



Borough of Chambersburg
Traffic Calming Policy
Parking, Traffic and Street Lights

Adopted March 8, 2010
Re-authorized February 8, 2021

Introduction

Speeding traffic is a major concern in the Borough of Chambersburg because of its detrimental impacts on the safety and livability of our streets.

Neighborhoods where speeding occurs experience unsafe conditions for pedestrians, bicyclists, and other drivers as well as negative environmental impacts such as noise.

The Institute of Traffic Engineers defines traffic calming as, "the combination of mostly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized users".

In plain English, traffic calming is building or retrofitting streets with certain features and characteristics that induce drivers to slow down and pay more attention to their surroundings.

Originally adopted in 2010, this document represents the local administration of a Commonwealth of Pennsylvania policy associated with the installation of physical improvements inside the right-of-way, in the traffic cartway, which if not done correctly, could create unintended and dangerous physical conditions. The Pennsylvania Department of Transportation has a similar policy and procedure for State-owned streets. This policy governs Borough-owned streets.

This policy does not apply and is not applicable to streets that are private, in the surrounding townships, or owned by the Commonwealth of Pennsylvania. This policy document represents the approved and adopted policy of the Town Council.

What Traffic Calming Is Not

Citizen complaints about speeding traffic are often accompanied by requests for new Stop signs, traffic signals, turn restrictions, speed limit signs and the like. These are not traffic calming devices, but rather regulatory traffic controls that are governed by the Pennsylvania Department of Transportation through an approval process that requires documented speed and engineering studies.

The Borough Highway and Engineering departments frequently receive requests for new Stop signs to "slow down traffic" and "improve safety" on a local street. Not only are Stop signs not a traffic calming measure, but research shows that installing unnecessary Stop signs can often result in more collisions and more speeding.

Another common traffic-related request involves the lowering of posted speed limits on streets. This is another regulatory control governed by the Pennsylvania Department of Transportation. Again, most research concludes that driver speed is less a function of posted speed limits and more a function of real or perceived driving conditions.

Suggesting Stop signs and speed limit changes is antithetical to the concept of traffic calming.

Unlike the aforementioned regulatory traffic controls that require some form of legal enforcement, traffic-calming measures are designed to be self-enforcing. Drivers are slowed down by the physical characteristics of the roadway, not by an artificially imposed speed limit or Stop sign.

Included herein are all the physical traffic calming methods acceptable to PennDOT. However, due to cost, maintenance, and design limitations, only certain changes will be permitted to reduce vehicle speed. Therefore, be cognizant that in many cases, only simple changes are practical to be installed. Even if the suggested site meets the criteria, budget can also be a factor in prioritizing installation.

Objectives of the Traffic-Calming Program

1. Improve the safety and livability of streets and neighborhoods by using appropriately designed and implemented traffic calming measures to mitigate the impacts of traffic while creating safer streets for motorists, pedestrians, and bicyclists;
2. Maintain a traffic calming project selection process guided by objective, needs-driven criteria to ensure that limited Borough resources are utilized in a cost-effective and efficient manner;
3. Implement traffic calming measures that are appropriate and effective for a given situation or street and improve public safety without jeopardizing emergency response needs, creating hazards or nuisances or impeding commercial truck routes;
4. Ensure that any proposed traffic calming installation has public support in the affected neighborhood before it is implemented;
5. Welcome citizen input and involvement in all phases of the program.

Goals

- (A) To design and construct physical improvements when the actual measured and engineered environment quantitatively demonstrates that such physical improvements are prudent, necessary, cost effective, and efficient in calming, slowing, or reducing the potential for a majority of vehicular drivers to be in accidents; and
- (B) To weigh carefully the cost and complexity of such physical improvements against valid and verifiable engineering and evidence rather than speculation, conjecture, and assumptions, which could lead to poorly designed, or dangerous, wasteful, and expensive installations, which could cause danger to the traveling public. **Remember, a traffic calming measure is not a guarantee that vehicular drivers will follow all traffic laws or that an accident will never occur.**

Process for Requesting, Initiating, and Implementing a Traffic-Calming Project on a Borough Street

To achieve the program objectives, the following process will be followed when considering requests for developing, designing, and implementing traffic calming measures:

1. A Traffic Calming Request application shall be submitted to the Highway Department secretary by a Borough resident, property owner, or business owner. If the street is a State or U.S. Route, the contact person noted on the form will be referred to the Pennsylvania Department of Transportation.

