



ARLINGTON COUNTY, VIRGINIA

**County Board Agenda Item
Meeting of July 8, 2006**

Date: June 29, 2006

SUBJECT: Approval of Spring Traffic-Calming Projects

C. M. RECOMMENDATION:

1. Approve traffic-calming projects as recommended by the Neighborhood Traffic Calming Committee (NTCC) for the following streets:

- a. South Taylor Street from Columbia Pike to 4th Street South
- b. South Columbus Street from South George Mason Drive to South Chesterfield Road
- c. North Lexington Street from Lee Highway to Little Falls Road

2. Authorize the County Manager to implement improvements, excluding speed cushions on 35th Street North between Military Road and North Randolph Street; should speeds not be reduced along the section of 35th Street North between North Randolph Street and North Vermont Street, authorize the County Manager to proceed with construction of the speed cushions.

ISSUES: Opposition to the 35th Street North traffic calming project by adjacent residents.

SUMMARY: The Neighborhood Traffic Calming Committee (NTCC) has recommended that the County Board approve the eleventh set of traffic-calming projects at an estimated cost of \$560,000. The recommendations of the NTCC are shown in Attachment 1. All projects recommended to move forward have met the adopted criteria for appropriateness and public support.

BACKGROUND: The Neighborhood Traffic Calming Committee (NTCC) is charged with making recommendations to the County Board on traffic-calming projects which meet adopted criteria, have gone through a community plan-development process and received substantial community support for implementation. In February 2006, the NTCC and staff identified the eleventh set of neighborhood streets with the most severe traffic problems and began working with residents on solutions to the problems identified.

The NTC Program, adopted by the County Board in March 2000, is a problem-severity-based program for which resources are directed to the neighborhood streets which have the most severe problems in terms of speed, volume and other factors such as reported accidents, and are in close

County Manager: _____

Staff: Ron C. Hicks, Department of Environmental Services/Neighborhood Traffic Calming

proximity to public and private facilities such as parks, schools and community centers. A speeding problem is defined as when the recorded 85th-percentile speed is at least five miles per hour (mph) above the posted speed limit. For a street with a posted speed limit of 25 mph, a speeding problem is considered to exist when the 85th-percentile speed is 30 mph, or greater.

When requests for traffic calming-assistance are received by staff, traffic data are collected and evaluated, and staff assigns a priority-ranking score to the streets with confirmed problems. Twice a year, the NTCC reviews the list of traffic-calming requests, selects the locations with the highest priority-ranking scores and works with the residents to develop solutions to the identified problems. Based upon the program criteria, the four proposed projects were rated the highest-priority streets for traffic calming. There are currently 81 locations on the priority-ranking list which qualify for traffic calming and are awaiting assistance, and several locations for which data have recently been collected and will be included in the next ranking.

During the past twelve months, 15 previously-approved NTC Projects have either been completed, or began the implementation process. All of the projects approved in prior rounds are now in the implementation process or final-design stage. Initial evaluations of the NTC projects have found them to have a substantial impact on travel speeds, resulting in average reductions of five miles per hour, and in some cases, much higher.

DISCUSSION: The NTCC and staff have concluded work on the eleventh set of traffic-calming projects under the NTC Program procedures adopted by the County Board in March 2000, and are recommending to the County Board that these projects move forward for implementation. The most recent NTCC funding session was held on June 15, 2006 and the recommendations of the committee are shown in Attachment 1.

In February, four project streets were selected by the NTCC based upon the problem-severity ranking that had been developed to assess the severity of neighborhood traffic problems. NTCC members and a staff person were assigned to work with residents of each street to clarify the problems, consider possible solutions and achieve consensus within the affected area on solutions to the problems. This has been accomplished for each of the four project streets. The location of each project is shown on Figure 1. A description of each project follows:

1a. South Taylor Street from Columbia Pike to 4th Street South: Residents living on and near South Taylor Street in the Barcroft School and Civic League have identified speeding and pedestrian safety as traffic concerns and requested traffic-calming assistance from County staff. In 1997, South Taylor Street was identified in a neighborhood survey as in need of a traffic-calming plan. The traffic data collected indicated that there are 721 vehicles per day, with an 85th-percentile speed of 33 mph. The street is not an emergency-response route or a Metrobus route. However, there is an Arlington County bike route crossing over South Taylor Street at 8th Street South and the intersection has been identified as a difficult crossing.

