

TOWN OF MORRISVILLE

Traffic Calming Policy

Mission Statement

The Town of Morrisville wishes to have a procedure whereby its' residents can petition the Town to incorporate traffic calming devices and systems in order to alleviate speeding, excessive traffic volume, dangerous intersections or other conditions that are of a public safety nature.

Introduction

Every year the Town of Morrisville and the Police Department receive numerous complaints about traffic on residential streets. The complaints vary, but most center on an excess of traffic and traveling too fast, resulting in a perceived unsafe condition for residents (noise, accidents, and difficulties for pedestrians and bicyclists). In the past, the Town has attempted to deal with these citizen concerns using conventional traffic control methods of signage, pavement marking, and increased enforcement activity. However, signs and pavement marking's. alone may be ineffective. Police presence does have a targeted impact, however, the police cannot stay at the problem locations long enough or often enough to have a permanent affect. For these reasons the Town Board of Commissioners requested the Public Safety Advisory Committee along with staff to develop alternative measures to address these citizen concerns. These new methods are commonly referred to as traffic calming.

Traffic Calming devices are intended to help make residential streets more "calm" thus making the neighborhood feel more livable. Although "livable" in terms of a neighborhood does not have a precise definition, a livable neighborhood can be described as having the following characteristics:

- Ability to feel safe and secure when using the street
- Opportunity to interact with neighbors
- Ability to experience a sense of home and privacy
- A sense of community identification
- Maintain emergency vehicle access

In essence, when citizens call to request a stop sign to slow traffic on their street, they are requesting that the Town make their street more livable. Because no single answer for the problem of speeding vehicles on neighborhood streets exists, many different traffic calming techniques have been developed. These techniques range from the traditional, such as radar display boards and selective police enforcement to newer methods such as street chokers, slow points, and speed humps.

Purpose

The purpose of this document is to present ways in which residents can find solutions to residential traffic problems that fall within the scope of this policy. Consideration is given to a variety of residential traffic concerns and to the characteristics of these concerns on a case-by-case basis. Each situation is reviewed with respect to the available traffic control measures that have been, or could be, found effective to alleviate the neighborhood traffic concern.

The following document outlines the guidelines and procedures which can be used to develop potential solutions to each particular situation.

There are many factors taken into consideration when reviewing residential traffic concerns to determine the most feasible traffic control measure. These factors include: the surrounding roadway network, resident access, speeds and/or volume of traffic, accident history and neighborhood response and budget considerations. Public health and safety are always the overriding consideration when installing or removing traffic control devices.

I. Traffic Calming Defined

The Institute of Transportation Engineers characterizes traffic calming as “the combination of mainly physical measures that reduce the negative effects of motor vehicles, alter driver behavior, and improve conditions for non-motorized street users” (ITE Journal, January 1997). It is the retrofitting of physical devices into the roadway to reduce traffic speeds and cut-through traffic, thereby generally making the street environment more safe and pleasant for pedestrians, other drivers, and residents.

Traffic calming has several significant benefits and some drawbacks. Summarized below are benefits and drawbacks of traffic calming.

II. Benefits of Traffic Calming

- Reducing speeds
- Reducing collision frequency and severity
- Increasing the safety for non-motorized users of the street
- Enhancing the street environment (streetscape)
- Reducing cut-through vehicle traffic
- Increasing the quality of life
- Incorporating the preferences and requirements of the people using the area along the street(s)
- Reducing negative impacts of vehicles on the environment and neighborhood
- Reducing the need for police enforcement, hence reducing costs (cost is quickly offset by the reduced need for police enforcement)

III. Disadvantages of Traffic Calming

- Potentially may increase emergency response time
- Vehicles may be damaged and people injured by inappropriate driver behavior (e.g., driving too fast or inattentive)
- Snow removal is more difficult and time consuming
- Installation costs
- Additional signs and lighting may be required
- Increased maintenance, especially where landscaping is included
- Annoying to some residents (noise and inconvenience)
- Some treatments can restrict resident access

