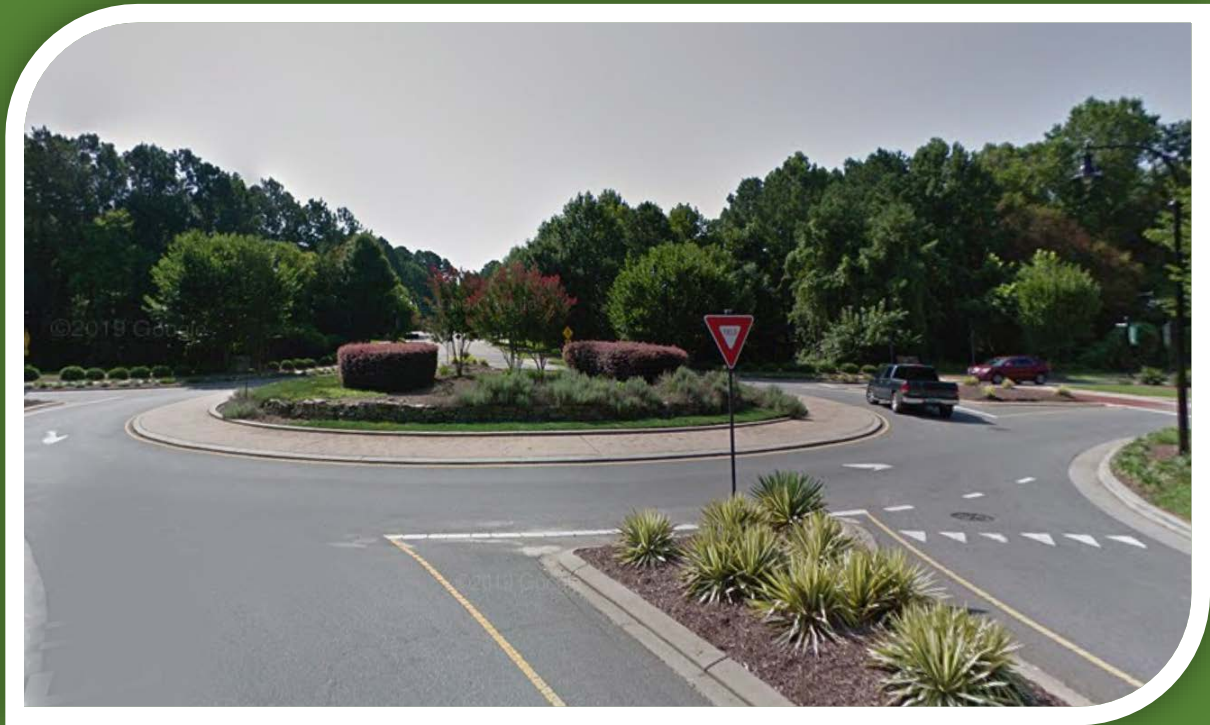


# Town of Wake Forest Residential Traffic Calming Policy



Adopted May 2020



# Town of Wake Forest Traffic Calming Policy

## Introduction

The goal of the Town of Wake Forest's **Residential Traffic Calming Policy** is to create safe neighborhoods, decrease collisions, and improve the quality of life to the residents. This Policy guides Town Staff and inform residents about the process of implementing traffic calming in residential areas. An additional goal is to increase access to all modes of transportation and reduce the need for police enforcement. This policy is intended for residential areas only and will not eliminate incidents of speeding.

## Qualification

Only streets and local roadways maintained by the Town of Wake Forest and are covered under this policy. Local Roadways are neighborhood and subdivision streets with direct residential driveway access that do not carry significant volumes of traffic.

## Traffic Calming Warrants

The following warrants must be met in order to qualify for Traffic Calming consideration:

- The posted speed limit is no greater than 25 mph
- The roadway cannot be more than two travel lanes or have a width of more than 40 feet
- 15% of the traffic on the street must exceed the posted speed limit by more than 5 mph, as determined from field analysis
- The applicant has provided documentation of at least two Neighborhood Awareness Campaigns. Documentation should verify 75% of the affected residents were reached. Residents must live on the specific street of concern.
- Traffic volume on the affected street is less than 4,000 vehicles per day
- The route cannot be a primary route for Emergency Services

If warrants for traffic calming measures are not met, no traffic calming will be installed or considered under this policy. Additional requests for traffic calming in the same area will not be considered within a 36-month period without enough cause. Sufficient cause is determined at the discretion of the Transportation Engineer and/or Public Works Director.