The South Taylor Street Working Group was composed of residents, two NTCC members and staff which met over a period of several months to develop an effective traffic-calming plan. An “open house” was made available to the community. The neighborhood of the affected area is comprised of mostly single-family homes and a townhouse community. The result of the petition process is that 104 out of the 125 households (83 percent) supported the plan. The

project has also received support from the Barcroft School and Civic League and the Our Savior Lutheran Church and School. (See Attachments 2A through 2C.) Due to the many activities along and around South Taylor Street which includes two large parks, two schools and a church nearby, the neighborhood strongly supported a traffic-calming plan. After much discussion and reviewing other traffic-calming measures, staff and residents considered the following measures to be best suited to address the problems identified for South Taylor Street.

The South Taylor Street plan consists of the following components:

- Two raised crosswalks
- Two nubs
- Two textured crosswalks

Staff has estimated the cost to construct this project to be \$100,000.

Outside of the traffic-calming process the neighborhood requested two locations to be studied for multiway stop signs. South Taylor Street at 8th Street South and at 4th Street South both qualified for multiway stop signs under the Arlington County warrants.

1b. South Columbus Street from South George Mason Drive to South Chesterfield Road: The section of South Columbus Street between South George Mason Drive and South Chesterfield Road is in the Claremont neighborhood. This section is classified as a neighborhood-principal street and carries a traffic volume of 2,355 vehicles per day with an 85th-percentile speed of 33 mph. The street, along with South Chesterfield Road, connects this part of South Arlington to King Street (Route 7.) This street is also used to access Wakefield High School and the Claremont Elementary School.

Residents along the 1300-1500 blocks of South Columbus Street have requested staff assistance to deal with speeding and traffic safety issues. An initial community meeting was scheduled in March 2006, and subsequent work-group meetings were held to develop a plan to be presented to the neighborhood. The residents preferred speed humps to address the speeding issue. Since this section of South Columbus Street is a designated fire-emergency response route, speed cushions would be used instead of speed humps. Parking-edge lines are also a part of the plan and would be painted along South Columbus Street from the curve at South Chesterfield Road to South George Mason Drive.

The project has been supported by 71 percent of the households in the impacted area of the neighborhood. In addition, the Claremont Citizens Association has written a letter of support for the project. (See Attachment 3A.)

The project consists of three speed cushions spaced 500 feet apart and painted parking edge lines. The estimated cost of the project is \$27,000, and could be constructed this construction season.

1c. North Lexington Street from Lee Highway to Little Falls Road: The residents along North Lexington Street have asked for traffic-calming measures to resolve dangerous pedestrian conditions as a result of excessive speeds along this stretch of roadway from Lee Highway to Little Falls Road, a distance of 0.6 miles. North Lexington Street from Lee Highway to Little

Falls Road in the Williamsburg and Leeway Overlee Civic Associations neighborhoods is designated as a neighborhood-minor street and carries approximately 1,504 vehicles per day with an 85th percentile speed of 33 miles per hour. The average speed was measured at 25.5 mph, and the number of vehicles exceeding the speed limit on North Lexington Street was recorded at 1,250, or 83 percent.

The North Lexington Street Working group was made up of residents who live along North Lexington Street and several who live on adjacent streets within the affected area. The North Lexington Street Working group reviewed traffic data and traffic patterns within the neighborhood as background data to prepare for the planning process.

There is no school located within the neighborhood boundaries, but a strip-commercial area is located along Lee Highway which is included in the boundaries. An “Open House” was available to residents to review and comment on the plan near the end of the process. The plan was presented to residents of 152 households located in the petition area and was supported by over 82 percent of the households. (See Attachments 4A and 4B.)

The Lexington Street traffic-calming project consists of the following components:

- One textured-pavement gateway at Lee Highway
- Three speed cushions
- One 20-foot circle at the intersection of 25th Road North
- Three textured crosswalks on the north, east, and west side of North Lexington Street.
- One textured crosswalk at the intersection of 27th Street North
- Four nubs at the intersection of 27th Street North and North Lexington Street with updated curbs ramps
- Two nubs and textured crosswalk at 28th Street North
- One textured pavement gateway and two nubs at the intersection of Little Falls Road

Staff has estimated the cost to construct this project to be \$211,000. Should the project be approved, portions of the project could be scheduled for construction this summer.

