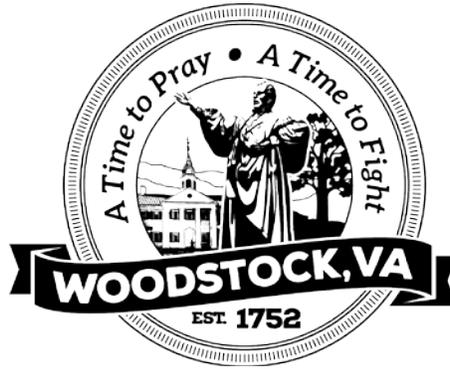


THE TOWN OF  
**WOODSTOCK**  
*Virginia*

**NEIGHBORHOOD  
TRAFFIC CALMING  
INITIATIVE**

**ABSTRACT**

The Town of Woodstock is committed to having safe travel for its residents and visitors, and recognizes that community input for pedestrian, bicycling and vehicular facilities is key to that effort.



## Neighborhood Traffic Calming Initiative

The Town of Woodstock is committed to having safe travel for its residents and visitors, and recognizes that community awareness to engineering controls may be necessary for traffic calming in residential neighborhoods. Residents play a significant role in neighborhood education and organizing, in addition to engaging town officials in the discussion of neighborhood traffic calming needs. Please see the below process to educate and organize your neighbors, to request speed enforcement, to engage officials, to install engineering devices, and finally, to evaluate your efforts.

### 1. Get Started

- a. Organize your neighborhood and designate a point-of-contact
- b. Request police enforcement and portable radar units (speed recorder devices/speed trailer)

### 2. Determine Eligibility for Neighborhood Traffic Calming Initiative

- a. Define neighborhood/study area
- b. Submit formal request to the Urban Designer | Neighborhood Planner for a traffic count and speed study
- c. Urban Designer | Neighborhood Planner (and transportation engineer) evaluate the study results and determine the following in accordance with the Manual for Uniform Traffic Control Devices (MUTCD):
  - i. Does the neighborhood/study area meet minimum traffic volume requirements?
  - ii. Do the streets meet the 85<sup>th</sup> percentile speed requirements?
  - iii. Do the streets have documented cut-through traffic?

### 3. Develop a Neighborhood Traffic Calming Plan

- a. Discuss traffic calming measures with the neighborhood group and town staff
- b. Develop a traffic calming plan with town staff
- c. Send the request to the Urban Designer | Neighborhood Planner to transmit to the Town Manager and Street Committee
  - i. Did the Street Committee accept the plan?
- d. Plan is integrated in upcoming Capital Improvement Program

### 4. Implementation of Traffic Calming Initiative

### 5. Evaluation

- a. Conduct a new traffic count and speed study to determine effectiveness

## Traffic Calming Measures Outlined

We will take a series of actions to address problems citizens have identified in their community. Using the “the three e’s” approach to comprehensively address the problem:

1. Education – First Step
  - a. Least Costly
  - b. Most Effective
2. Enforcement – Next Step
  - a. Often needed to change bad behavior
3. Engineering – Last Resort
  - a. Most expensive

Please find the below, VDOT-approved, traffic calming engineering controls that are installed in various conditions on residential streets:

### **INCREASED COMMUNITY EDUCATION**

#### **Public outreach campaign to inform the community of proposed changes and provide opportunity for comment**

- Temporary signs on roadways (variable message boards, etc.)
- Press releases for local newspapers
- Radio and television public service announcements
- Flyers for kids to take home from school
- Display advertisement in public places, like libraries and town hall
- Work with community groups and police to “spread the word”
- Sponsor educational table/booth at local events, like festivals and fairs, government services fair, etc.

#### *Advantages*

This is the most effective strategy to encouraging driving behavior in the community. As it is the least expensive, staff is capable of quickly engaging the right resources for an education campaign.

#### *Disadvantages*

Funding is needed to work with neighborhood groups and to develop an appropriate assortment of solutions to implement.

**INCREASED SIGNAGE**

This measure increases public awareness through visual communication that could include, more speed signs, 'slow children ahead' signs, or similar type signage.

*Advantages*

Increased public awareness, less expensive than engineering interventions.

*Disadvantages*

Increased signage could negatively affect aesthetics.

**INCREASED POLICE ENFORCEMENT**

This measure places law enforcement officers on streets where speeding is prevalent.

*Advantages*

Rapidly reduces speeding when a police officer is present. Visible radar recorder devices can make drivers aware of their speed.

