



Managing Traffic with Calming Devices

Laberge Group



ITE's definition of Traffic Calming.

The combination of mainly physical measures to reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users.



Do you have problems with...

- **Speeding?**
- **Excessive traffic volume in residential areas?**
- **Frequent accidents or “Danger Zones” for pedestrians?**
- **Cut-through traffic?**



What are your goals & objectives for traffic calming?

- Create safe & attractive streets.
- Reduce the number and severity of accidents.
- Reduce the negative impact traffic on the environment.
- Reduce vehicular speed & volume.
- Reduce cut-through traffic.
- Reduce the need for law enforcement.



When do you need to install traffic calming devices?

- **Desire to improve the local environment.**
- **You have community and government support.**
- **High number of complaints or requests from residents to reduce vehicular speed.**
- **Officials are willing to perform a comprehensive study addressing the direct/indirect impact of calming devices.**



Where should you apply the traffic calming devices?

- Residential Neighborhoods.
- Shopping & Business Districts.
- Near Schools, Parks and Recreational Areas.
- Only in areas with the support of local residents.



There are special considerations to think about.

- **Diversions.**
- **Availability of alternate routes.**
- **Impact on economic growth.**
- **Compliance with Master Plans & Zoning.**
- **Overall design standards.**

Most effective on roads designed for 25 -35 mph.



There are many types of traffic calming devices.

- Speed Humps 12-feet to 22-feet
- Entrance Treatments
- Diverters
- Median Barriers
- Cul-de-sacs
- Traffic Rotaries/Roundabouts
- Traffic Circles
- Choke Points
- Pedestrian Refuges/Slow points
- Curb Extensions
- Raised/Textured Crosswalks
- Striping





There are many types of traffic calming devices.

Speed Humps

- Humps versus Bumps.
- Effectiveness (Usually a 10 mph decrease).
- Placement.
- Cost.
- Advantages/Disadvantages.

Special consideration for emergency response routes must be taken.



There are many types of traffic calming devices.