Please see below what is required to be included in a Traffic-Calming Request application.

2. The Highway Department secretary will present the traffic-calming request to the Mayor and Town Council for referral to the Parking, Traffic and Street Light Committee on an upcoming Council agenda. This referral is an important legislative step in the process.
3. The Mayor and Town Council may refer the traffic calming request to the Parking, Traffic and Street Light Committee by majority vote; or if it fails, the process is concluded.

4. Staff will present the traffic-calming request to the Parking, Traffic and Street Light Committee. Residents and property or business owners in the affected neighborhood will be mailed a meeting notice of the public meeting where the request will be discussed.

If recommended by the Parking, Traffic and Street Light Committee, the Engineering Department will conduct an assessment and recommendation for various traffic calming measures based on the request as well as information gathered at the committee meeting. **It should be noted that for any projects that involve State or Federal funding, including liquid fuels projects, the processes outlined in PennDOT's Design Manual Part 1 and 1A must be followed.**

If not recommended, the Highway Department secretary will send written correspondence to the contact person noted on Traffic Calming Request regarding the committee decision not to conduct an assessment and recommendation for traffic calming measures.

5. When the assessment is finished, the Engineering Department assessment and a recommendation for traffic calming measures, if supported, will be presented to the Parking, Traffic and Street Light Committee at an upcoming meeting. Residents, property or business owners in the affected neighborhood will be mailed a meeting notice.

The Parking, Traffic and Street Light Committee will make a recommendation to the Mayor and Town Council based on the Engineering Department assessment and any recommendation for traffic calming measures, if a consensus is reached on the appropriate installation.

6. Based on the Parking, Traffic and Street Light Committee recommendation, the Mayor and Town Council will decide whether the project should proceed as recommended by the committee, as recommended with additional or subtracted measures as determined by the Mayor and Town Council or in opposition to the recommendation of the committee.

Town Council can use a number of criteria in making their decision including the cost of the proposed installation, the timing of and prioritization of other capital improvements, as well as the potential unintended impact of the recommendation on the traveling public.

The Highway Department secretary will send written correspondence to the contact person noted on Traffic Calming Request regarding the Mayor and Town Council decision and timeframe for implementation, if applicable.

It is acceptable for the improvement to be added to the long-range transportation improvements project list rather than merely undertaken immediately.

7. The Engineering Department will conduct an evaluation of the implemented traffic calming measures within 12 months of installation and provide a report to the Parking, Traffic and Street Light Committee.
8. If recommended by the Parking, Traffic and Street Light Committee, adjustments to the traffic calming measures will be presented to the Mayor and Town Council. Residents and property or

business owners in the affected neighborhood will be mailed a meeting notice.

9. Based on the Parking, Traffic and Street Light Committee recommendation, the Mayor and Town Council will decide whether adjustments to an existing traffic-calming measure will be made after installation.
10. The Engineering Department will maintain a map depicting the location of all traffic calming measures approved by the Mayor and Town Council.

Submission of Traffic-Calming Project Request Application

A traffic-calming project request application must be submitted to begin the evaluation process.

The request application must be complete and contain all the required attributes to be evaluated.

A Borough clerical employee will be assigned to be the gatekeeper for application submissions.

One resident, property or business owner must sign the request and serve as the contact person for the request.

The contact person must secure signatures from at least 50% of the residents, property or business owners of a given neighborhood. **The Borough will work with the applicant to provide a mix of handwritten surveys, emails of support, or other digital communication, but a survey continues to be a required step.** Finally, it is up to the applicant to disseminate the survey information (i.e. door-to-door, via telephone, or by sending postcards in the mail), and to solicit a response to the Borough of Chambersburg.

A neighborhood is defined as all residents, property or business owners that have driveway access to the street being considered for traffic calming measures between the nearest intersecting streets. For example, if the request is for the installation of a measure at the intersection of King Street and N. Sixth Street, the neighborhood would be measured as one block north, south, east, and west of that proposed intersection.

Only if there is explicit interest of 50% of the residents, property, or business owners of the proposed neighborhood, will the application be evaluated.

In the end, the Parking, Traffic, and Street Lights Committee will be the sole arbiter of whether the neighborhood has expressed sufficient interest.

