Date: March 8, 2006

SUBJECT: Approval of Traffic Calming Projects and Spring Review of the NTC Program

C. M. RECOMMENDATION:

1. **Approve** traffic calming projects as recommended by the Neighborhood Traffic Calming Committee (NTCC) on the following streets:
   a. North Harrison Street between 37th Road North and Williamsburg Boulevard
   b. Little Falls Road between North George Mason Drive and Old Dominion Drive
   c. North Rochester Street between Williamsburg Boulevard and the County Line

2. **Authorize** the County Manager to implement improvements, excluding speed cushions on 31st Street South between South Abingdon Street and South Randolph Street; should speeds not be reduced following implementation of these improvements, authorize the County Manager to proceed with construction of the speed cushions.

3. **Approve** a speed hump project as recommended by the NTCC for North Barton Street between 9th Street North and North Pershing Drive.

4. **Confirm** guidance to the NTCC to evaluate traffic calming tools, especially speed humps and cushions, through the upcoming periodic evaluation.

ISSUES: None.

SUMMARY: The Neighborhood Traffic Calming Committee (NTCC) has recommended that the County Board approve the tenth set of traffic-calming projects at an estimated cost of $301,000. 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 where there is substantial community support for implementation. Last summer, the NTCC and staff identified
the tenth 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 proximity to public and private facilities such as parks, schools and community centers. A speeding problem is defined as when the recorded 85\textsuperscript{th} 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 85\textsuperscript{th} 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. The NTCC is in the process of selecting the next set of streets, generally four to six, to receive traffic calming assistance. There are currently 87 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. In 2005, staff had requests from residents of 44 streets requesting traffic calming.

During the past twelve months, 24 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.

**DISCUSSION:** The NTCC and staff have concluded work on the tenth 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 January 11, 2006 and the recommendations of the committee are shown on Attachment 1.

Last summer 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, develop solutions and achieve consensus within the affected area on solutions to the problems. This has been accomplished for each of the five project streets. The location of each project is shown on Figure 1. A description of each project follows:

1.a North Harrison Street from Williamsburg Boulevard to 37th Road North: Residents living along and near North Harrison Street have asked for traffic calming measures to resolve pedestrian issues as a result of excessive speeds along this half-mile stretch. North Harrison Street from Williamsburg Boulevard to 37th Road North in the Rock Springs neighborhood is designated as a neighborhood-principal street and carries approximately 2,100 vehicles per day with an 85\textsuperscript{th}-
percentile speed of 32 miles per hour. The average speed was measured at 25.5 mph, and the number of vehicles exceeding the speed limit on North Harrison Street was 1,366, or 63 percent.

The North Harrison Street NTC Planning group was made up of residents who live on North Harrison Street and one who lives on Williamsburg Boulevard. The North Harrison Street NTC Planning group reviewed speed data and traffic patterns within the neighborhood as background data to prepare for the planning process.

The Williamsburg Middle School is located within the project boundaries and supported the NTC planning effort by providing a representative from the school. An open house was available to residents to review and comment on the plan near the end of the process. The Rock Springs Civic Association was presented the plan and has written a letter of support for the North Harrison Street NTC project. The plan was presented to residents of 35 houses located in the petition area. The plan has been supported by over 73 percent of the households in the affected area. (See Attachment 2A and 2B.)

The North Harrison Street traffic calming project consists of the following components:

- Four speed humps
- Five painted crosswalks at various locations on and North Harrison Street
- One new crosswalk located at Williamsburg School and across from 3671 North Harrison Street. This will include the construction of wheelchair ramps (two) on the east and west side on the street.
- Stop bar painted on southbound North Harrison Street at 3607 North Harrison Street
- Painted parking edge line from 3601 North Harrison Street to 3551 North Harrison Street
- “No Parking” sign and “Do Not Block Intersection” sign for North Harrison Street at 36th Street North.

Staff has estimated the cost of this project to be $58,000. Should this project be approved, it will be scheduled to be constructed this summer, prior to opening of school.

1.b Little Falls Road from George Mason Drive to Old Dominion Drive: Residents living on and near Little Falls Road in the Rock Springs Civic Association have identified speeding and pedestrian safety as traffic concerns and requested traffic calming assistance from County staff. The 24-hour traffic count on Little Falls Road is 1,041 vehicles, with an 85th-percentile speed of 31 mph. The average speed was measured at 26.5 mph. The number of vehicles exceeding the speed limit was 670, or 64 percent.