IV. Traffic Calming Objectives

The Town of Morrisville's traffic calming program is one part of the Town's commitment to the safety and livability of its residential neighborhoods. Under this program, the Town of Morrisville's Public Safety Advisory Committee and staff will work with residents to identify traffic problems in their neighborhoods and find potential solutions that are acceptable and appropriate. The overall objectives for the traffic calming program are:

1. Improve neighborhood livability by mitigating the impact of vehicular traffic on residential neighborhoods;
2. Reduce the need for traffic safety enforcement in residential areas;
3. Reduce crash frequency and severity;
4. Promote safe and pleasant conditions for motorists, bicyclists, pedestrians and residents on neighborhood streets;
5. Encourage citizen involvement and effort in neighborhood traffic management activities;
6. Make efficient use of Town of Morrisville resources by prioritizing traffic requests from citizens;
7. Effectively address the dual, and frequently conflicting, public safety interest of traffic calming and emergency response;
8. Support the Capital Improvement Program and Residential Street Program such that livability and safety of established residential neighborhoods is enhanced in transportation operations
9. Inform citizens of the Town of Morrisville of the multi-jurisdictional roadways and traffic control devices

The Town of Morrisville will employ a variety of traffic calming strategies and techniques to achieve the program objectives. Such traffic calming strategies and techniques shall be planned and designed in conformance with sound engineering and planning practices. Each location will be studied on an individual basis to determine the most appropriate applications for that situation.

V. Program Tools

The Town of Morrisville's traffic calming program relies on the "Five E" process; Education, Enforcement, Evaluation, Economics, and Engineering to address problems of excessive traffic speed or volume. These strategies will be implemented using a phased approach, beginning with the least restrictive and least expensive methods (phase I) and proceeding to more complex solutions (phase II). Where appropriate, Phase I approaches will be used first. These include targeted enforcement, education, and the use of signs. If these strategies are ineffective, Phase II solutions may be considered. In some cases, based on Town staff evaluation, Phase I may be bypassed in favor of the Phase II approach. In some instances a Phase I approach may be implemented as a temporary mitigation while the Phase II planning process is underway. In either phase, different strategies may be used in combination.

Typically the most effective traffic calming treatments are ones that deflect vehicles vertically, horizontally, or both. There are more than 25 different traffic calming treatments in use today throughout the United States; however several of these may not be applicable or workable in the Town of Morrisville.

VI. General Program Information

What Roads are covered in this Program?

The control measures provided in this document are intended to be applied to local streets serving predominantly single-family residential neighborhoods. Collector streets that run through neighborhood areas may also be considered for less restrictive traffic calming measures. Streets that are designated as thoroughfares or which are classified as State or Private are not eligible for this program.

Defining the Traffic Concern: When a request about traffic concerns on a residential street has been received, the Public Safety Advisory Committee will request staff to perform an initial investigation. Based on findings from the initial investigation, additional traffic studies may be scheduled. The purpose of these additional studies is to determine if the traffic concern is related to speeding or volume and to quantify the severity of the traffic concern. These studies will indicate whether the traffic concern qualifies for traffic control measures.

Who pays for Control Measures? Installation of traffic mediation (traffic calming) devices is considered a street improvement and as such is eligible for special assessments in accordance with North Carolina General Statute § 160A-216(1). In addition to the canvass requirements stated in section 5 of this policy, a petition for street improvements, in accordance with the special assessment statutes of North Carolina General Statutes 160A Article 10, shall be required for all traffic mediation device installation projects estimated to cost more than \$1,000 (one thousand dollars). It shall be the policy of the Town to require property owners of the affected area to bear 50% of all actual costs over \$1,000 of the described and approved traffic mediation device(s) installation project and

that such costs may be assessed in accordance with North Carolina General Statutes. The property owners (versus household representation) of the affected area as described herein at section 5 shall sign the assessment petition in addition to the canvass form(s). Sufficiency of the assessment petition shall be in accordance with requirements of North Carolina General Statute 160A Article 10. Note that the determination of majority is different for assessment purposes compared to the canvass 65 percent or 70 percent requirement stated herein at section 5.