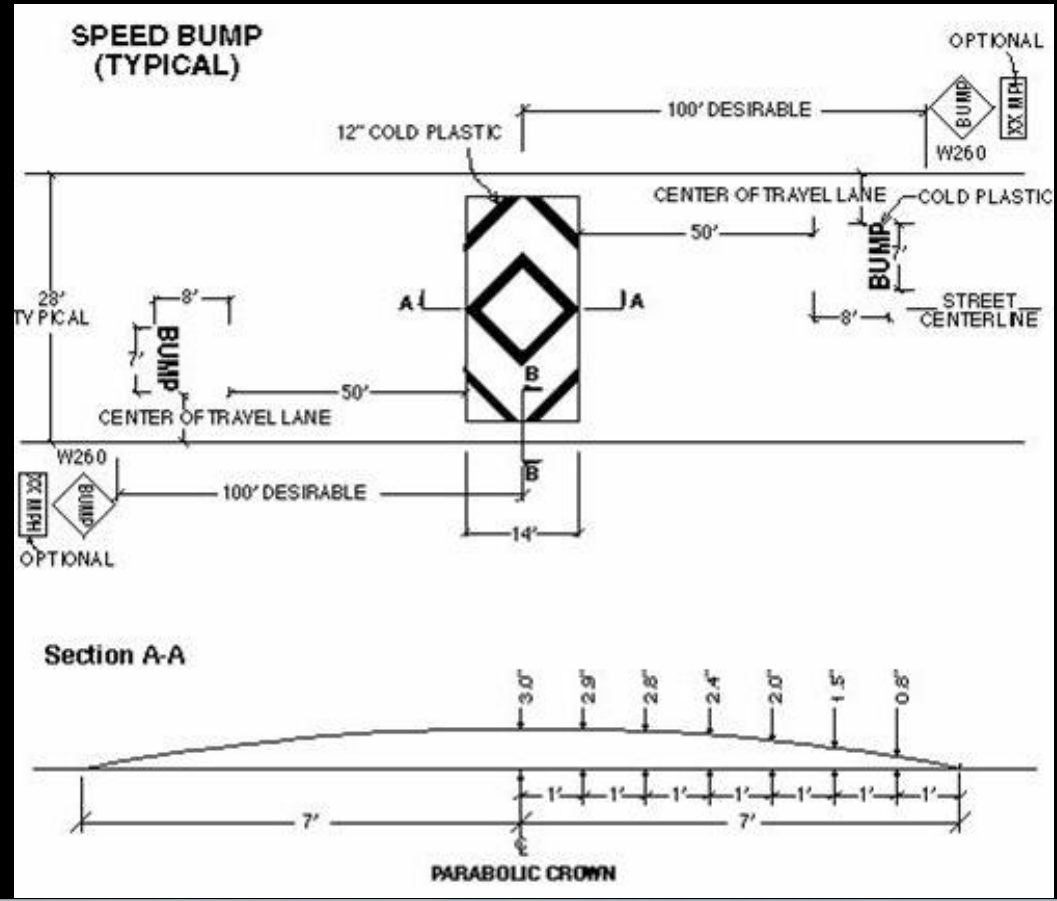
Findings





There are many types of traffic calming devices.

Design plans for 14-foot speed hump.





There are many types of traffic calming devices.

Chokers, Curb Extensions & Neckdowns

- Narrows lanes to slow speed of traffic.
- Improves ascetics of neighborhood when landscaped.
- Increases pedestrian safety.

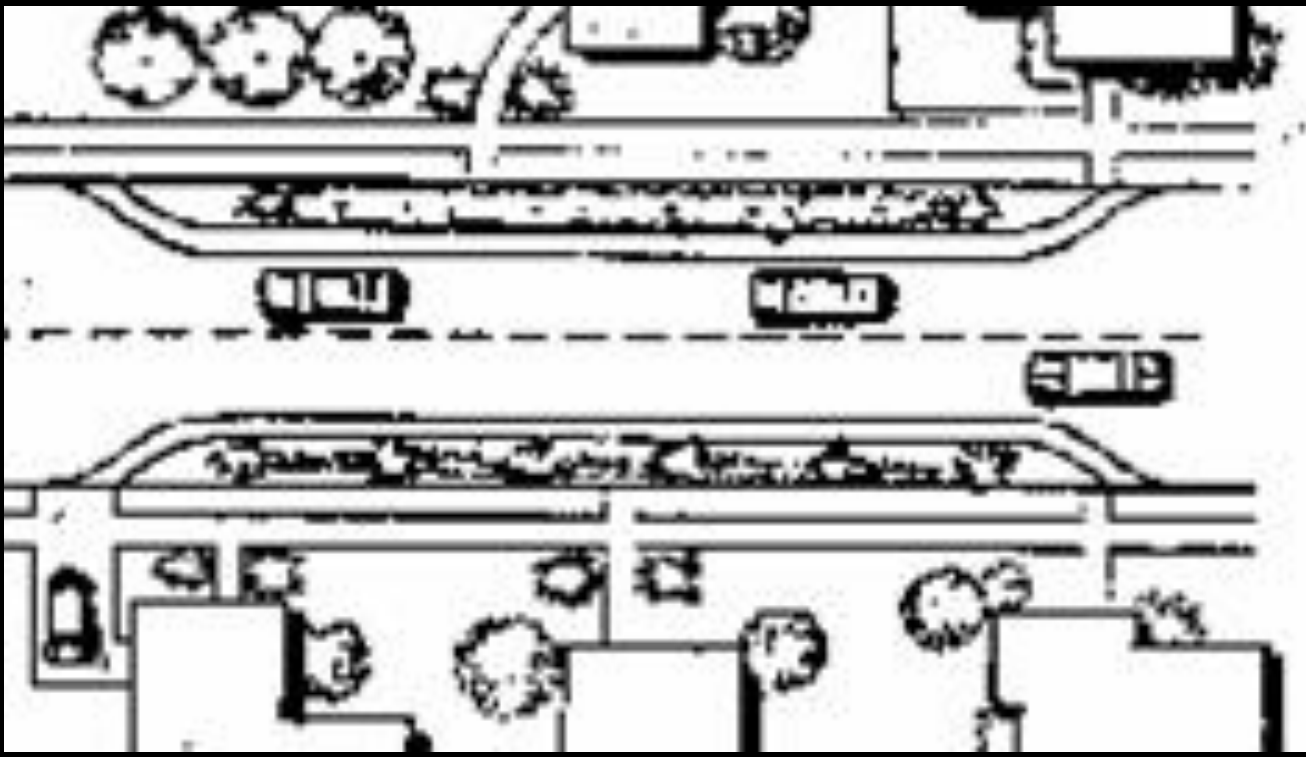
This type may reduce parking spaces.





There are many types of traffic calming devices.