2. 35th Street North from Military Road to North Vermont Street: Residents living on and near 35th Street North in the Gulf Branch Civic Association have identified speeding and pedestrian safety as traffic concerns and requested traffic-calming assistance from County staff. Traffic data were collected on 35th Street North, between Military Road and North Vermont Street, in 2002 after the initial request was made. The data were collected at two locations along 35th Street North: one between Military Road and North Randolph Street and a second location between North Randolph Street and North Vermont Street. The collected data showed traffic volumes of 1,636 vehicles per day with average speeds of 29.62 mph between Military Road and North Randolph Street, and 1,437 vehicles per day with average speeds of 26.46 mph between North Randolph Street and North Vermont Street. The 85th-percentile speeds for these sections of 35th Street North were measured at 34 and 32 mph, respectively.

Another traffic study was performed on 35th Street North, between North Randolph Street and North Vermont Street, in October 2004 which showed the volume at 1,661 vehicles per day with an 85th-percentile speed of 30 mph. In June 2005, residents of the Gulf Branch neighborhood living on 35th Street North appealed to the NTCC requesting that 35th Street North be “moved

up” the list and selected in July 2005. However, because this program is problem-severity driven, and other streets ranked higher, the NTCC did not select this street at that time.

In February 2006, the NTCC selected 35th Street, between Military Road and North Vermont Street, as one of four streets to receive assistance. County staff and committee members scheduled an initial meeting for March 7, 2006, to discuss the 35th Street North traffic-calming project with the neighborhood. This initial meeting was attended by 29 citizens. Notices were mailed to residents living in the affected area of the Gulf Branch Civic Association, as well as to residents living to the west in a portion of Country Club Hills. In all, approximately 350 notices were sent. In addition, signs were posted on 35th Street North, at each end of the project area, notifying motorists of a potential traffic-calming project, and providing a phone number for inquires.

While the request for assistance to develop a traffic-calming project was originally only in the Gulf Branch area, staff had received inquiries about possibly extending the project to the west into Country Club Hills. However, after the second work group meeting, it became clear there was little or no support to extend the project to the west. The project area was determined to be from Military Road to North Vermont Street.

At the April 2006 NTCC meeting, residents opposing traffic calming measures on 35th Street North requested committee members to follow the Master Transportation Plan (MTP) principle relating to determining consensus for the voting area, and to allow the borders of the project to be the arterial streets. In addition, they requested that a post-card survey be conducted instead of a door-to-door petitioning. The NTCC members agreed that the process should be followed as it has been practiced for the last five years, allowing door-to-door petitioning by volunteers. The door-to-door petition is preferred to the post-card survey in that it produces a significantly higher percentage of resident voting. The NTCC also determined that the “affected area” of the project to be households along the street from Military Road to North Vermont Street and household on the side streets within one block of 35th Street North.

A workgroup consisting of residents, both within and outside the affected area, had been formed as a result of the initial meeting on March 7, 2006. There were several workgroup meetings prior to the “open house” which was held on May 24, 2006. The May 2, 2006, meeting was attended by approximately 30 citizens. Staff discussed a preliminary plan which included a traffic circle at 35th Street North and North Utah Street. Residents on North Utah Street asked staff to reconsider the traffic circle, based on inclement weather concerns and sight distance, and install another speed cushion instead. Nubs at the North Randolph Street intersection with 35th Street were also added to the plan. Staff made these changes prior to the open house, and presented these changes at the “open house”.

The open house was conducted on May 24, 2006, with approximately 65 citizens in attendance. Staff provided copies of the petition at the open house for residents of the affected area to sign, as well as a form for citizens outside the affected area to provide their concerns. These were shared with the NTCC.

The 35th Street North plan consists of the following components:

- A textured-pavement gateway at Military Road
- Four speed cushions between Military Road and North Vermont Street
- Two nubs at North Randolph Street
- A nub at North Vermont Street
- Parking edge lines between Military Road and North Randolph Street

Seventy percent of all residents in the affected area have voted to support the project. The residents in the affected area living on 35th Street North have supported the project by 84 percent. The Gulf Branch Civic Association has also sent a letter supporting the proposed traffic calming project to the County Board. (See Attachment 5A.)

There have been a number of residents in opposition to any 35th Street North traffic calming project residing mostly outside the affected area. These residents expressed their concerns in an April 27th email message to County Manager Ron Carlee. (See Attachment 5B.) These issues were addressed in a letter from Ken Chandler, Deputy County Manager, on May 17th. (See Attachment 5C.) These issues and a staff response are shown on Attachment 6.