Speed Control Measures (not listed in any particular order)

- a. Reduce Speed Limit
- b. Speed Humps/Narrowed Speed Humps
- c. Roundabout
- d. Street Narrowing/Intersection Threading
- e. Chicane
- f. Texture Changes to Pavement
- g. Turn Restrictions and One-Way Streets
- h. Median Modifications
- i. Diverters and Partial Diverters
- j. Signs
- k. Pavement Markings.

Transit, School and Emergency Routes

Very restrictive traffic calming measures such as speed humps typically should not be installed on a street serving as a primary emergency response route or transit route. These routes should be considered for some of the less restrictive traffic calming options such as median island, street narrowing, and traffic mini-circles. School bus routes should also be considered in the evaluation.

VII. Standard Procedures for Implementation of Traffic Control Measures

Step I: Initiation:

Traffic Control Measures can be requested by any of the following methods:

- a. A written request from the Board of the Homeowners Association acting for the neighborhood or a minimum of five signatures from the owners of five separate properties in the neighborhood will be required before studies will be initiated.
- b. Staff Field Reviews
- c. Request by the Public Safety Advisory Committee

Step II: Committee /Town Staff Review/Traffic Engineering Analysis-Classification

- a. The Public Safety Advisory Committee or a Subcommittee of the Public Safety Committee will review the concern(s) with the neighborhood group,

Homeowner Association, or individuals initiating the request to assure that the scope and details of the concern are clearly identified. A traffic study may include any or all of the following, depending on the scope of the concern:

- (1) Traffic conditions at the location
- (2) Existing traffic signs and pavement marking.
- (3) Motorist travel patterns
- (4) Effect of the roadway system in the vicinity
- (5) Traffic or roadway plans for the vicinity and contributing roadway system
- (6) Time of day, day of week relationship
- (7) Apparent cause of concern
- (8) History of the location
- (9) Determination of roadway classification (local, collector or arterial)
- (10) Emergency access concerns
- (11) Other considerations

b. Traffic studies may be necessary to obtain the following information:

- (1) 24-hour traffic count to determine the average daily traffic
- (2) Vehicle speed check
- (3) Vehicle turning movement counts
- (4) Origination/Destination study
- (5) Pedestrian counts
- (6) Accident report summary
- (7) Collision diagram studies

Step III: Public Safety Advisory Committee Recommendation:

The Town Staff analyzes traffic data, field information and other available information pertaining to the particular area of concern in determining appropriate traffic control measures for recommendation to the Public Safety Advisory Committee. Should the staff determine that there are other potentially impacted local roads or streets in the area, additional traffic studies on those roads or streets may be conducted. As a result of the traffic studies, road or street classifications (and applicable measures) are determined as follows provided that a “no further action” decision is not made by the appropriate authority (staff, committee, town commissioners):

a. Class A

- (1) Speed - minor excessive speed or,

Action: The Town may request the Police Department to increase enforcement on a random basis during the hours when the majority of the speeding violations seem to occur.

- b. Class B
 - (1) Speed - Excessive speed, or
 - (2) Volume - Excessive traffic volume, or

Action: Residents may petition the town for traffic calming measures through the Public Safety Advisory Committee

Step IV: Notice of Public Information Meeting

- a. Residents within the community of a proposed traffic control measure will be given notice of a Public Information Meeting so that their views and opinions may be expressed regarding the traffic control measures proposed.

