

MEDINA TOWNSHIP
NEIGHBORHOOD TRAFFIC CALMING
POLICY
FOR TOWNSHIP ROADS

BY

DAVID L. ARBOGAST

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Traffic Calming Policy for Medina Township

Purpose:

Medina Township continually strives to strengthen and protect its neighborhoods by improving the quality of life in residential areas. Traffic conditions on residential streets can greatly affect neighborhood livability. Speeding traffic in neighborhoods create safety hazards. When traffic problems become a daily occurrence, our sense of community and personal well-being are threatened.

Medina Township's *Traffic Calming Policy* was developed to guide township officials and inform residents about the processes and procedures for implementing traffic calming on residential streets. Under this policy, township officials will work with residents to identify traffic problems in their neighborhoods and seek appropriate solutions.

Citizen participation is an important part of all traffic calming projects. The township's goal is to give the people who live and work in the project area the opportunity to become actively involved in the planning and decision-making process.

What Streets will be addressed under this policy?

This policy addresses township residential minor arterial, principal collector, minor collector, and local service streets. The road department and the roads commissioner will identify how streets are classified.

Minor Arterials interconnect with principal arterial roadways and includes all arterials not classified as principal. The main role of a minor arterial is to provide intra mobility.

Collector streets are difficult to define. Collector streets are typically streets that provide access between local streets or from local streets to arterial thoroughfares. Collector streets often carry some amounts of through-traffic. To be considered under this Policy, a collector street must be primarily residential. In order to allow flexibility for land uses like parks and school, no exact standard will be set. However, as a general guideline, this means at least 75% of the properties with frontage on the street are in residential zoning or have existing land use that is residential.

Principal Collector streets can be found in residential, commercial and industrial areas, providing land access and traffic circulation. Typically, major collectors have greater right-of-way, paving width and wider traffic lanes than minor collectors. Principal collectors frequently have left turn lanes.

Minor Collector streets are found only in residential neighborhoods and provide a high degree of access to individual properties. As a rule, both right-of-way and paving widths are narrower than principal collectors and designated left turn lanes are infrequent.

Local streets provide direct and full access to private property and are laid out so that their use by through-traffic is discouraged.

Local Service streets are intended to provide secondary and in some cases primary access to private property. They are generally located within a commercial or high-density zoning area and are commonly known as “alleys”.

II. Street Evaluation and Prioritization

Initiation

All streets will be evaluated by street segment. A segment is that portion of the street that lies between two thoroughfares or collector streets, or other logical features that may separate portions of a street, such as changes in land use, major driveway entrances, particular road conditions, or boundaries. A street segment can be added to the list of streets to be studied for potential traffic calming in a number of ways:

- A group of citizens contacts the Township Trustees directly to express concerns about speeding traffic on their street. The Township Trustees sends a questionnaire to the resident or residents who ask for additional information about the problem areas and allows multiple residents to sign the request. Once the trustees receive this questionnaire, the street segment will be added to the list of streets to be studied. This information will be forwarded to the Chief of Police and the Road Department Commissioner for review.
- A recommendation to study may be made by the Township Trustees, Zoning Commission, or the Road Department. This recommendation may follow a request to a public body from a group of citizens, or the concerns that may surface during the regular business of these public bodies;
- The Police Department recommends the addition of a street to the list based on their enforcement efforts or concerns.

Preliminary Evaluation

The Trustees with the Road Department will visually inspect the street, review the resolution to determine the established speed limit, and collect traffic volume and speed data. The data collection will normally be done using electronic automatic traffic recorders over a period of days. The following data will be collected:

- Speed data to determine the 85th percentile speed as well as the median speed and average speed. The 85th percentile speed is the speed exceeded by the fastest 15% of vehicles.
- The volume of traffic for a typical day. Preferably, both weekdays and weekends will be included to provide a complete depiction of traffic conditions.
- The speed and volume data will typically be in a form that enable specific times of day to be evaluated in order to determine peak hour traffic

volume and to identify any specific times of day when traffic speeds are higher.

- Determination if the street is a main emergency response route. No application can result in an increase of emergency response times greater than 4 minutes from the primary response station.
- The application chosen will need to provide for efficient snowplowing and other maintenance operations.

The first step in the preliminary evaluation will be to determine whether the posted speed is appropriate according to State Law. If a determination that the speed limit is not in compliance, then the Township Board of Trustees shall request a change of the speed limit according to the Ohio Revised Code.