Staff has estimated the cost to construct this project to be \$222,000. Staff recommends to move forward with the implementation of the plan, with the exception of the two proposed speed cushions between Military Road and North Randolph Street. Speed data would be collected after the completion of the improvements, and if travel speeds are not reduced along this segment of 35th Street North, the speed cushions would be constructed. The section of 35th Street North in the project area is scheduled to be repaved in the summer of 2007. Construction of the project will take place just prior to the repaving of the street, with speed cushion installation taking place directly after the paving project.

NTC Periodic Review

In the first several years of the NTC Program, projects were approved and funded for implementation. In recent years, implementation has continued, and considerable data now have been collected to permit an overall evaluation. The upcoming “Periodic Review” of the Neighborhood Traffic Calming Program provides the opportunity for the NTCC to evaluate the current traffic calming tools, especially the use of speed humps, and speed cushions. The review would involve the programs use of these devices, experience and effectiveness, and any possible changes to criteria. The “Periodic Review” of the Neighborhood Traffic Calming Program will be provided to the County Board early this fall.

FISCAL IMPACT: Funding in the amount of \$560,000 is available for these projects in the Neighborhood Traffic Calming (NTC) Program PAYGO budget. Fund 313 Cost Center 43512 Project NTC.

ATTACHMENT 6

Discussions of Concerns Raised by Opponents of the 35th Street Project

The following provides information on the concerns raised by opponents of the 35th Street North neighborhood traffic calming (NTC) project.

1. Initial Scoring to Determine Priorities for Assistance

Every street that meets the minimum thresholds to receive traffic calming assistance receives points to determine where it ranks compared to other streets waiting for traffic calming assistance. The points are based on volume, speeds, accidents, bus/bike routes, pedestrian generators and whether or not the street has sidewalks, and are intended to quantify problem severity. If a street currently has traffic calming measures on that street, points are deducted from the score.

Initial requests for traffic calming on 35th Street North were received in 2002. Traffic data were collected for two segments of 35th Street North: one between Military Road and North Randolph Street, and a second between North Randolph Street and North Vermont Street. The data confirmed a speeding problem and the points were given representing the factors above. The initial points were 56 for each of the segments of 35th Street North.

Twice a year, the Neighborhood Traffic Calming Committee (NTCC) selects about four projects to receive traffic calming assistance. Streets with the most points are selected. However, streets with more points on the problem severity list are passed over consistently if either they have been selected by Neighborhood Conservation (NC) as a project street, or construction is currently taking place on the street which may change the characteristics of the street (e.g., narrowing the street, townhouse development.) Once any work being done on a street which has been passed over, is complete, staff will collect new data to determine if the street continues to qualify for traffic calming assistance.

In February 2006, the NTCC selected 35th Street North to received traffic calming assistance, although there were two projects which had more problem severity points than 35th Street North. However, these two project streets have impeding NC projects that would change the width of the street when construction is completed.

2. Determine Limits of Affected Area

The method of determining the affected area for a street selected to receive traffic calming assistance has been consistent since the adoption of the traffic calming program in 2000. Households adjacent to the street and one block off the selected street are considered to be within the affected area. In a few cases, the NTCC extended these boundaries based on street network (e.g., cul-de-sacs or parallel streets).

The affected area for 35th Street North includes all households on 35th Street North from Military Road to North Vermont Street and cross streets, which is essentially all of the Gulf Branch neighborhood. A total of 194 households were part of the affected area.

3. Speed Profile for Determining Speed Hump Eligibility

A street is eligible for traffic calming, per the NTC policy, when the 85th percentile speed is equal to, or greater than 30 miles per hour. The NTC policy additionally considers speed humps as a possible measure when the 85th percentile speed is equal to, or greater than 32 mph. This has been consistently applied since the adoption of the program in 2000. Although the NTC program manual toolbox states speeds greater than 30 for traffic calming assistance and greater than 32 mph for speed humps, it was understood from the ad hoc committee report that these should have included equal to. The revised manual reflects this change.