Please note that Pennsylvania State Law permits the municipality to assess the cost of installation of traffic improvements on a per linear foot basis to the adjacent property owners where a traffic improvement is installed. It is therefore possible that Town Council will levy a one-time assessment to cover the cost of such a traffic improvement on the surrounding property-owners.

A copy of the Traffic Calming Request form is included as an attachment

Borough of Chambersburg
Traffic Calming Installation Request Application

A Borough resident, property or business owner must complete and sign this form and serve as the contact person for the request. Each request will be considered separately.

Name of applicant/point of contact: _____

Mailing address of applicant: _____

Are you? ___ Resident of the Borough ___ Property Owner ___ Business Owner in the Borough

Please list the street address for a mid-block installation or the intersection requested for installation:

What time of day/day of the week, do you notice the most issues?

Which of the following best describes your concerns?

___ speeding ___ aggressive driving ___ ignoring signs/signals ___ commercial vehicles ___ other:

Has the situation changed, worsened? ___ yes ___ no ___ I do not know

Does the situation impact any of the following:

___ pedestrians ___ bicyclists ___ schools ___ school bus stop(s) ___ senior living ___ hospital(s) ___ other:

Signature: _____ date: _____

Print Name: _____

The contact person must secure signatures from at least 50% of the residents, property or business owners of a given neighborhood. A form is provided.

A neighborhood is defined as all residents, property or business owners that have driveway access to the street being considered for traffic calming measures between the nearest intersecting streets.

Return the completed forms to:

Borough of Chambersburg
Highway Department
100 South Second Street
Chambersburg, PA 17201
charr@chbgboro.com

Date received: _____ Received by: _____

Traffic Calming Request Neighborhood Support Signatures

Please make additional copies if necessary. OK to substitute emails in support of application with information included in each email of support.

No.	<u>Printed Name</u>	<u>Street Address</u>	<u>Contact Phone/Email</u>	<u>Signature</u>
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

Engineering Department Assessment

The Engineering Department will conduct an assessment that includes the information listed below to determine whether traffic calming measures are needed based on the Traffic Calming Request Form.

1. Total volume. Total traffic volume on the study street will be measured for a period of 7 consecutive days in both directions.
2. Average daily traffic (ADT). The ADT should exceed 250 vehicles for the street to be considered for traffic calming.
3. Average speed. When speeding is the primary concern, the average speed should exceed 10 mph over the posted speed limit before traffic calming is considered. Further, the 85% percentile of speed must exceed the posted speed by a minimum of 10 mph in at least one direction of traffic.
4. Crashes. Crash data on the study street for the most recent three years. Major incidents with injury and/or towing of vehicles without the mitigating factor of driving under the influence must exist.
5. Facilities. Location of schools, public facilities such as parks or community centers and/or commercial uses with pedestrian and/or vehicle access to the study street.
6. Sidewalks. Location of sidewalks along the study street. Absence of sidewalks likely invalidates the need for traffic calming to protect pedestrians. In every case, a sidewalk is a more preferred option to a traffic-calming device.
7. Proximity in feet to key intuitions: day care centers, schools, clinics, hospitals, senior living homes, and other destinations with intensive pedestrian uses.
8. Adjacent streets. Determine if the increased traffic or speed on the study street is related to poor traffic conditions on adjacent streets. Adjacent streets that accommodate vehicle weight restrictions, truck or emergency routes or other variables should be evaluated to determine whether they contribute to the increased traffic or speed on the study street.
9. Deficiencies on the adjacent streets should be addressed in conjunction with recommendations for traffic calming on the study street.
10. If the assessment includes a recommendation for traffic calming measures, cost estimates will be provided along with availability of funding in the current Borough budget and a timeframe for implementation.
11. The Engineering Department will coordinate assessment review with the Police Department, Fire Department and any other necessary Borough departments to secure comments or recommendations to be incorporated into the assessment to be presented to the Parking, Traffic and Street Light Committee.
12. The assessment includes consideration of the Institute of Traffic Engineers Traffic Calming Practice Revised publication, as amended from time to time, and Pennsylvania's Traffic Calming Handbook published by PennDOT, as amended from time to time.

Project Points System

A points system will be used to determine the score that will be used to consider what type of traffic calming design measures should be incorporated for the project.

