

## **Traffic Calming Measures Policy**

### **Purpose:**

To outline a process by which the Town of Nags Head can address requests related to transportation safety concerns on town-maintained streets. The guidelines in this policy will assist Town staff in determining an appropriate course of action in evaluating and providing sensible and programmatic responses to each request and recommend certain actions to the Board of Commissioners for consideration of implementation.

The policy's goal is to prioritize and implement police enforcement, traffic calming, and pedestrian measures based upon safety, applicability, budget, efficacy, and partnerships.

### **Applicability:**

The process outlined in this policy is for the consideration and implementation of traffic calming measures for all Town of Nags Head public streets. This excludes S Croatan Hwy. (US Hwy 158), S. Virginia Dare Trail (NC 12), and South Old Oregon Inlet Road (SR 1243) which are managed by the North Carolina Department of Transportation.

### **Procedure:**

Citizens or neighborhood associations may submit a Request for Traffic Calming form to the Town Clerk via regular mail at P.O. Box 99, Nags Head, NC 27959 or via email at [townclerks@nagsheadnc.gov](mailto:townclerks@nagsheadnc.gov)

The Traffic Calming Measure Request Form shall be completed by the applicant indicating the specific location and summary of the traffic concern. If the request is located within a neighborhood having a homeowners or property owners association, the name of the association should be indicated in conjunction with the name of a board representative supporting the request.

All applications shall require a minimum of (5) five neighborhood residents with contact information who are in support of the request. All sections of the application shall be filled out completely with the signature of applicant/contact person affixed to the form.

Once a request is received, staff will initiate a traffic assessment to review factors such as speed, volume, street length, street grades, accident history, sidewalks and other factors. Speed and volume data will be collected via the police radar trailer or a temporary installation of a radar speed limit sign. The data collection period shall be for a minimum of two weeks up to 30 days.

If the request meets traffic-related criteria noted later in this policy under **Traffic Assessment**, the request moves to the next step. If the basic minimum criteria listed above is not met, a letter will be sent to the "point of contact" explaining why the location will not be considered for further evaluation. The letter will also include an option for an alternate path via a neighborhood support option. The criteria for a neighborhood support option will require a formalized petition that meets a minimum threshold of 70% of all households within the area of influence in support of the traffic calming treatment.

If the applicant does not meet the neighborhood support petition requirements, the application will not be considered for further evaluation.

If the traffic requirements nor the neighborhood support criteria are met, a letter will be forwarded to the “point of contact” summarizing the findings with an explanation of how the traffic related criteria or the neighborhood support threshold was not met. In this instance, Tier 1 and/or Tier 2 traffic calming measures may be recommended to mitigate the issue.

If the process proceeds forward, an engineering report will be prepared utilizing site-specific data collection. The report shall state the issue of concern, the area of influence, the results of the data collection along with maps, and photographs and other pertinent information. A concept will be prepared with a recommendation for the implementation of a Tier 3 traffic calming measure. If it is determined the conditions warrant the addition of traffic calming measures, the application will proceed to the next step.

This information will be shared and reviewed with the lead contact person and/or the community committee that has filed the request. It is then the responsibility of the citizen’s committee to plan and conduct a neighborhood meeting to review the concept plan for the proposed enhancements, inform other residents about the use of traffic calming devices, and document additional input. Input, including the level of neighborhood support for the concept, shall be documented for presentation to the Nags Head Board of Commissioners.

All Tier 3 recommendations proceeding via the neighborhood support option shall require at least (1) neighborhood meeting and documentation indicating support for the proposed concept of at least 70% of all households within the area of influence in favor of the proposed traffic calming treatment.

Tier 3 traffic calming measures will be implemented as funds become available and at the discretion of the Board of Commissioners. Improvement projects may be included as a line item in the Capital Improvement Plan for the next fiscal year (July 1-June 30) and are subject to approval by the Board of Commissioners.

Multiple requests for traffic calming in the same area within a 36-month period will not be evaluated without sufficient cause. Sufficient cause is determined at the discretion of the Town Manager, Police Chief, or Town Engineer.

Timelines for traffic assessments may vary depending on how many requests are in the queue. Applications and requests will be reviewed based upon the order they are received.