In 2002, after receiving a request from one of the Gulf Branch community representatives, the data collected showed the 85th percentile speed was 34 mph for both segments of 35th Street North. NTC program practice has been that if someone requests new traffic data on a street for which data are more than two years old, new data are collected. So in 2004, after a request was made by another citizen, the 85th percentile speed was measured at 30 mph for the segment of street between North Randolph Street and North Vermont Street, still within the guidelines to receive assistance from the traffic calming staff.

Once 35th Street was selected for traffic calming assistance, because of concerns from opponents of the 35th Street North traffic calming project, the NTCC requested that staff collect a third set of data between Military Road and North Randolph Street and between North Randolph Street and North Vermont Street. The 85th percentile speeds were 32 mph and 36 mph, respectively. The 85th percentile speeds of 32 mph are consistent with the way the program has operated over the last five years, allowing speed humps if the data show an 85th percentile speed equal to, or greater than 32 mph.

There have been past projects where the NTCC provided a waiver of the 32 mph speed threshold to allow speed humps as a measure. These were on project streets where the 85th percentile speeds were measured at 31 mph. These instances were cases where staff and the NTCC felt it necessary to allow speed humps because other measures were not feasible. On long street segments where a number of traffic counts were collected and some segments of that street qualify for traffic calming assistance, staff used the higher speed. Despite community interest in doing so, the NTC program does not develop plans for areas or entire neighborhoods, so that it can concentrate on more severe problems in more neighborhoods. Neither is the NTC program confined to each individual block recognizing that speeding problems often are not limited to a single point or block. Despite differences in speeds from one segment of 35th Street to the other and one year to another, the overall profile shows a street with an 85th percentile speed of 32 miles per hour, or greater.

4. Consideration of Alternatives to Speed Humps

Arlington has employed a number of traffic management measures over the years. Non-restrictive measures range from quite inexpensive (e.g., painted parking lanes) to more expensive (e.g., speed humps, traffic circles), to quite or very expensive (e.g., nubs, gateways, street narrowing). In some cases measures (e.g., fixed radar speed display), become ineffective after six months. Arlington County staff studies have shown that measures other than speed humps have limited effect upon speed and in the case of 35th Street North, topography limits the ability to narrow the street to create a “yield” street. Staff believes the installation of four speed humps provides a compromise. The 35th Street North plan also includes nubs and a textured paved gateway at Military Road. The proposed plan would place speed humps spaced at approximately 500-feet apart, the maximum distance to be effective.

5. Petition Process to Determine Support Threshold

The NTC program specifies that support levels can be determined by petition or using a post card survey. The NTC minimum requirement for non-restrictive measures, such as speed humps, textured paved gateways and nubs is 60 percent of the households in the affected area. In practice, the petition process is the preferred method of determining support for a traffic calming project. The petition process provides better participation, is quicker, and allows the petitioner to be able to describe the project to residents. The petition is designed by staff with supporting data which includes traffic data, a map of the proposed project and measures, and pictures of the various measures included in the project. The petition process is used in other County programs including the Neighborhood Conservation Program, which was used a model for the NTC program. Post-card surveys have proven to be ineffective with a poor rate of return. Additionally, a great amount of staff time is spent with a post-card survey. As a result, the petition process is now used on a consistent basis.

6. Treatment of “Vacant” Homes in Support Calculation

Using petitions, households are classified as supporting the plan, opposing the plan, vacant, or unavailable. The NTC policy for vacant houses has consistently been to subtract the number of vacant houses from the total number of households in the affected area. Occupied dwellings, where occupants cannot be reached after several tries are considered as “unavailable” and counted as opposing. In the case of the 35th Street North traffic calming project, staff has confirmed the households identified as vacant in the affected area to be indeed, vacant.

7. Scoring to Assist Funding Priority

As described above, streets eligible for traffic calming assistance are given points to determine priority based on problem severity. Once a street receives that assistance and a plan has sufficient support, there is a second tabulation of points to assist the NTCC in selecting projects to move forward during the semi-annual funding round. The points for the funding priority are again based on volume, speeds, accidents, bus/bike routes, and pedestrian generators (e.g., schools, parks), plus dangerous conditions (e.g., curves, hills, and topography), and civic association support and community support in excess of 60%.

In addition to the 56 points for volume and speeds, 35th Street North received five additional points for dangerous conditions (topography), five points for the Gulf Branch Civic Association support, and five points for each 10 percent community support greater than 60%. This brought their funding priority score to 71 points. This was the lowest score of the four projects; however, the NTCC voted to fund all four projects.