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### Neighborhood Awareness Campaign

Since neighborhood streets service mostly residential areas, most speeding issues are caused by residents of their own neighborhood or street. The Town of Wake Forest requires a Neighborhood Awareness Campaign be held any time there is a significant concern. A Neighborhood Awareness Campaign, with successful neighborhood support, is required before any Traffic Engineering Study will be considered. “Speeders” are not always non-residents; most are neighbors and friends who are committed to safe and peaceful neighborhoods. Residents should remind their neighbors to pay attention to their driving habits and their mutual responsibility everyone living in their neighborhood. The neighbors and Homeowner Associations (HOA’s) are encouraged to use creative methods for reducing traffic problems in their neighborhoods, such as:

- Holding discussions at scheduled neighborhood meetings
- Placing door hangers and talk to neighbors individually
- Contacting map companies (e.g. Google Maps) to remove their neighborhood as a cut through route
- Encouraging neighbors to ride bicycles or walk to destinations in order to reduce motor vehicle volume and speeding in the neighborhood

These are just a few examples of ideas for a Neighborhood Awareness Campaign. It is the sole responsibility of the residents, citizens, or HOA. Town staff will not be involved in the Neighborhood Awareness Campaign.

A successful Neighborhood Awareness Campaign will be based on reaching at least 75% of the affected residents. Residents must live on the specific street of concern.

### Procedure for Initiating a Traffic Engineering Study

Following a successful Neighborhood Awareness campaign, residents, citizens or Homeowner Associations (applicant) should contact the Town of Wake Forest Engineering Division of Public Works by mail at 301 S. Brooks Street, Wake Forest, NC 27587 or by submitting the Traffic Calming Request form found on the Traffic Calming page on the Town of Wake Forest Website. This can be found by visiting the Town of Wake Forest website at <https://wakeforestnc.gov> and searching for “traffic calming.”

Once the request has been made, staff will contact the applicant and initiate a Traffic Engineering Study to determine if traffic calming devices, or other traffic control devices, are warranted. The Traffic Engineering Study typically takes about 90 days to complete, depending on department workload.

### Traffic Engineering Study

The Engineering Division will conduct a Traffic Engineering Study to determine if traffic calming devices are warranted for the requested street. Entire neighborhoods will not be considered for study. This information will be observed in the field through observation or site visits and collection of appropriate data to perform any analysis. The following types of information will be collected by staff:

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- Roadway geometric details (roadway and lane width, road grade, sight distance, number of driveways, etc.)
- Sign and pavement marking details
- Presence of pedestrian facilities (i.e. sidewalk, multi-use path, greenway)
- On-street parking
- Proximity of schools and/or emergency services
- Speed data (85<sup>th</sup> percentile speed and amount of speeding violations)
- Accident data from Wake Forest Police Records
- Observation of pedestrian and bicycle activity
- Any other information deemed necessary by Town staff

Once the applicable data and results have been collected, it will be reviewed by the Engineering Division and Public Works staff to determine if warrants exist. The applicant will be notified of these results as soon as they are available via email.

### Traffic Calming Device Guidelines

Every traffic calming request is unique and will be evaluated on a case by case basis. If warrants for traffic calming devices are met, Town staff will follow the following Traffic Calming Device Guidelines.

The following devices are options that the Town of Wake Forest may propose if warrants are met. Non-physical options will be implemented before any other options will be considered.

#### **Level 1 - Non-Physical / No Cost Traffic Calming Measures**

- Increased enforcement by the Wake Forest Police Department
- Additional Neighborhood Awareness Campaign
- Installation of temporary Radar Speed Display Devices

After 90 days of level 1 traffic calming device measures being implemented, follow-up data and analysis will be performed. Data from the Wake Forest Police Department and/or the Radar Speed Display Devices will be used. If the results show that the non-physical devices are ineffective at controlling the undesired traffic condition, Town staff will examine level 2 traffic calming measures.

