures to slow speeds midblock.	Consider for implementation on E. Brown Street at Second Avenue in the short term. Not recommended for First Avenue intersection.



Funding, Design and Approvals

1. Rank/prioritize project
2. **Secure funding**
3. Complete design
4. **Obtain permits/approvals**



Installation and Evaluation

1. Install measures
 - If temporary: monitor effectiveness and seek additional public input - install permanently or remove
2. Conduct post-construction evaluation
3. Modify (if necessary)
4. Plan/program regular maintenance



Neighborhood Workshops

- **Workshop #1** - Discuss observations, issues and objectives
- **Workshop #2** - screening of strategies
- **Workshop #3** - present and discuss draft traffic calming plan



Traffic Calming Considerations

- Emergency Access/Response
- Maintenance
- Installation/Drainage
- Liability
- Aesthetics/Noise
- Costs
- Resident acceptance



Traffic Calming Toolbox - Basic Categories

1. Speed Control Measures
2. Volume Control Measures
3. Other Safety Enhancement

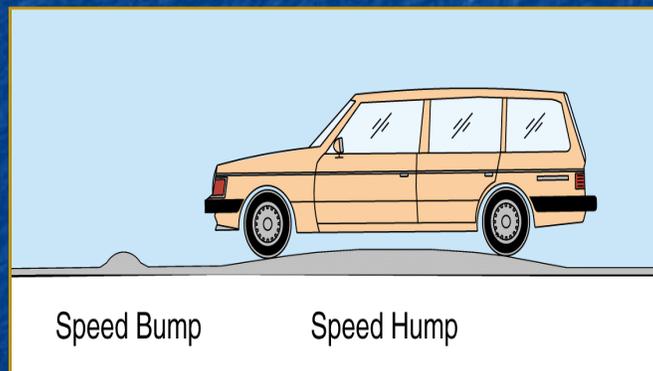


Speed Control Measures

- Speed humps/tables
- Raised/textured crosswalks
- Raised intersections
- Rumble strips
- Textured/colored pavement
- Narrowed lanes
- Neck downs/bulb outs
- Corner radii treatments
- Landscaping
- Gateways/visual cues
- Stationary radar signs
- Speed display board
- Pavement markings/edge treatment
- Signing