**Traffic Assessment:**

The Town Manager, with the assistance of the Police Chief, Town Engineer, Fire Chief, and Public Services Director or their designated representatives will review the location(s) identified in the application. A preliminary review shall be performed for those requests with a primary concern related to speeding. Both traffic volume and speed shall be analyzed for a period which closely represents peak traffic periods, to the maximum extent feasible. Eligibility shall be based on meeting the requirements of Part (A) and may include items noted in Part (B) below:

Part (A) required data review

**Speed-** 85<sup>th</sup> percentile speed exceeds posted speed limit by greater than or equal to **6 mph**

**Volume-** Minimum average of 200 vehicles per day (vpd)

**Length-** Street segment lengths considered for traffic calming applications should not be more than 1 mile in length but greater than 300 ft in length. Street segment lengths less than 300 ft in length or with less than 10 residential direct driveway connections are not eligible for traffic calming.

**Grades-** Street grade shall be less than 8%

*And any one or more of the following*

Part (B) Supplemental data review

**Accidents-** Two (2) or more speed-related crashes within a three (3) year period

**Pathways-** The presence of pedestrian generators and facilities, sidewalks, crosswalks, etc.

**Other factors-** The presence of other roadside factors, public safety concerns, and area conditions that could be mitigated by a traffic calming device.

Speed and volume data will be collected via the police radar trailer or a temporary installation of a radar speed limit sign. The collection period shall be for a minimum of a 2-week period up to a 30-day period.

**Traffic Engineering Study:**

The next step in the process consists of review of the collected vehicular data, review of street geometry, pedestrian activity observations, historical data review, and characterization of the area of influence. The Town Engineer or his/her designee will conduct field observations/site visits and collect any supplemental data as necessary to perform a warrant analysis. Once the following information is collected, an initial recommendation will be determined by the Town Manager.

- Geometric Features of the roadway (lane width, shoulder width, sight distance, vertical curves, and sidewalks)
- Traffic volume data and verification of street classification
- Speed data to determine the 85<sup>th</sup> percentile speed and extent of speeding violations should they exist.
- Accident data for the past 3 years through the Nags Head Police Department
- Observation of pedestrian and bicycle activity
- Other pertinent information as deemed necessary

The data collection relies on data driven decisions and observations by standard transportation analysis methods. All requests will be confirmed and prioritized using measured traffic data. Requests that are received but not supported by traffic data will be

prioritized by the actual measured data and not by anecdotal reports.

A Traffic Engineering Study Summary documenting the study results shall include the following information:

- 1) A complete description of the study area with applicable maps, photos, and extent of study area.
- 2) Identity of the area of influence which includes properties abutting the street under study and properties on intersecting streets within a reasonable distance of the roadway section as determined by staff.
- 3) A description of the problem the neighborhood has requested to address. This shall include field data collected describing the scale of the problem. For example, if speeding is the concern, the study should show data from a completed speed study.
- 4) A description of the proposed traffic calming measures, as applicable, and locations where the neighborhood requests to install such traffic calming devices. This shall include any additional signs, pavement markings and other traffic control devices.
- 5) An estimated cost of the proposed traffic calming device, the expected maintenance requirements, and an estimate to remove devices.

Once the applicable data and results have been collected and report prepared, the findings will be reviewed by the Town Manager, Police Chief, Fire Chief, Public Services Director and Town Engineer, or their appointed designees. Once finalized, the point of contact will be notified of these results.

This information will be shared and reviewed with the lead contact person and/or the community party that has filed the request. It is then the responsibility of the citizen's committee to plan and conduct a neighborhood meeting to review the concept plan for the proposed enhancements, inform other residents about the use of traffic calming devices, and document additional input. Town staff will attend the meeting to address questions about the process and summarize the findings.

### **Traffic Calming Device Guidelines:**

Every traffic calming request is unique and shall be evaluated on a case-by-case basis. As such, the outcomes for requests may vary. If the request does not meet the traffic requirements or does not have the neighborhood support, mitigative measures may be recommended.

Mitigative measures are structured in three separate tiers and generally follow a schedule based upon cost of implementation and resultant impact. The following outlines the framework of the tier-based schedule and associative mitigation measures. Town staff will follow the tier-based structure in preparing recommendations for traffic calming requests received.

The Town uses three **Tiers** of traffic calming devices:

**Tier 1- Non-Physical Traffic Calming Measures (Low Cost, Low Impact)**

- Increased enforcement by the Nags Head Police Department
- Neighborhood Awareness Campaign
- Temporary installation of the police radar trailer
- Maintenance of landscaping to improve sight distance

These treatments can be addressed with Town forces or neighborhood engagement without a formal application being filed. This allows work to be done quickly, at low cost, and with minimal impact to area residents.

**Neighborhood Awareness Campaign**

Because many people exceed the posted speed limit in their own neighborhood, a Neighborhood Awareness Campaign is recommended anytime there is a perceived issue. “Speeders” are not always non-residents, most are neighbors and friends who are committed to safe, peaceful neighborhoods. Speeding in residential areas is a bad habit and it takes a unified effort to break it. Neighbors should remind neighbors to pay attention to their driving habits and of their mutual responsibility to the residents living in the community.