The primary purpose of the preliminary evaluation is to determine whether the speeding or traffic volume problem is significant enough to warrant further study and priority. For streets to be considered for prioritization the measured 85th percentile speed must be more than 5 mph higher than the posted speed limit or the traffic volume on the street must be greater than 1,000 vehicles per day. In the event that a street does not meet these criteria, the township recognizes that a traffic problem may still exist on the street. The problem may not warrant the use of the townships limited resources to be resolved by this program.

When the township receives more requests than can be evaluated immediately due to staffing limitations, the trustees will determine in what order the requests will be acted upon.

Prioritization

Street segments that meet the above qualification will advance to selection scoring and prioritization. At this time, a more detailed field review and study of the street will be completed. The detailed evaluation will typically include the following:

- The traffic speed and volume data collected under the preliminary evaluation;
- Additional speed and volume studies as needed;
- An evaluation of the roadway geometry to determine the location of sidewalks, to identify sight distance problems, and to identify any other conditions of concern for traffic safety;
- A review of auto accident history for the prior three years to determine the total number of collisions and to identify any significant auto accident trends.

This detailed evaluation will generate information about several rating criteria to be used in prioritizing streets. These criteria will be given varying weights in the rating chart based on the following descriptions:

- Speed is given the most importance, since high speed usually affects safety and livability the most. It is also the condition that is improved the most using traffic calming measures.
- Traffic volume is also considered because it contributes to the general traffic conditions on the street.
- Cut through-traffic can negatively impact Neighborhood Streets by increasing traffic volume.
- Auto accident history gives an indication of existing safety problem with the street. A high level of auto accidents can be an indicator of limitation of the street design that may be difficult to quantify. In addition, reducing traffic speed and volumes has been shown to reduce auto accidents.
- Roadway geometry is an important factor in traffic safety in neighborhoods. Roadway geometry features can restrict visibility; creating hazards for motorists and pedestrians.
- Residential density also affects traffic conditions; higher densities typically generate more pedestrians and vehicle turning movements. In addition, projects on high-density streets benefit more people than projects on low-density streets.
- Other criteria such as the presence of sidewalks and pedestrian generators like schools or parks are important because they relate to pedestrian safety. Vehicle travel speeds and volumes directly affect the potential for pedestrian injuries and fatalities.

Rating Chart

Criteria	Points	Basis for point assignment
Speed	0-40 points	4 points assigned for every mph greater than 5 mph above the posted speed limit (using the full day 85 th percentile speed)
Volume	0-25 points	1 point for every 200 vehicles per day.
Auto accident history	0-10 points	1 point assigned for each of 0.3 recorded auto accidents per year per mile of roadway (based on past three years)
Pedestrian generators	0-10 points	4 points for each elementary or middle school within 500 feet of the project area. 2 points for each other school, bus route, park, or community building within 500 feet of the project area. 2 points should be given if any (not for each) retail, commercial, or other institutional (including churches) uses exist within 500 feet of the project area.
Roadway geometry	0-8 points	Each street segment will be rated on a scale from 0 to 8 for potentially hazardous roadway geometry factors. Factors to be considered include horizontal and vertical curvature, street width, proximity of home to the street, stop distance, intersection sight distance, driveway sight distance and geometry.
Sidewalks	0-7 points	5 points assigned if there is no continuous sidewalk on at least one side of the street
Total points possible	100	

III. Preliminary Uses of the Prioritized List

The prioritized list will be used in several ways by different departments in the township. The primary purpose of the list is to identify streets and areas for traffic calming projects. However, due to limited resources, some areas may not be identified and funded for a project for significant periods of time. In addition, developing a traffic-calming project can take months, adding to the delay experience by residents. Therefore, interim strategies may be used to provide citizens with some improvement of their traffic problems.

Police Enforcement

The prioritized list and the speed and volume data will help the Medina Township Police Department enforce speeding laws more efficiently. The data tells officers which streets have the most significant speeding problems. In addition, specific information about the speed profiles for the street can help officers focus their efforts on the most serious offenders.

IV. Traffic Calming Projects

Traffic Calming Measures

Residents will be given a “toolbox” of traffic calming measures that can be used to reduce traffic problems on residential streets. These policies do not include a list of traffic calming measures and definitions, or the criteria or limitations for installation. A specific listing of traffic calming measures for use on township roads might limit the potential solutions to traffic problems, as new or modified ideas for calming traffic are constantly being developed. In addition, including all the necessary information about traffic calming measures would make the document always obsolete. Several publications and web sites provide information and guidelines that would be useful.

