



## Traffic Calming Policy

### **Mission Statement:**

The Town of Waxhaw's goal is to provide safe and pedestrian friendly streets for all of the residents of the town while balancing the need for an efficient transportation network. As part of that goal we understand that traffic must be able to flow freely but to do so as safely possible. This policy is meant to provide avenues for citizens to report unsafe conditions, establish a process for review and development of solutions for unsafe areas.

### **Introduction:**

Each year the Town of Waxhaw receives numerous complaints and concerns regarding traffic within the Town. The majority of the complaints involve vehicles speeding in the neighborhoods, which may result in the unsafe condition for the residents living in the area.

The Town has attempted addressing complaints from the residents with increased patrols and police presence, additional stop signs and installation of speed cushions. 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 staff to develop effective 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 or speed hump 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 and the Town 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 appropriate 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.

### **Definitions:**

- Center Island Installations- Curbing installed in the center of the street narrowing the travel lane.
- Chicane- Curb extensions that alternate from one side of the street to the other, forming S-shaped curves.
- Chokers- Curb extensions at midblock locations that narrow a street by widening the sidewalk or planting strip.
- Roundabout- A circular junction requiring traffic to circulate counterclockwise around a center island typically used for large volumes of traffic.
- Speed Humps- Rounded raised areas placed across the roadway.
- Speed Tables- Flat-topped speed humps often constructed with brick or other textured materials on the flat section.
- Neckdowns- Curb extensions at intersections that reduce the roadway width from curb to curb. Work best for intersections with substantial pedestrian activity.
- Streetscape- The appearance or view of a street.
- Traffic Circles- Raised islands placed in intersection around which traffic circulates. Used to calm intersections typically within neighborhoods where large vehicle traffic is not a major concern but speeds, volumes, and safety are problems.

## **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 Waxhaw’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 Waxhaw’s staff will work with residents to identify traffic problems in their neighborhoods, and specifically as possible find

potential solutions that are acceptable and appropriate to present to the Waxhaw Board of Commissioners. The overall objectives for the traffic calming program are:

- a) Improve public safety.
- b) Improve neighborhood livability by mitigating the impact of vehicular traffic on residential neighborhoods;
- c) Reduce the need for traffic safety enforcement in residential areas;
- d) Reduce crash frequency and severity;
- e) Promote safe and pleasant conditions for motorists, bicyclists, pedestrians and residents on neighborhood streets;
- f) Encourage citizen involvement and effort in neighborhood traffic management activities;
- g) Make efficient use of Town of Waxhaw resources by prioritizing traffic requests from citizens;
- h) Effectively address the dual, and frequently conflicting, public safety interest of traffic calming and emergency response;
- i) Inform citizens of the Town of Waxhaw of the multi-jurisdictional roadways and traffic control devices.

The Town of Waxhaw 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 Waxhaw'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 Waxhaw.

## **VI. General Program Information**

### **a) 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.

### **b) Defining the Traffic Concern:**

When a request about traffic concerns on a residential street has been received, the Town Manager 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.

### **c) Who pays for Control Measures?**

The Waxhaw Board of Commissioners have instituted a no cost policy for installation of traffic calming measures as deemed appropriate by this policy.

### **d) Speed Control Measures: (not listed in any particular order)**

1. Chicane
2. Chokers
3. Roundabout.
4. Speed Humps/Speed Tables
5. Neckdowns
6. Traffic Circles
7. Signage
8. Pavement Markings
9. Center Island Narrowing
10. Reduction in speed limit

### **e) 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 1: Initiation:**

Traffic Control Measures can be requested by any of the following methods: (not listed in any particular order)

- 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 Police Chief.
- d) Request by the Town Manager.
- e) Request by any member of the Board of Commissioners.

### **Step 2: Town Staff Review/Traffic Engineering Analysis-Classification:**

a. The Town Manager or their designee will review the concern(s) with the parties requesting the traffic control measures 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 counts 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 3: 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 Board of Commissioners. 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, Town Commissioners):

**Step 4: 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 and an opportunity to provide written comments so their views and opinions may be expressed regarding the traffic control measures being proposed.

\*Notification may include one or all of the following:

- 1) Advertisements in local publications
- 2) Legal Notice
- 3) Letters sent to the residents/property owners
- 4) Posted on Public Bulletin Boards and at the Public Library.
- 5) Notifications on the Town of Waxhaw website and other electronic outlets but not limited to Facebook, Twitter, etc.
- 6) Attempts to work with the local HOA (if there is one) or other groups of residents to communicate to the residents of the upcoming meeting and requesting participation.
- 7) Flyer/notification placed in the Town Newsletter.

\*Town Manager will determine which notifications will be utilized.

- b. Purpose of Public Information

- 1) A public information meeting is conducted by the Town staff to discuss with residents which traffic control measures are being considered on the road or streets in the area. Residents of the impacted roads or streets are also given the opportunity to request traffic control measures and provide additional ideas or suggestions.
- 2) The Town staff will conduct a public information meeting after notification. The Staff's 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: Town Commissioners' Role**

Upon receipt of the information from the Town Manager the Board of Commissioners shall consider at a scheduled meeting and make a determine to approve the request as presented, deny the request or modify the request.

#### **Step VII: Removal of Speed Control Measures**

Residents may submit a request to the Town Manager to remove an existing speed control measure provided the following are included in the request:

- 1) A petition signed by 70 percent of all households in the affected area (as determined by the Town Manager). 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 removal of the traffic control measures before the Town Manager will forward a request with a recommendation for approval. A simple majority of the Town Board of Commissioners is required for removal of residential traffic control measures.
- 2) If removal of a speed control measure is granted the area will not be eligible for speed control measures to be installed for a period of no less than five (5) years.

**Approved and adopted: April 2012 by Waxhaw Board of Commissioners**