Choker

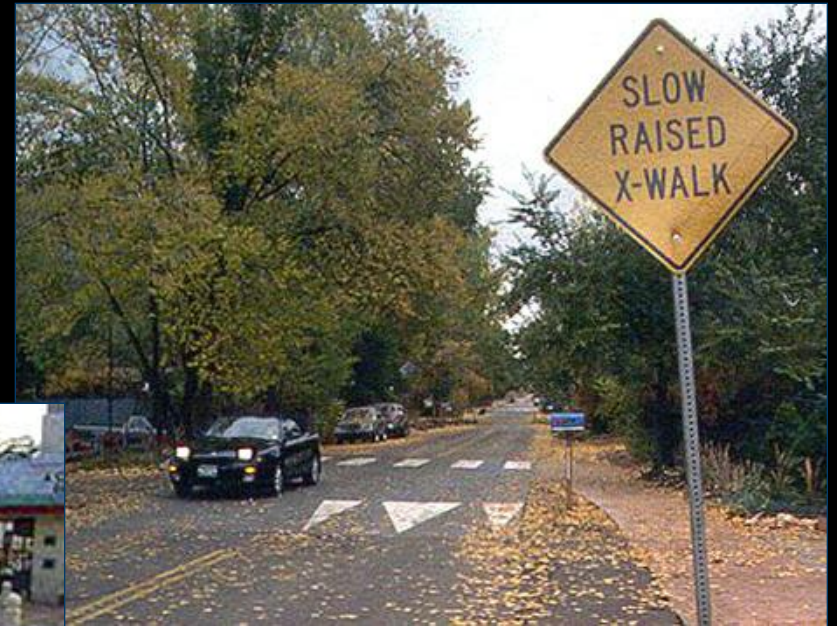




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Pavement Treatments

- **Textured or raised crosswalks**
- **Striping**
- **Rumble Strips**



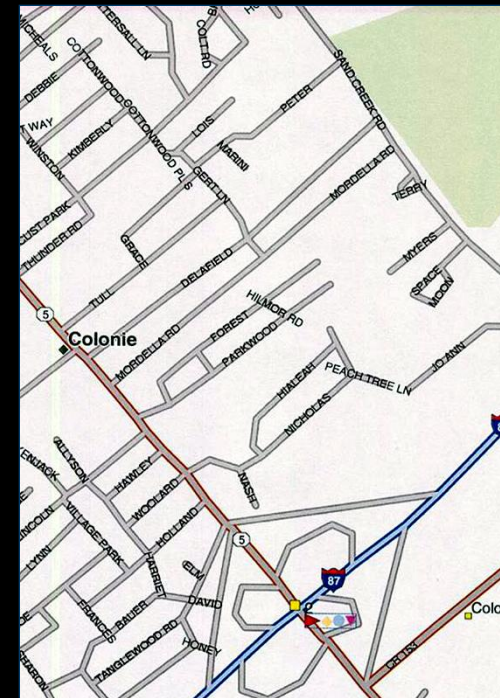


Case Study -Village of Colonie, New York

Major problems created by cut-through commuters.

Village began by Evaluating:

- Conversion to one-way streets.
- Closure/Signage.
- Traffic Circles.
- Curb Extensions.
- Humps.





Case Study -Village of Colonie, New York

Major problems created by cut-through commuters.

Village looked at the installation of speed humps.

- Project Specs.
- Timeframe.
- Cost.
- Impact.
- Process of alerting the community & building support.



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Delafield & Mordella





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Before

Street	Average WD Traffic	Poster Limit	85%	Average Speed
Delafield	1630	25 mph	40 mph	34 mph
Mordella	1450	25 mph	45 mph	35mph



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After

Street	Average WD Traffic	Poster Limit	85%	Average Speed
Delafield	1630	25 mph	40 mph	34 mph
	1096		30 mph	25 mph
Mordella	1450	25 mph	45 mph	35mph
	1205		29 mph	24 mph



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Results

- **Decreased the average speed by 10 mph.**
- **Significantly reduced traffic volume.**
- **Improved the safety and “quality of life” for local residents.**
- **NO difficulties with snow removal.**
- **Minimal impact on emergency response.**



Case Study -Village of Colonie, New York

The Village's special considerations where...

- Emergency response routes
Need support from emergency service providers
- Snow removal
- Impact on surrounding areas



Conclusion

These traffic calming devices are not a “cure all” for managing traffic and are in no way an alternative for law enforcement.

Municipalities need to have a comprehensive “traffic plan” and look at their entire network as an interdependent system.