The Township Road Commissioner will develop and use these documents and other resources to present a “toolbox” of traffic calming measures to residents during the project development process. In addition, others may make general presentations about traffic calming. This information will be used to develop the project.

Project Selection

In many cases, several neighboring streets have similar speeding or traffic problems. Implementing traffic calming on one street can cause the problem to get worse on other streets, or create traffic problems where there were not significant problems before. Therefore, traffic calming projects will often need to include several streets in the same area. Some flexibility in selecting projects from the prioritized list will be necessary in order to accommodate appropriate grouping of streets. The Township’s goal is to provide

traffic calming in all areas of the township that the trustees have control and the data indicates that traffic calming is needed.

Due to the criteria used, the rating chart will give higher scores for residential collector streets. However, it is important to have traffic calming projects on both residential and collector streets and residential local streets. Projects may be selected from each list.

Residents or a homeowners association may elect to pay for 100% of the construction costs via a petition to implement a low priority project faster, provided the other high priority projects remain on schedule.

Project Initiation

Once the area has been selected for a traffic calming project, the designated trustee will contact neighborhood representatives and identify a committee of 5 to 7 neighborhood representatives who will assist in notifying and petitioning other residents. Preferably, the project will be supported by an established neighborhood association. The committee and the designated trustee will work together to identify the petition area. Typically the petition area will include properties on all street segments within the actual project area, on cross streets up to the next parallel street or up to 300 feet from the project streets, and on any other street that must use the project street as primary access. Projects on Collector Streets will generally have a relatively large petition area.

The citizen committee will be given petition forms along with information about the project area and basic information about traffic calming to provide to the residents in the petition area. In order to move on the next phase of project development, signatures must be gathered from at least 60 percent of the households (owner or renters) within the petition area.

In addition to the petition, in some situations, surveys may be distributed to residents of the petition area to further measure support for the project and obtain additional comments about traffic from residents who may not be able to attend the project development meetings described below.

Meeting for Project Development

The designated trustee will work with residents of the petition area to set up a public meeting. All the residents of the petition area will be invited to attend. Facilitators will be used to assist in the process, and depending on the size of the project, consultants may be on hand to help with the project. Representatives of the Police, Fire, Zoning, and Trustees will be invited to attend the meeting and participate in the discussion. The following activities will take place at this meeting:

- Preliminary activities and introduction including a map for the residents to use pushpins to show where they live or have their business.

- Facilitator will present the data and analysis for the traffic problems in the project area. This process may include photographs of the streets to help illustrate the problems.
- Participants will be offered a “toolbox” of physical traffic calming measures or other solutions for the traffic problems on their streets. This toolbox will be in the form of a verbal presentation accompanied by handouts and other visual media.
- Participants will be asked to provide one-sentence descriptions of specific traffic issues within their neighborhood. Ideally, about 20 to 40 issues will be listed and posted on the wall.
- Citizens will have a chance to vote on the issues that are their highest priorities by using the “dot technique”. (Participants are given a dot to put on the issues that concern them the most) This process brings out a list of primary issues within the project.

Residents will split into groups and work around the map laid out on a table. Using their top issues prioritized in the previous activity and their toolbox of possible solutions, residents will discuss specific solutions for the traffic problems on their streets. Creative ideas from the residents that are not included in the toolbox will also be considered. Using the maps provided, participants will create a neighborhood traffic-calming plan with technical questions and provide guidance.

- Each of the group will present their maps and give a summary of their discussion. These reports should be recorded to assist in future project development.
- A final group discussion to get consensus about differences in the plans will give the trustees final guidance.

Conceptual Plan Development

The trustees will create a conceptual plan for the neighborhood based upon the recommendations and proposed solutions from the residents. Any necessary field measurements will be taken to ensure that the proposed treatments will fit within the context of the street and to help with design. The proposed solution will be evaluated for their appropriateness for the project area, and adjustments will be made as necessary. The plan development should include an analysis of whether or not the proposed measures will negatively affect nearby residential streets. The conceptual plan and report will be reviewed by Police, Fire and Roads as well as representatives of other departments as needed. The Trustees will prepare a final report and a conceptual plan which incorporates any comments.

Final Report to Neighborhood

The Trustees will present the final report along with the conceptual plan at a public meeting where all the residents of the petition area are invited to participate. A map of the projected area with visual aids will be used to summarize the treatments. Approximate project cost and installation information will be presented as well.

