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TRAFFIC CALMING POLICY
(Revised January 31, 2017)

SUMMARY

Traffic calming measures may be appropriate in Maplewood Township where there is a documented need to:

- Reduce neighborhood cut through traffic
- Reduce traffic speeds through neighborhoods
- Accentuate pedestrian or bicycle use
- Control intersection traffic flow

The traffic calming policy provides guidelines for the following activities:

- Requests for traffic calming consideration
- Documentation of traffic calming
- Identification and approval of traffic calming strategies
- Programming of traffic calming improvements
- Design of traffic calming projects
- Evaluation of traffic calming projects

INTRODUCTION

This policy addresses a procedure through which neighborhood and public requests can be considered for filtering external traffic through traffic calming measures. Traffic calming is the management of traffic through the use of roadway design features. Management of traffic can include grouping traffic, diverting traffic, altering speeds, and encouraging a change of emphasis in transportation mode. Traffic management through traffic calming is most effective if the features are both *warranted* and *properly designed*.

Traffic calming solutions may be warranted where there is a demonstrated need for traffic calming, and where solutions can be identified that will address the need. The needs to manage traffic through traffic calming devices might include the following:

- Reduce neighborhood cut through traffic
- Reduce traffic speeds through neighborhoods
- Accentuate pedestrian or bicycle use
- Control intersection traffic flow

Not only must the needs be perceived by the neighborhood, but they must also be documented to be substantive. In order for traffic calming strategies to be effective, traffic data collection and analysis must validate that calming needs are legitimate. These traffic studies may include:

- Speed studies
- Vehicle and pedestrian counts
- Through-traffic surveys
- Accident records
- Intersection capacity analysis

Effective solutions for valid needs also require that the selected traffic calming strategy be appropriate for the need, e.g., a strategy to reduce traffic speed and not to divert traffic should be used if the documented problem is excessive speed.

Once an effective strategy for traffic calming has been selected, it should be properly designed in accordance with the relevant design parameters. These should include consideration of:

- Local, County, state and Federal Standards
- Traffic volume
- Design speed
- Americans with Disabilities Administration (ADA) compliance
- Design vehicle characteristics
- Manual on Uniform Traffic Control Devices (MUTCD)
- American Association of State Highway and Transportation Officials (AASHTO)

Although warranted and properly designed traffic calming strategies can have the desired benefits of managing traffic, they also can create disadvantages to adjacent streets and neighborhoods and to the traveling public at large. Traffic calming could have the potential of shifting an existing traffic problem to another street or neighborhood. Traffic calming may also increase delay for emergency response vehicles, and can increase long term maintenance costs for the Township. Because of the controversy and potential disadvantages, traffic calming should be implemented only with the majority consent of those directly impacted.

This policy therefore provides guidelines for the following traffic calming activities:

1. Requests for traffic calming consideration
2. Documentation of traffic calming need
3. Identification and approval of traffic calming strategies
4. Programming of traffic calming improvements
5. Design of traffic calming projects
6. Evaluation of traffic calming projects

REQUESTS FOR TRAFFIC CALMING CONSIDERATION

Traffic calming consideration can be initiated in two ways:

1) Township staff or representatives may initiate a study to verify if traffic calming is appropriate to solve a specific concern with respect to traffic, pedestrian, or bicycle safety or operations. This concern may be identified through staff monitoring.

2) Adjacent property owners may initiate the request for a traffic calming. This may be initiated upon receipt by the Township Engineer of a Traffic Calming Petition developed by the Township signed by at least one member of seventy-five percent (75%) of the property ownerships facing the street(s) on which the traffic calming is requested. The

Engineering Department shall develop this standard Traffic Calming Petition that would describe potential traffic calming measures to be considered (i.e., traffic striping, speed bumps, traffic signage, etc.). This petition would also describe the potential for these traffic calming measures to be installed in the street in front of the residents' properties and that there is no guarantee that traffic calming will definitely be implemented, since it depends on the results of the traffic study. The petition would also have space for the residents to fill in a description of the street or streets which are being requested for study. Signatures from residents will serve as their acknowledgment to what is outlined in the petition. Residents after reading the disclosure will need to provide contact information so they can be reached and contact as necessary.

A block shall consist of every developed property having frontage on the street to be studied between successive intersecting streets. Where more than one person is listed as owner for each property, only one person shall be entitled to vote or sign a petition. Likewise, if multiple properties are owned by the same person or persons, the owner(s) will only be entitled to one vote or signature on the petition. This definition of property owner shall apply throughout this policy document.

The Township staff will review the petition for validity. The Township Engineer will assess whether other streets may be impacted by implementation of traffic calming strategies. The Township Engineer will also define the area of potential impact resulting from the traffic calming implementation on a case by case basis.