Criteria	Points	Basis for Point Assignment
Volume	0 to 30	Average daily traffic, 1 point assigned for every 100 vehicles to maximum of 30 points.
Speed	0 to 30	Average speed, 15 points if the average speed exceeds the posted speed limit by 10 mph. 15 points if the 85% percentile of speed exceeds the posted speed limit by 10 mph in either direction.
Crashes	0 to 10	1 point for every major crash reported within past 3 years.
Schools	0 to 10	1 point assigned for each school-crossing crosswalk on the study block.
Pedestrian Generation	0 to 10	1 point assigned for each public facility such as parks or community centers and/or commercial uses that generate a significant number of pedestrians on the study block.
Pedestrian Facilities	0 to 10	5 points assigned if there is a continuous sidewalk on one side of the street; 10 points if the network connects beyond the location.
Total Points	100	Maximum

Traffic Calming Design Measures

The project score will be used to determine the type of traffic calming design measures to be incorporated when making a recommendation to the Parking, Traffic and Street Light Committee.

0-15 Points - No traffic calming measures needed.

15-40 Points - Police Department speed enforcement.

40-65 Points - Lowering posted speed limit, increased signage, painted crosswalks and/or painted lines to narrow the street corridor.

65-85 Points – All the above and continue observation for one (1) year.

85-100 Points - Install any one (1) of the authorized traffic-calming devices should Town Council approve.

Descriptions and examples of these measures are included as an attachment from PennDOT.

Pennsylvania Department of Transportation Possible Traffic Calming Installations

The following are the only permitted installations that may be approved for Borough streets if qualified.

The enclosed publication are the rules from PennDOT for the installation of devices on State-owned streets.

The same devices are the only devices permitted on Borough-owned streets.

The criteria for installation and the process for request should follow the Borough policy for Borough-owned streets.

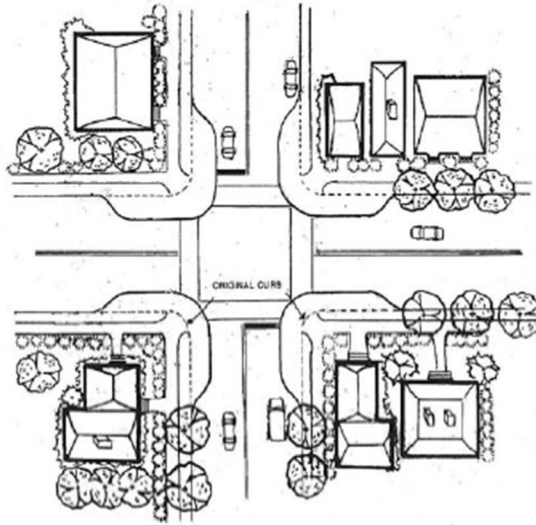
CURB EXTENSIONS / BULB-OUTS

Description:

Curb extensions, sometimes referred to as bulb-outs, are areas of expanded curbing.

Appropriate Locations:

- ❑ Appropriate for all street classifications: local roads, collectors, and arterials.
- ❑ Many jurisdictions extend the curb only 6 feet from the existing curb, which protects parked vehicles, improves pedestrian visibility, and minimizes crossing distance, but does not typically affect the speed of motorists. For extensions that do not result in narrowing of the travel lanes, usage on streets of up to 15,000 ADT with posted speeds up to 40 mph is appropriate.
- ❑ Works well in downtown areas.
- ❑ Primarily used at intersections.
- ❑ Can be used at mid-block locations with significant pedestrian activity, school children, or senior citizens. Mid-block curb extensions may also be used to address speeding on streets where speed humps are not permitted.



Typical Uses:

- ❑ Reduce the crossing distance for pedestrians.
- ❑ Improve the line-of-sight for pedestrians.
- ❑ Make pedestrians more visible to oncoming traffic.
- ❑ Slow traffic by funneling it through a narrower street opening.
- ❑ Slow vehicles making a right turn by reducing the curb radius.

ON-STREET PARKING

Description:

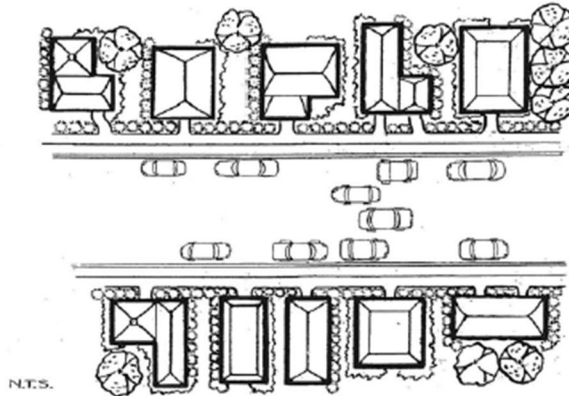
Parking on one or both sides of the roadway which has the effect of reducing the roadway width. By law, on-street parking is permitted unless otherwise prohibited.

