

TCRPC

Planning Toolkit Fact Sheet



INTRODUCTION

Traffic calming is an umbrella term used for strategies and improvements designed to increase safety, livability, and quality of life by decreasing auto speeds and cut-through motor vehicle traffic, typically on local roads or arterials in downtown, urban settings. Applied to the road itself or the built environment along the road, traffic calming measures require drivers to slow their vehicles to acceptable speeds in order to avoid physical danger or psychological discomfort of all road users. Despite becoming more popular and accepted, traffic calming techniques require careful attention during the planning and construction phase to ensure maximum benefit to users and residents.

Traffic calming measures can either be operational adjustments to the road system or physical installations, with the most effective solutions often being a combination of both. Operational adjustments include things like increased or better signage to alert drivers to speed limits; pavement markings to decrease lane widths; and establishing a series of multi-way stop signs at previously unmarked intersections. Operational adjustments are cheap, quick and usually politically safe; however, they require enforcement and may not yield the fully desired results.

Physical traffic calming installments come in three types. Horizontal diversion, such as bulb-outs, chicanes and curb extensions which hinder the vehicle's ability to move in a straight line or squeeze lane widths to force a slower speed for comfortable travel.

Vertical deflection includes speed bumps, speed humps and raised sidewalks, all of which also require slower vehicle speeds. Finally, physical obstruction can divert unwanted traffic around the affected neighborhoods, or provide an obstacle requiring the motorist to slow down in order to safely bypass it. These include diverters, right-in/right-out islands and traffic circles. Physical installations tend to have better results but are more costly, can have unforeseen consequences and can be politically contentious.

Traffic calming measures can promote non-auto transportation modes not only by increasing bike/ped safety, but also by providing platforms for bike/ped facilities. For example, bulb-outs can serve to not only restrict lane widths that slow cars down, but also to decrease crossing distance for pedestrians. Another example is to use the plateau surface of a speed hump as a raised crosswalk.

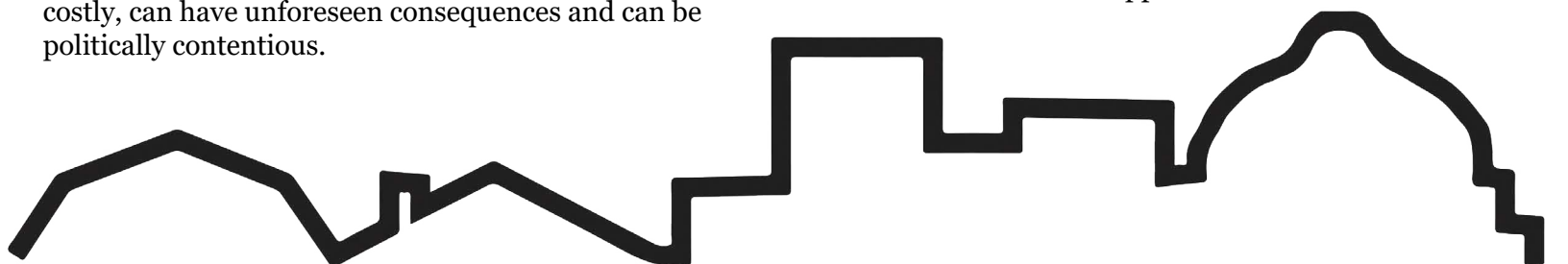
PennDOT has developed the "Traffic Calming Study and Approval Process", described in the Traffic Calming Handbook, to guide those interested through process of analysis, design, and approval necessary to successfully implement traffic calming techniques. If on a state road or using liquid fuels tax, state or federal funds, traffic calming must follow the process proscribed in PennDOT's Design Manual Part 1 and 1A and get approval from the local PennDOT engineering district. As with other transportation planning processes, public input represents a vital aspect of the project for both successful implementation and community buy-in.

BENEFITS

- Enhanced neighborhood safety and quality of life through reduced vehicular speeds
- Decreased vehicle noise in residential areas
- Promotion of alternative transportation modes

DRAWBACKS

- Considerable costs associated with some installation types
- Lengthy study and approval process for installations funded by liquid fuel tax, state or federal sources
- Unforeseen consequences of pushing traffic into other neighborhoods
- Pushback from unsupportive citizens



PRACTICAL TIPS

- Engage community members early in the process
- Consult MPO and PennDOT district engineers for design guidelines
- Identify funding sources and project priorities within the framework of the larger municipal budget

RESOURCES

PA Policy Examples

- **Borough of State College (Center County) Traffic Calming Guidebook**
- **Middletown Township (Bucks County) Traffic Calming Policy**
- **Schuylkill Township (Chester County) Traffic Calming Policy**

Supporting Documents

- **FHWA Traffic Calming e-Primer**
- **Institute of Transportation Engineers (ITE) Traffic Calming Resources**
- **US DOT Traffic Calming to Slow Speeds**
- **PennDOT Traffic Calming Handbook**
- **NACTO Speed Reduction Mechanisms**

RELATED TOOLKIT FACT SHEETS

- **Complete Streets**
- **Walkability**
- **Form Based Codes**
- **Transit-Oriented Development**