2. DOCUMENTATION OF TRAFFIC CALMING NEEDS

All valid traffic calming requests shall be studied and address at a minimum the following issues:

- Traffic speed
- Traffic volume
- Through-traffic
- Accident experience
- Vehicle-pedestrian conflicts
- On-street parking

Other issues that may need to be addressed include:

- Purpose of the study
- Emergency vehicle response
- Improvement maintenance
- Physical and operational conditions of the street(s)
- Impacts to other streets

Township staff shall be responsible for conducting traffic calming studies in accordance with these guidelines under the supervision of the Township Engineer. If the Township Engineer so elects and the Township Committee approves, the study may be outsourced to a qualified traffic Engineering Consultant. It is estimated that a typical traffic calming study will require up to 90 days to complete. The traffic data that will be required will include:

- 48 hour directional traffic counts (conducted by police)
- Review of three years' accident records at the subject location (conducted by police) or as long as police records exist if less than 3 years.

A rating system will be utilized to compare competing local traffic calming projects. Table 1-1 provides rating criteria for local streets, and Table 1-2 provides rating criteria for collector streets.

Table 1-1 Local Streets Rating Criteria*

Criteria	Points	Basis
Speed	0 to 45	5 pts assigned for every mph greater than 5 mph above the posted speed [(85th percentile speed limit** – 5 mph – posted speed limit) x 5 pts]
Volume	0 to 20	ADT*** divided by 100
Traffic Accidents	0 or 5	1 pt for each accident/year at one location
School Crossing	0 or 10	10 pts if children must cross street to get to school
Engineering Judgment	0 to 20	Judgment of Engineer based on site conditions
Total Points Possible	100	

*** ADT = Average Daily Traffic

Table 1-2 Arterials & Collector Streets Rating Criteria*

Criteria	Points	Basis
Speed	0 to 25	5 pts assigned for every mph greater than 5 mph above the posted speed [(85th percentile speed limit** – 5 mph – posted speed limit) x 5 pts]
Volume	0 to 15	5 pts for every 1,000 ADT*** on any one street (based on <4,000 ADT***)
Traffic Accidents	0 to 15	1 pt for every 2 accident/year at one location
Residential Density	0 to 10	1 pt for every 50 dwelling units/mile
School Crossing	0 or 10	10 pts if children must cross street to get to school
Pedestrian Generators	0 or 5	5 pts if pedestrian generator
Engineering Judgment	0 to 20	Judgment of Engineer based on site conditions
Total Points Possible	100	

* Road classifications shall be those shown on the adopted Township Master Plan.
** Speed at or below which 85% of vehicles drive unaffected by other traffic or weather.
*** ADT = Average Daily Traffic

A traffic calming study must score a minimum of 50 points in order to be considered for traffic calming improvements. These scores will be used to compare competing local traffic calming projects based on available funding.

3. IDENTIFICATION OF TRAFFIC CALMING STRATEGIES

The Township Engineer and his staff will analyze the traffic data and site conditions to determine which traffic calming strategies would be appropriate and effective for the subject street(s). Once the most appropriate potential traffic calming strategy is identified, the Township Engineer shall present the strategy to the Engineering, Public Works & Planning Committee (EPWP) for approval.

4. PROGRAMMING OF TRAFFIC CALMING IMPROVEMENTS

Township staff will prioritize those traffic calming strategies within the Township that have been approved within their area of impact. Prioritization will be based on the rating criteria summary and evaluation against other Township project funding needs. The Township will program priority traffic calming improvements within the capital improvement budget specifically for traffic calming and road improvements, as approved by the Township Committee. Subject to available funding, those traffic calming improvement locations not selected will remain in consideration for the following years.

5. DESIGN OF TRAFFIC CALMING PROJECTS

The design of traffic calming devices must meet the following criteria:

- The posted speed may not be more than thirty (30) miles per hour
- The street shall have an Average Daily Traffic (ADT) of less than 4,000
- Limited to streets having only one lane of through traffic in each direction
- Streets must not be primary emergency routes
- At the discretion of the Township Engineer, certain traffic calming measures may not be used if they would create an unsafe condition for motorists driving at normal speeds under average driving conditions
- Streets must not be through truck routes unless an acceptable alternative route is identified and approved. Design of traffic calming features shall accommodate a single unit truck
- Design must be in accordance with applicable standards

6. IMPLEMENTATION

Prior to implementation of the traffic calming measure, a letter shall be distributed to the residents affected by the traffic calming measure. The letter shall describe the measure selected by the Township Engineer and generally describe the impacts to the affected streets/residents. This may include types and locations of the traffic calming measures, and describe their potential impacts to residents.

The Township will conduct a public meeting to review the traffic calming measure with the residents and provide them the opportunity to comment. Said meeting will be publically advertised on the Township website and local paper. The Township will consider comments by residents and make best efforts to address their concerns.