Appropriate Locations:

- ❑ On-street parking may be appropriate for all classifications of streets.

Typical Uses:

- ❑ Reduce vehicle speeds by reducing the effective width of the roadway.



TRAFFIC CIRCLES

Description:

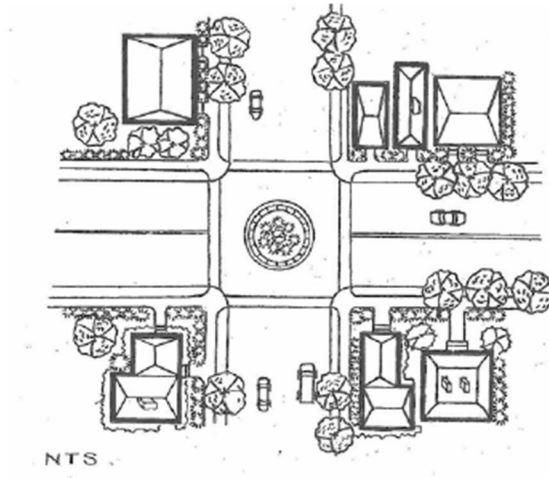
Traffic circles are raised islands located in the center of an unsignalized intersection. All traffic must negotiate the circle and circulate in a counterclockwise direction. When yield signs are used on each approach, traffic must yield to vehicles within the circle.

Appropriate Locations:

- ❑ Traffic circles are appropriate at intersections of local streets without high pedestrian or left-turning volumes.
- ❑ The ADT volumes on each local street should not exceed 3,500.

Typical Uses:

- ❑ Slows vehicles due to the horizontal deflection, and through the motorist ability to break up line of sight (when appropriately landscaped).



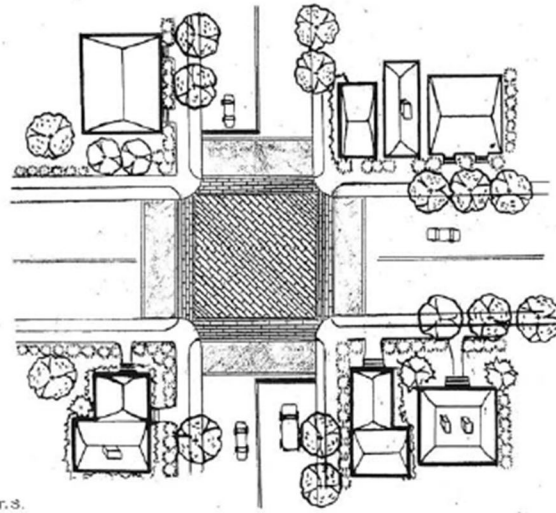
RAISED INTERSECTIONS

Description:

Intersections, including crosswalks, which are raised 3 to 6 inches above street level. Long ramps are included on all approaches.

Appropriate Locations:

- ❑ Commonly found in commercial areas and business districts with high pedestrian activity.
- ❑ Sometimes used in redevelopment areas with an emphasis on neo-traditional design.
- ❑ They are appropriate on local streets and collectors.
- ❑ They are generally not recommended for arterials. However, they may be used very selectively on arterial streets in downtown commercial areas as part of a redevelopment effort where there is support for encouraging pedestrian activity. If used in this manner, coordination with emergency services will be important.
- ❑ They are appropriate on streets with volumes up to 10,000 ADT.



Typical Uses:

- ❑ Reduce vehicle speeds on all approaches.
- ❑ Decrease conflicts between vehicles and pedestrians by better demarcating crossing areas and elevating pedestrians above the street.