#### **Level 2 - Low Impact / Lower Cost Traffic Calming Measures**

- Signage and advance warning device addition/changes
- Add/change pavement markings – Including crosswalks
- Adding on-street parking

After 90 days of level 2 traffic calming device measures being implemented, follow-up data and analysis will be performed. Data from the Wake Forest Police Department and Town staff monitoring will be used. If the results show that the low impact devices are ineffective at controlling the undesired traffic condition, Town staff will examine level 3 traffic calming measures. All level 3 traffic calming measures require the applicant to provide a Traffic Calming Petition Form signed and supported by at least 75% of the affected property owners (one per unit). The affected property owners shall be residents of the

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petitioned street. If a commercial business/development is affected, only the business owner, or authorized designee, can sign the Traffic Calming Petition Form. Additionally, a public hearing and vote will be held before the Town of Wake Forest Board of Commissioners prior to any Level 3 traffic calming device implementation.

### **Level 3 - High Impact / Higher Cost Traffic Calming Measures**

- Center island/median installation
- Chicanes
- Choker/neckdowns
- Mini roundabouts
- Intersection diversion (partial closure)

**The Town of Wake Forest DOES NOT allow for the installation of any vertical deflection devices (e.g. speed bumps) along any Town maintained roadway.** Speed bumps are the most commonly requested traffic calming device. Research shows varying opinions and results related to the installation of speed bumps. Speed bumps and other vertical deflection devices produce significant negative impacts to emergency response, increased noise as vehicles pass over them, increased braking and acceleration, increased vehicle wear-and-tear, street maintenance issues, snow and ice removal hindrance, and potential for increased speeding due to delays associated with the device. There are plenty of other effective traffic calming devices that can be implemented.

### **Vertical Deflection Devices Examples**

- Speed bumps/humps
- Raised intersections
- Speed tables

Multi-way stops and traffic signals are traffic control devices and should not be considered traffic calming devices. These will not be considered as a traffic calming device option during a Traffic Engineering Study for traffic calming devices. Multi-way stops and traffic signals will only be installed in locations that are warranted by the Manual on Uniform Traffic Control Devices (MUTCD).

Nothing in this policy shall interfere or waive the right of the Town to install traffic calming measures within the public right-of-way without notice.

## **Funding**

The Town of Wake Forest does not have a special funding source for traffic calming projects, nor has the Town set-aside any existing funds to be used exclusively on traffic calming projects. Funding will be determined on a case-by-case basis. Town staff will be responsible for determining a funding source for all Level 2 measures within the existing department budget or in the next fiscal year budget. **There is no guarantee that Town funding will be available.**

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Level 3 traffic calming measures will be implemented as funds become available and at the discretion of the Board of Commissioners, Town Manager, and/or Chief Financial Officer. Level 3 traffic calming projects may be included as a line item in the Capital Improvement Plan (CIP) for the next fiscal year (July 1 – June 30) and is subject to approval by the Board of Commissioners.

The Board of Commissioners and/or Town Manager may recommend a 25% 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 Commissions may also recommend that a traffic calming project utilize 100% private funding. In these instances, the applicant would be responsible for raising 100% of the cost of any applicable design, construction and materials fees/costs related to that project. If Town staff can perform construction of the traffic calming project, the applicant is only responsible for raising the estimated costs of materials provided by the Public Works Director. If the applicant is unable to raise the required funding amount, the project will not be constructed until funding becomes available.

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

### Removal of Traffic Calming Devices

Requests for removal of traffic calming devices will only be considered if sufficient data justifies the removal of that device. Removal analysis will examine the same criteria as the Traffic Engineering Study. Town staff will perform the same Traffic Engineering Study for the removal requests as installation requests. Removal requests based on inconvenience will not be considered. All costs related to the removal request will be the responsibility of the requesting party. All requests for removal of traffic control devices must provide a Traffic Calming Petition Form signed by at least 75% of the affected residents in support of the removal. The affected residents will be the same as the original petition, or as determined by Town staff.