*Disadvantages*

This is a temporary behavioral change in drivers. Sufficient human resources is problematic.

**INCREASED FINES**

This measure places citizen responsibility prevalent.

*Advantages*

Posted fines increase awareness and creates a deterrent.

*Disadvantages*

Creates burden on lower income earners.

## **SPEED HUMP**

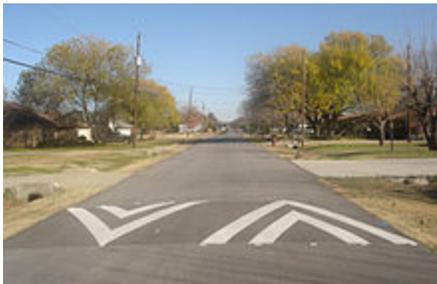
Speed humps are narrow, rounded, slightly raised areas crossing travel lanes. They are generally 12-feet long and are 3- to 4- inches high.

### *Advantages*

Speed humps are relatively inexpensive. They are relatively easy for bicycles to cross if designed and installed properly. They are very effective in slowing travel speeds.

### *Disadvantages*

They may divert traffic to parallel streets. They may cause damage to vehicles that do not slow down. Speed humps can be problematic to snow plowing crews.



## **CURB EXTENSIONS**

Curb extensions are a physical curbside constriction that narrows the travel lane. These can be at intersections or mid-block on streets that have existing curb and gutter.

### *Advantages*

At intersections, they improve pedestrian circulation and space. They also reduce speeds at intersections, especially for right-turning vehicles. They create protected on-street parking bays and reduce both speeds and volumes.

### *Disadvantages*

They may slow emergency vehicles making right turns. They may require the elimination of some on-street parking and may require bicyclists to briefly merge with vehicular traffic. They need to be carefully designed in order to have an aesthetic appeal in the streetscape.



## LINE STRIPING

Line striping (paint) for on-street parking, bicycle/pedestrian lanes, etc. can effectively constrict a wide right-of-way.

### *Advantages*

They can improve pedestrian circulation when paired with an intersection (with a crosswalk). They provide for traffic calming due to constricted travel space for vehicles. Fairly inexpensive measure.

### *Disadvantages*

Line striping paint has to be maintained indefinitely.



## CHICANE

Chicanes are alternating curb side constrictions that channel traffic in a snake-like configuration.

### *Advantages*

Chicanes are an effective traffic calming measure by forcing vehicles to make a horizontal movement.

### *Disadvantages*

Curb realignment can be costly, especially if landscaping and drainage issues exist. They may eliminate some on-street parking. They need to be carefully designed in order to have an aesthetic appeal in the streetscape.



## RAISED INTERSECTION

Flat, raised areas covering an entire intersection with ramps on all approaches.

### *Advantages*

They can calm two streets at once and can improve pedestrian safety and vehicular safety. They can have a high aesthetic value if designed properly. Raised intersections do not take away on-street parking spaces.

### *Disadvantages*

They can be a more expensive traffic calming measure and can impact drainage significantly. They are less effective at reducing speed than the use of speed humps, speed tables, and raised crosswalks.



## SPEED TABLE/RAISED CROSSWALKS

Speed tables are flat-topped, 10-foot wide speed humps that allow for safe pedestrian traffic.

### *Advantages*

They are smoother on larger vehicles than speed humps and are effective at reducing speeds.

### *Disadvantages*

They may divert traffic to parallel streets. They may cause damage to vehicles that do not slow down.



## TRAFFIC CIRCLE/MINI ROUNDABOUT

A traffic circle is an elevated area in the middle of an intersection that provides for counterclockwise traffic flow.

### *Advantages*

Traffic circles reduce left-hand turn accidents and are very effective in moderating speeds and improving safety. They can have a positive aesthetic value if designed properly and can calm two streets at once.

### *Disadvantages*

Traffic circle landscaping has to be maintained. They can be difficult for long emergency vehicles to circumnavigate. They may reduce on-street parking and may require additional right-of-way acquisition.



## TRAFFIC ISLAND/RAISED MEDIAN ISLAND

A traffic island is a raised concrete island along the centerline of a street that narrows the travel lanes at that location (usually at a street entrance of an intersection).

### *Advantages*

Traffic islands are good for entrances to residential areas and wide streets where pedestrians need to cross as they increase pedestrian safety.

### *Disadvantages*

Their speed-reduction effect is somewhat limited by the absence of any vertical or horizontal deflection. They may require the elimination of some on-street parking.