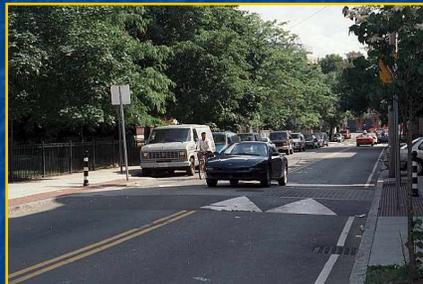
Speed Bump vs. Hump



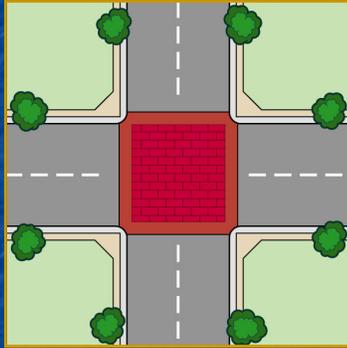
Speed Hump/Table



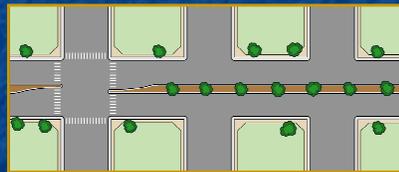
Raised Crosswalk



Raised Intersection

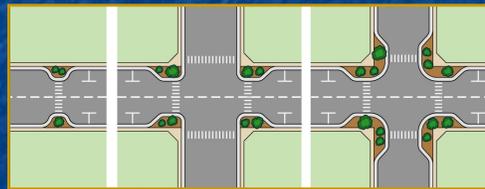


Median Treatment & Traffic Island

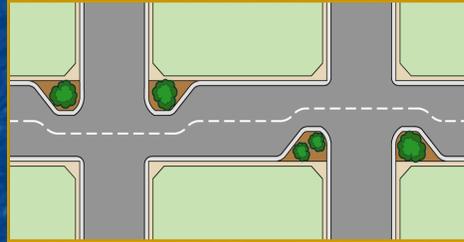




Neckdowns/Curb Extensions

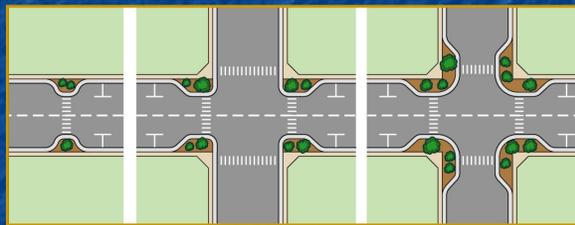


Chicane

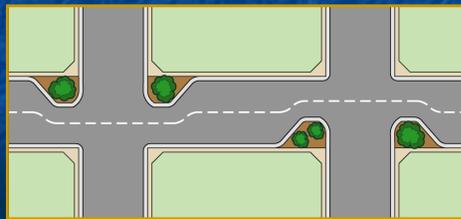


Chicane vs. Neckdown

Neckdown



Chicane



Road Narrowing



Textured/Colored Pavement



Traffic Circle



Roundabout



Gateways/Visual Ques



Radar Speed Sign





Volume Control Measures

- Turn restrictions
- One-way streets



Turn Restrictions/One Ways



Other Safety Enhancements

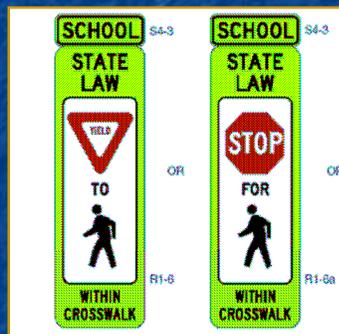
- Lighting
- Signing
- Pavement Markings
- Enhanced crosswalks
- Flashing beacons
- Pedestrian movement controls



Lighting



In Street Pedestrian Crossing Sign



Lime Green Crosswalk Sign



Pavement Markings



Enhanced Crosswalk



Crosswalk Beacon

Pedestrian Activated Crosswalk Beacon

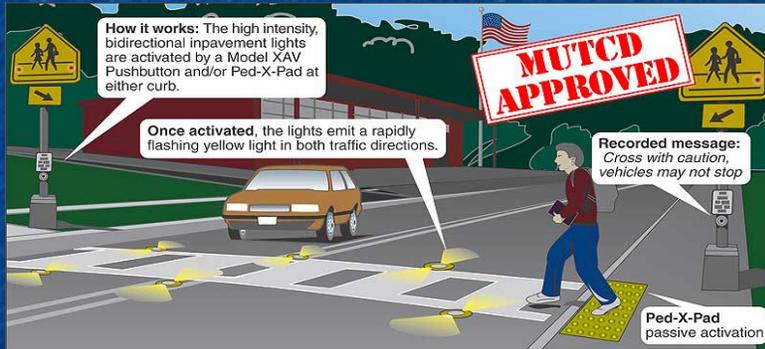
- Safe Pedestrian:** The beacon is designed to be activated by a pedestrian's weight, ensuring that only pedestrians can activate the beacon.
- Visible:** The beacon is highly visible to drivers, with a large, illuminated pedestrian symbol.
- Compliant:** The beacon is compliant with all applicable standards and regulations.
- Easy to Install:** The beacon is easy to install and maintain, with a simple, plug-and-play design.
- Long Life:** The beacon is designed to last for many years, with a long life expectancy.
- Low Cost:** The beacon is a cost-effective solution for improving pedestrian safety.

Products

- Back-to-Back Beacon Assembly:** This assembly consists of two beacons mounted on a single post, providing a clear view of the crosswalk from both directions of travel.
- Individual Beacon Assembly:** This assembly consists of a single beacon mounted on a post, providing a clear view of the crosswalk from one direction of travel.
- Standard Sign Post Assembly:** This assembly consists of a beacon mounted on a standard sign post, providing a clear view of the crosswalk from one direction of travel.
- Remote Transmitter:** This transmitter allows the beacon to be activated from a distance, providing a clear view of the crosswalk from a distance.



Lighted Crosswalk



Not Traffic Calming Tools



Traffic Calming Key Points

- Involves using a combination of traffic devices and strategies
- **Generally not a single magical solution**
- Often initially installed on a trial basis
- **Start somewhere**



Traffic Calming Tips

- Establish municipal process/policy - coordinator
- **Understand the problem**
- Look beyond the single road
- **Emergency access and maintenance**
- Involve the public/neighbors
- **Consider temporary treatment first**



Traffic Calming