Notification may include:

- (1) Newspaper Advertisements
- (2) Legal Notice
- (3) Letters sent to the residents/property owners
- (4) Posted on Public Bulletin Boards and at the Public Library

- b. Purpose of Public Information

- (1) A public information meeting is conducted by the Public Safety Committee or subcommittee of the Public Safety Advisory Committee to advise residents which traffic control measures are being considered on the road or streets in the area. Residents of those additionally impacted roads or streets are also given the opportunity to request traffic control measures.
- (2) The Public Safety Advisory Committee or subcommittee will conduct a public information meeting after notification. Some of the committees' duties will include:

- (a) Review of data
- (b) Receive comments from concerned residents and obtain pertinent information on the proposed traffic control measure and its effect on residents and motorists.
- (c) Determine boundaries of the affected area for the purpose of the petition process.
- (d) Act or modify staff recommendation and present to the Town Board of Commissioners.

Step V: Public Safety Advisory Committee Recommendation and Canvass

- a. If traffic control measures are proposed by the Committee, their recommendation(s) will be stated on the canvass form.
- b. ***A canvass form, to obtain neighborhood consensus, along with a map highlighting the area to be canvassed and the recommended traffic calming measure (s) will be issued by the Public Safety Advisory Committee to the persons or entity initiating the request.*** The contact person will receive a map highlighting the area to be canvassed. This map will depict the residential

property that is adjacent to, or directly affected by any changes to the road/street in question. The Town Staff will determine the area of affected residents to be canvassed. Any expansion of the area to be petitioned other than the subject travel route will be determined by the Public Safety Advisory Committee and Town Staff.

- c. The contact person is required to obtain signatures of 70 percent of all households in the affected area for or against consideration of traffic control measures. Each affected household shall be counted as one vote, regardless of the number of separate properties owned. In the case of multiple owners, only one vote shall be counted for that property. A minimum of 65 percent of the households within the affected area must be in favor of the proposed traffic control measures before the Public Safety Advisory Committee will forward a request with a recommendation for approval. A simple majority of the Town Board of Commissioners is required for implementation of or removal of residential traffic control measures. All vacant property within the affected area should be listed on the canvass form as vacant by the contact person. A sufficient number of non-resident owners must be contacted if the minimum petition threshold cannot be met because of an excessive amount of vacant properties.

Example: Affected area - 26 lots

Less: Vacant Lots 2 lots

Less: Half of double lot owners 4 lots

Number of households 20

70 percent of canvass required 14

65 percent favorable required 13

- d. The contact person or homeowners association has 90 days to return completed canvass forms. Canvass forms not received within the 90 day period will be deemed null and no further action will be taken. Prior to the expiration of the initial 90 day period, a one-time extension of the 90 days *may* be granted by the Public Safety Advisory Committee. However, in no case will canvass forms be accepted later than 180 days from the beginning of the initial signature period. Positive identification may be required at the time of signature of the canvass form. Signatures are final and may not be added or removed from a canvass form once the canvass forms have been received by the Town Staff.
- e. If a location fails to achieve the necessary majority within the signature period, the location shall not be considered for a period of three years from the date the signature period expires unless conditions change significantly.
- f. In some instances temporary traffic control measures may be recommended at the recommendation of the Public Safety Advisory Committee. The objective of such an installation in a residential community may be to test the effectiveness and demonstrate the benefit of the traffic control measure. The use of temporary devices also may be advantageous when budget constraints delay the installation of the permanent device.

Step VI: Town Commissioners' Role

- a. Upon receipt of a canvass form with the required minimum percentage of affirmative signatures, the Public Safety Advisory Committee's recommendation will be forwarded for review and action at a regularly scheduled Town Board of Commissioners meeting.
- b. Should the Board of Commissioners agree with the PSAC recommendation (s) and further agree that the method of cost recovery for all costs associated with providing the recommended traffic calming device(s) will be through an assessment process as authorized under G.S. 160A-216 Article 10, the Board will authorize the issuance of a petition to the persons or entity initiating the request. The petition will contain a statement of the town's intent to undertake the project, a general description of the project, a map identifying the property within the affected area and a statement of intent to assess individual property owners for the percentage of the costs to be assessed. The petition "must be signed by at least a majority in number of the owners of property to be assessed, who must represent at least the majority of all the lineal feet of the frontage of the lands abutting on the street or portion thereof to be improved" (G.S. 160A-217 (a)).
- c. Upon receipt of a valid petition, if the Board of Commissioners decides to finance the proposed project by special assessments, it shall first adopt a preliminary resolution in accordance with G.S.160A-223.