Several creative methods to reducing traffic problems in neighborhoods can be:

- Hold discussions at scheduled neighborhood meetings
- Hold a “slow down” block party to get people to think about their driving habits
- Placing door hangers and talk to neighbors individually
- Encourage people to ride bicycles or walk to destinations in an effort to reduce motor vehicle volume and speeding

These are just a few examples of ideas for a Neighborhood Awareness Campaign. A successful Neighborhood Awareness Campaign is one where at least 50% of the affected residents are communicated with. Residents shall primarily reside on the street directly associated with the request.

Town staff will not be involved in the Neighborhood Awareness Campaign.

**Tier 2- Non-Structural Traffic Calming Measures (Moderate Cost, Low Impact)**

- Signage and advance warning device addition/changes
- Add/change pavement markings- Including crosswalks
- Follow-up Neighborhood Awareness Campaign
- Gateways/entryways
- Turn prohibitions
- Colored pavements
- Temporary installation of the radar speed display device (i.e. radar speed limit sign)

After 6 months (minimum) of Tier 2 traffic calming device measures being implemented, follow-up data and analysis may be performed. Data from the Nags Head Police Department and Town staff monitoring will be used. If the results show the Tier 2 measures are ineffective

at controlling the undesired traffic condition, Town staff will examine the potential Tier 3 traffic calming measures.

### **Tier 3- Structural Traffic Calming Measures (High Cost, High Impact)**

- Permanent installation of the radar speed display device (i.e. radar speed limit sign)
- Speed cushion installation
- Planted Median Islands
- Chicanes
- Mini Traffic Circles

All Tier 3 treatments require at least (1) neighborhood meeting and documentation indicating support for the proposed concept gaining support. Applications utilizing the neighborhood support approach shall be required to document support from at least 70% of all households within the area of influence in favor of the proposed traffic calming treatment.

### **Funding for Traffic Calming Projects**

The Town of Nags Head has not identified any special funding source for traffic calming projects. Potential funding options available are special assessments, private funding, and operating funds. Nags Head Board of Commissioners will determine the appropriate funding mechanism for the installation of traffic calming devices on a case-by-case basis. Town staff will be responsible for determining a funding source for all Tier 1 and 2 devices within the existing budget or the next fiscal year. There is no guarantee that Town funding will be available.

Tier 3 traffic calming measures will be implemented as funds become available and at the discretion of the Board of Commissioners and may be included as a line item in the Capital Improvement Plan (CIP) for the next fiscal year (July 1-June 30) and are subject to approval by the Board of Commissioners.

The Board of Commissioners and/or Town Manager may recommend a cost share be provided by the applicant. If the applicant is unable to raise the required funding amount, the project will not be constructed until funding becomes available.

The Board of Commissioners may also recommend that a traffic calming project utilize 100% private funding. In these instances, the applicant will be responsible for raising 100% of the cost of the applicable design, construction, and materials fees/costs related to the project. If Town staff can perform construction of the traffic calming project, the applicant is only responsible for raising the costs of the materials provided by the Public Services Department. If the applicant is unable to raise the required funding amount, the project will not be constructed until the funds become available.

Installation of traffic calming devices is considered a street improvement and is eligible for special assessment in accordance with North Carolina General Statute 160A-216(1) should the Board of Commissioners recommend private funding.

### **Traffic Calming Implementation**

Once a traffic calming plan has been approved by staff (if no appropriation of funds is necessary), or once the Board of Commissioners has appropriated funding, the project manager shall take the actions necessary to commence the construction process.

The project manager responsible for implementation of the traffic calming plan shall provide updates to the community representative(s) during the construction period.

Once completed, Town staff will monitor the overall effectiveness of the traffic calming devices and make recommendations for adjustment or modification as required.

### **Multi-Way Stops and Traffic Signals**

Multi-Way stops (i.e. stop signs) and traffic signals are traffic control devices and should not be considered a traffic calming device in response to potential speeding concerns. Stop signs serve to assign right-of-way and multi-way stops will only be considered in instances where the Manual on Uniform Traffic Control Devices (MUTCD) warrant analysis indicates that a multi-way stop is appropriate. Requests for Traffic Signals will be forwarded to the North Carolina Department of Transportation (NCDOT) Division Traffic Engineer for review.

### **Approved Signs**

Design, application, and placement of traffic control devices shall follow those adopted in the Manual on Uniform Traffic Control Devices (MUTCD).