Meeting participants will be asked to provide comments and help refine the recommended design. The Trustees will refine the design as necessary to address the concern and comments from this meeting.

Final Approval Process

With information about the project and petitions provided by the Trustees, the citizen committee will petition residents of the petition area to determine the level of support for the installation of the proposed traffic calming measures. Both resident and non-resident property owners may be included on the petition. Signatures are required that represent at least 67 percent of the household in the petition area. In addition to the petition, a survey of residents in the area may be conducted to further assess the level of community support. Once the necessary level of support is determined, projects will be funded based upon their prioritization.

Design and Construction

Once the project is approved and funded, the Road Department and County Building will oversee the completion of the detailed design. The final plans will be review by the County Engineer, Police, Fire, Roads, and Trustees. The traffic calming measures will be constructed by a contractor. The design and construction phase may take up to 12 months.

Many traffic-calming measures offer significant opportunities for landscaping. Landscaping issues will be a part of the design and plan. Neighborhood residents will be responsible for installation and maintenance of the landscaping. Landscaping must be installed in accordance with the wishes of the trustees and zoning. A separate agreement with the residents and the trustees will state that the residents or a homeowners association will be responsible for the installation and maintenance landscaping.

Project Evaluation

Six months and one year after the project is installed, the designated trustee will complete an evaluation of the effects of the project. Comments will be solicited from residents in the project area by the use of a formal survey. Traffic speed and volume data will be collected and any change in traffic volumes and speeds on the treated streets will be documented. In addition, traffic diversion and impact on nearby residential local streets will be measured. If any unacceptable impacts are identified, corrective measure will be taken. In some cases, traffic calming measures might be removed.

SUMMARY OF THE PROCESS OUTLINED IN THIS POLICY

STEP #1	<ul style="list-style-type: none"> • Citizens contact trustees with concern or a study initiated by the township • Trustees sends questionnaire to residents • Citizens return completed questionnaire to Trustees
Step #2	<p>COMMITTEE:</p> <ul style="list-style-type: none"> • Conducts a preliminary evaluation including a basic speed and volume study; • Recommends reduced speed limits if necessary; and • Determines whether the traffic problem is significant enough to warrant further study and prioritization for traffic calming measures.
Step#3	<ul style="list-style-type: none"> • Township conducts a more detailed evaluation and study of the street. • The data collected from the evaluation is input into the rating chart in order to create a prioritized list of street segments that have significant traffic problems.
Step #4	<ul style="list-style-type: none"> • Trustees use the prioritized list to help implement some interim strategies to provide citizens with some improvement to third party traffic problems. These strategies may include: <ul style="list-style-type: none"> • Police enforcement • Speed signs • Awareness campaigns
Step #5	<ul style="list-style-type: none"> • Projects are selected based on the prioritized list and the connectivity of streets in specific areas. • A citizen committee of residents who live on or near the project street is formed. • Designated trustees and the committee identify the petition area for the project, and the citizen committee gathers signatures from residents within the petition area. • At least 60% of the households in the petition area must be represented on the petition in order to move on to the next step.
Step #6	<ul style="list-style-type: none"> • Trustees work with neighborhood residents to hold a public meeting to develop the project. • Designated trustee presents the data for the project and a “toolbox” of traffic calming measures. • Citizens and Trustees work together to identify the key problems and recommend solutions for the neighborhood.
Step #7	<ul style="list-style-type: none"> • Trustees develop a draft conceptual plan based on the recommendation from the neighborhood meeting. • This plan is reviewed by representatives of each department. • A final plan is developed based on any internal comments.

Step #8	<ul style="list-style-type: none"> • Trustees present the final report and conceptual plan to the neighborhood at another public meeting where meeting participants comment on the conceptual plan. • Trustees refine the design as necessary.
Step #9	<ul style="list-style-type: none"> • Citizen petition residents of the petition area to determine the level of support. • Signatures must be obtained that represent at least 67% of the household in the petition area.
Step #10	<ul style="list-style-type: none"> • Designated engineer completes the detailed design. • Agreements are signed between the neighborhood and the township stating that the neighborhood will install and maintain any landscaping. • Traffic calming measures are installed.
Step #11	<ul style="list-style-type: none"> • According to the policy the project is evaluated. • Additional data is collected. • Comments are solicited from neighborhood residents and others. • Corrective measures will be taken if necessary.