Step VII: Public Hearing Required:

- a. In accordance with G.S. 160A-224 and 225 the Board of Commissioners shall cause the issuance of a notice that a preliminary assessment resolution has been adopted and that a public hearing on the resolution will be held at a specified time and place.

Step VIII: Determination of Project Costs and Preliminary Assessment Rolls:

- a. In accordance with G.S. 160A-226 and 227 when the project is complete the Board of Commissioners shall ascertain the total cost of the project.
- b. The following items are permitted to be included in determining the total cost of the project; all related construction costs, cost of legal services, amount of interest paid during construction, costs of rights-of- ways and the cost of publications and resolutions.
- c. After the total cost of the project has been determined the commissioners shall have a preliminary assessment roll prepared. (G.S. 160A-228)
- d. The preliminary assessment roll shall be filed with the town clerk and available for public inspection.

Step IX: Public Hearing Required

- a. In accordance with G.S. 160A-227 and 228 the Board of Commissioners shall cause the issuance of a notice that a preliminary assessment roll has been completed and that a public hearing on the resolution will be held at a specified time and place and that notice of the hearing will be mailed to the owners of property listed on the assessment roll.
- b. At some point following the public hearing the Board of Commissioners “shall anul, modify or confirm the assessments, in whole or part, either by confirming the preliminary assessments against any or all of the lots or parcels described in the preliminary assessment roll, or by cancelling, increasing or reducing them as may be proper in compliance with the basis of assessment.” (G.S. 160A-228)

Step XI: Publication of notice of confirmation of assessment roll: G.S. 160A-229:

- a. After the expiration of 20 days from the confirmation of the assessment roll, the tax collector shall publish once a notice that the assessment roll has been confirmed, and that assessments may be paid without interest at any time before the expiration of 30 days from the date the notice is published, and that if they are not paid within this time, all installments thereof shall bear interest as provided in G.S. 160A-233.

VIII. Emergency Procedures

- a. The Town of Morrisville may, at its option, install traffic control measures in emergency situations as recommended by the Public Safety Advisory Committee, the Police Department, the Department of Transportation or other agency or as supported by traffic studies.
- b. Recommendation by the Police Department or other agency as an emergency situation shall be in writing, and shall state that the imminent health and safety of the public are at risk. Emergency situations typically exist where bodily injury or severe property damage has occurred as a result of speed or volume on a street which qualifies for consideration of Residential Traffic Control Measures. The recommendation must describe the nature of the emergency and its direct relation to an affected area’s traffic speed or volume concern. This recommendation must be signed by the Police or his/her designated representative or a Department Head.

IX. Removal of Speed and Volume Traffic Control Measures

A petition for the removal of traffic control measures may be accepted if it is a verifiable public safety hazard *or significant and verifiable traffic changes have occurred in and*

or around the affected area that warrant removal of the traffic control measure and provided that the following conditions are met:

- a. The traffic control measure to be removed must be in place for a minimum of a three year period.
- b. The request for a removal petition must be signed by the owners of at least five separate properties in the neighborhood of the original petition area.
- c. The new petition must include the same affected area as the original petition.
- d. Approval of 65 percent of the property owners in the original affected area is required for the Public Safety Advisory Committee to recommend approval of the requested removal.
- e. Subsequent steps for removal of the traffic mediation devices shall be the same as the current procedure to install traffic mediation devices including the cost assessment associated with the removal *as specified in G.S. 160A 216 Article 10.*

In the event a location fails to achieve the necessary petition majority within the 90 day signature period, the location shall not be reconsidered for a period of three years from the date the signature period expires unless conditions change significantly.