If, at any time, Town staff determines that unforeseen issues exist as a result of a traffic calming device, the Transportation Engineer and/or Public Works Director reserve the right to redesign, change, or remove the traffic calming device. All level 3 traffic calming device removal is subject to Board of Commissioner approval and public notification of removal will be given.

## Appendix – Traffic Calming Device Reference Guide

The following information is provided for information purposes only and is not intended to represent all the traffic calming device options available. The inclusion of a specific traffic calming measure in this guide is no guarantee that device will be considered for implementation. The information provided is courtesy of the Institute of Transportation Engineers (ITE)

### Increased Enforcement by the Wake Forest Police Department

Temporary targeted speed enforcement by the police department.

#### Advantages

- May be implemented immediately, no funding required
- No impact to emergency response times
- Effective at reducing speeds during the period of enforcement
- Creates a higher sense of security

#### Disadvantages

- Not highly effective – most drivers travel at the speed they feel most comfortable

### Temporary Radar Speed Display Devices

Devices are placed adjacent to the roadway displaying a vehicle's posted speed.

#### Advantages

- May be implemented immediately, no funding required
- No impact to emergency response times

#### Disadvantages

- May only be effective while the device is present
- Only effective for one direction at a time

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### Signage, Advance Warning, Lane Markings

Additional signage and advance warning devices can be implemented to remind drivers of the speed limits.

#### Advantages

- Inexpensive
- Can be installed in minimal time
- No impact to emergency response times

#### Disadvantages

- Only roads with certain geometric features can be considered for this treatment
- May impact on-street parking
- Increase maintenance costs

### On-Street Parking

Adding on-street parking by marking dedicated spaces along the roadway to narrow the travel lanes and provide more friction for cars

#### Advantages

- Inexpensive
- Can be installed in minimal time
- Provides more dedicated parking
- Encourages pedestrian activity by providing a buffer between the sidewalk and street

#### Disadvantages

- May be ineffective if not utilized
- May reduce sight distance for drivers and pedestrians
- May increase side-swipe collisions
- May impede solid waste collection
- Encourages mid-block crossings

### Center Island (Median Installation)

Raised island located along the street centerline that narrows the travel lanes

#### Advantages

- Increases driver awareness
- May provide a pedestrian refuge for crosswalks
- May reduce speeds and volumes
- May improve aesthetics
- Prevents vehicle passing

#### Disadvantages

- Loss of on-street parking
- May impact emergency response times
- Can limit driveway access to homes





## Chicanes

A series of alternating curves or lane shifts that force a motorist to steer back and forth instead of traveling in a straight path.

### Advantages

- Decreases pedestrian crossing distance
- Reduces vehicular speeds

### Disadvantages

- Limits bicyclists' use of the roadway
- Has an impact on emergency response times
- Loss of on-street parking
- Potential drainage problems



## Choker (Neckdown)

Curb extensions or roadside islands that narrow the roadway. Can be located at intersections or mid-block.

### Advantages

- Increased pedestrian safety
- Improved aesthetic appeal

### Disadvantages

- Requires bicyclists to merge with traffic
- Can have an impact on emergency response times
- Loss of some on-street parking
- May not be effective at lowering speeds



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### Mini-Roundabouts

A raised, circular island placed in the center of unsignalized intersections that requires vehicles to travel in a circular pattern. Incoming vehicles yield to motorists already in the intersection.

#### Advantages

- Decreases vehicular speeds as vehicles are forced to slow down to enter the roundabout
- Reduces collisions and severity of collisions
- May decrease traffic volumes

#### Disadvantages

- May require loss of on-street parking
- Increased maintenance costs
- Has an impact on emergency response times
- May impede large trucks and buses
- Additional right-of-way may be required for installation



### Intersection Diversions (Partial Closure)

Barriers placed diagonally across an intersection, blocking through movements, forcing motorists to make a right turn.

#### Advantages

- Improved pedestrian and bicycle access
- Reduces volume of vehicles
- Reduces vehicular speed

#### Disadvantages

- Reduces access and connectivity to residents and emergency access vehicles
- Drainage issues may exist