Raised Crosswalks

Description:

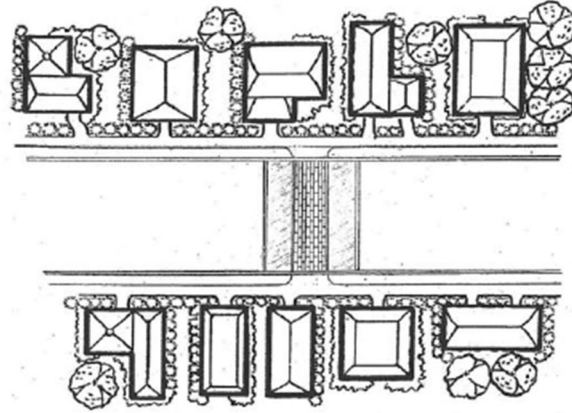
Raised crosswalks are marked and elevated pedestrian areas that are an extension of the sidewalk at mid-block locations or intersections. Raised crosswalks are typically 3 to 6 inches above street level. In many jurisdictions, raised crosswalks are level with the curb, about 6 inches above the street. They often have the same profile as the Seminole County speed hump.

Appropriate Locations:

- ❑ They are appropriate on local streets and minor collectors at intersections, with volumes less than 10,000 vehicles per day.
- ❑ Placement of mid-block crosswalk for consideration should follow the MUTCD recommended guidelines.

Typical Uses:

- ❑ Reduce speeds and improve visibility of the pedestrians by defining crossings.

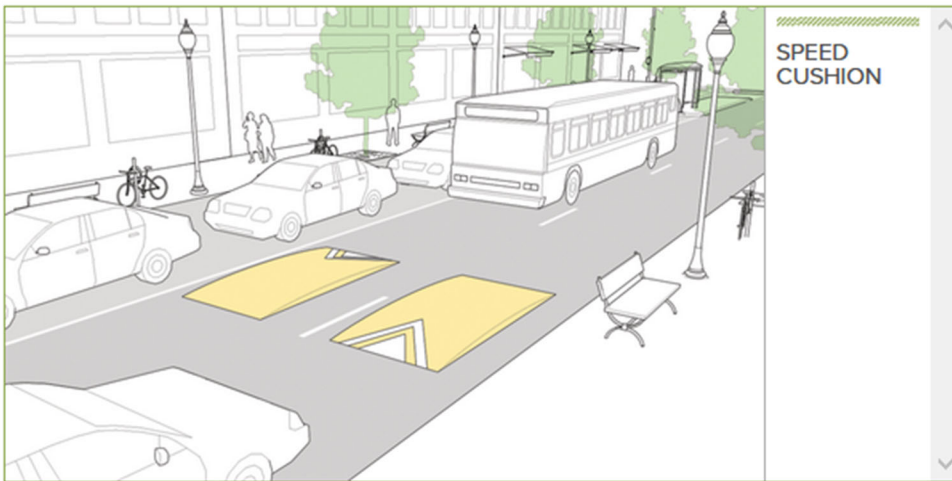




Speed Cushion

Speed cushions are either speed humps or speed tables that include wheel cutouts to allow large vehicles to pass unaffected, while reducing passenger car speeds. They can be offset to allow unimpeded passage by emergency vehicles and are typically used on key emergency response routes.

Speed cushions extend across one direction of travel from the centerline, with longitudinal gap provided to allow wide wheel base vehicles to avoid going over the hump.



Speed cushions allow emergency vehicles to pass their wheels on either side of the raised area.



Borough Approved Design Elements

Centerline Striping: Centerline striping is primarily used for residential streets without existing centerlines. In many cases, a centerline stripe can be effective in channeling traffic and thereby reducing speeds. There are also other specialized striping techniques that can be used to draw attention to lane markings, such as the addition of reflective pavement markers where appropriate.



Edge Line Striping: Edge line striping is also effective in residential areas to narrow the lanes and/or provide additional delineation for other uses. Reducing the lane width has the potential for reducing speed by creating a narrower traffic lane. The area between the edge of the road and the lane marking can often be used for parking or as a bike lane, depending on the resulting shoulder width.



Borough Approved Design Elements

Enhanced Crosswalks: At high volume pedestrian crossings, striped crosswalks might be appropriate to channelize pedestrians and notify motorists of pedestrians crossing the street. Crosswalks alone may not provide the desired level of protection or call sufficient attention to a pedestrian to allow them to safely cross the street. Depending on the need, there are a variety of crosswalk options that may be used at intersections to identify the safest place to cross. These includes enhanced diagonal ladder-style striping and possibly the use of textured pavements to increase the visibility by the motorist and encourage slowing down.



STATE APPROVED DEVICES AND GUIDELINES

Pennsylvania's Traffic Calming Handbook

PennDOT Publication #383, as may be amended from time-to-time

For State Highways and State-owned streets