Once it is determined the best traffic calming measure has been design and properly vetted to the public, it will be implemented. The Township will schedule the improvements in accordance with all required laws and regulations.

7. EVALUATION OF TRAFFIC CALMING PROJECTS

Six months following the completion of the traffic calming improvements, the Township staff will undertake a follow-up study to determine if the traffic calming features have achieved the initial purpose of the project. If unacceptable impacts are identified, corrective measures may be taken.

Traffic calming measures may be removed after the evaluation period for any of the following reasons:

- Emergency response is significantly impacted.
- The problem for which the traffic calming was implemented has been transferred to another street.
- At least sixty percent (60%) of the property owners in the defined area of impact sign a petition to remove the traffic calming measures. Once this petition is presented to the Engineering Department, the Township Engineer will conduct a study to determine if the implementation of the traffic calming measures has adversely affected the neighborhood and will require improved measures or complete removal. This procedure for removing traffic calming devices will not be considered for a minimum of three years following completion of the construction.

*** TRAFFIC CALMING PETITION ***

Please read the following Frequently Asked Questions before signing the petition.

A. What is Traffic Calming?

Traffic calming is the management of traffic tendencies/patterns by controlling vehicle speed and volume through the use of road design features such as speed humps/bumps, signage, striping, road narrowing/diet, use of pavement treatments/products, lighting, etc.

B. In what ways can traffic be managed?

Management of traffic can include several design features, such as, grouping traffic, diverting traffic, and altering speeds. These often includes implementing one or more design features as described above.

C. When is traffic calming most effective?

Traffic calming is most effective when changes are both warranted and properly designed. Without both, the benefits of traffic calming are significantly decreased and can actually become a detriment to the surrounding neighborhood and community.

D. When may traffic calming measures be warranted and what measures may be taken?

Traffic calming measures may be warranted when (1) a bona-fide need for traffic calming exists, and (2) solutions can be identified and designed to address the issue. The objectives of traffic calming include but are not limited to:

1. Reduce neighborhood cut through traffic
2. Reduce traffic speeds through neighborhoods
3. Accentuate pedestrian or bicycle use
4. Control intersection traffic flow
5. Reduce accidents/improve safety
6. Improve sight distance and reaction time

E. Is perceiving and reporting a need for traffic calming enough?

No. Though all traffic calming petitions will be seriously considered, requests for traffic calming must also be reviewed and tested by the Township to qualify. Traffic data collection and analysis must validate that traffic calming measures are legitimate. Traffic studies may take some time and may include, but are not limited to the following:

1. Speed/volume studies
2. Vehicle and pedestrian counts
3. Through-traffic surveys
4. Accident records

5. Intersection capacity analysis

F. Is data collection and legitimization of the problem enough to implement traffic calming measures?

No. Proposed traffic calming measures most often require Engineering solutions that need to comply with the following:

1. Local, County, State and Federal standards
2. Consideration to traffic volume as it relates to the rating of the road
3. Consideration to the posted and design speeds
4. Americans with Disabilities Administration (ADA)
5. Design vehicle characteristics (cars, trucks, trailers, etc)
6. Manual on Uniform Traffic Control Devices (MUTCD)
7. The Residential Site Improvement Standards (RSIS)

G. After traffic calming measures are determined to be warranted and properly designed what types of effects may one expect to adjacent streets, neighborhoods and to the traveling public at large?

When considering traffic calming measures, effects on the immediate street and adjacent streets must be taken into consideration. Traffic tendencies and patterns may shift to other surrounding streets and neighborhoods. Emergency vehicle response time may be increased, and traffic calming measures may increase the long term maintenance costs for the Township and affected motorists. A final study will be performed of the traffic measure to see if it will accomplish its intended task and not simply displace the problem(s) to other areas.

Traffic Calming Certification and Signature

The implementation of traffic calming measures will impact your street and neighborhood. For this reason the Township wants to make sure there is support from at least 75 percent of the impacted residents before it implements any traffic calming measure.

By signing the petition, you acknowledge you are doing so voluntarily and have reviewed the Frequently Asked Questions above. You also acknowledge that you and other signers are requesting a study and evaluation by the Township's Engineer regarding traffic calming measures.

By signing the petition, you understand the Township Engineer will make the final decision whether or not to implement traffic calming measures and the types of measures most appropriate for your street. In addition, you understand the implementation of a traffic calming measure could be near or in front of your property. This for example, could mean a speed hump/bump next to your house, flashing sign, striping along your road, or additional signage to name a few possibilities.

Traffic Calming Certification and Signature-

_____

(Road Name)

Date:_____ Page _____ of _____

Print Name/Signature	Address/Email	Phone#