County staff, committee members and residents met to determine what traffic calming measures would be most practical and effective for Little Falls Road. Due to the many activities located on the grounds of Rock Spring Congregational United Church of Christ, including the preschool, parking in this area is at a premium; therefore, narrowing Little Falls Road was not considered a feasible option to slow traffic since parking would be lost. Additionally, installing chokers would also require the elimination of parking spaces, and it is believed that the parked cars provide the same effect as chokers. After much discussion and reviewing other traffic calming measures, staff and residents believed speed humps should be considered. Although

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Little Falls Road did not meet the 32-mph, 85th-percentile minimum threshold speed for speed humps, staff and residents of Little Falls Road requested the Neighborhood Traffic Calming Committee approve a waiver and allow speed humps on Little Falls Road. Speed humps have proven to be an effective measure based on before-and-after studies performed by staff. At the November 2005 Neighborhood Traffic Calming Committee meeting, committee members approved a waiver of the 32-mph minimum threshold for speed humps and are recommending speed humps on Little Falls Road.

As part of the Little Falls Road traffic calming plan, a traffic island is also proposed at the intersection of North Columbus Street and Little Falls Road. This island would narrow the wide intersection of North Columbus Street with Little Falls Road and provide a pedestrian refuge. Although some residents are opposed to this island, and generated a petition against the traffic island, the traffic plan as a whole received 73-percent approval from the affected area and letters of support from the Rock Spring Civic Association, Rock Spring Congregational United Church of Christ, and Rock Spring Cooperative Preschool. (See Attachment 3A, 3B, and 3C.)

The Little Falls Road plan consists of the following components:

- Raised island at Little Falls Road and North Columbus Street
- One speed cushion between George Mason Drive and Rock Spring Road
- One raised crosswalk near 3205 Little Falls Road
- One speed hump near 4941 Little Falls Road

Staff has estimated the cost to construct this project to be $50,000. Should the project be approved, it will be scheduled for construction this summer.

1.3 North Rochester Street from Williamsburg Boulevard to County Line: Residents living on and near North Rochester Street in the Williamsburg Civic Association have identified speeding and pedestrian safety as traffic concerns and requested traffic calming assistance from County staff. North Rochester Street connects two arterials: Williamsburg Boulevard and Westmoreland Street and is also used as a cut-through route. The 24-hour traffic count taken on North Rochester Street showed 1,738 vehicles with an 85th-percentile speed of 35 mph. The average speed was measured at 30.3 mph. The number of vehicles exceeding the speed limit on North Rochester Street was 1,510, or 87 percent.

Residents are concerned about speed and safety along this quarter-mile segment of roadway, which continues into Fairfax County, where it changes names to North Roosevelt Street. Staff has notified Fairfax County of the pending traffic calming project. Fairfax County staff stated that residents have requested traffic calming on North Roosevelt Street (North Rochester Street) for many years, but to date no action had been taken there. The neighborhood of the affected area is comprised of single-family homes and a townhouse community. There are 38 homes in the petition area. The street is not an emergency-response route, or a Metrobus route.
The North Rochester Street Working Group was composed of residents, two NTCC members and staff which met over a period of several months to develop a traffic calming plan. An “open house” was made available to the community. The result of the petition process is that 25 of the 38 households (66 percent) supported the plan.

The North Rochester Street traffic calming project consists of the following components:
- Three speed humps
- One textured, at-grade crosswalk

Staff has estimated the cost to construct this project to be $34,000. Should the project be approved, the project will be scheduled for construction this summer.

2. 31st Street South from South Abingdon Street to South Randolph Street: The section of 31st Street South, between South Abingdon Street and South Randolph Street was selected by the NTCC for traffic calming assistance because of a high traffic volume, high speeds and difficulty of pedestrians crossing the street to reach bus stops. Traffic data indicate the street is used by over 5200 vehicles per day with an average speed of 29 miles per hour and an 85th-percentile speed of 34 miles per hour. Over 80 percent of the vehicles using the street were traveling over the posted 25-mph speed limit. This segment of 31st Street South is a designated emergency-vehicle-response route and a major Metrobus route, with four bus stops within the limits of the project.

This half-mile-long segment of 31st Street South lies mostly within the Fairlington Citizens Association boundaries, and three large rental apartment complexes also front on the street. These complexes (Shirlington House, Park Shirlington and Windsor at Shirlington Village) contain a total of 1,136 rental units.

A small working group composed of Fairlington residents, representatives of management of the three apartment complexes, some apartment residents, NTCC designees and staff met on several occasions to review the problems identified and to develop a plan to address the problems. An “open house” was held on November 30th at the Fairlington Community Center to share the plan with the community.

The plan developed by the working group consists of five speed cushions spaced 400 to 500 feet apart, bus-stop nubs at Metrobus stops along the street, enhanced laddered crosswalks and parking edge lines to define the on-street parking spaces, at a total estimated cost of $150,000.

This project provides a unique opportunity to address several traffic and pedestrian safety issues. There is substantial bus ridership in this corridor, but one of the safety concerns has been safe access to the bus stops. Crossing 31st Street South can be difficult during peak travel times because of the volume and speed of vehicles on 31st Street South. Improving the bus stops and pedestrian crosswalks to access the bus stops should enhance pedestrian safety.

Bus-stop nubs are extended nubs which are the length (40 feet) of a bus. The extended length allows the bus to stop so that the front and rear doors are adjacent to the curb for easier boarding.

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and departing. The bus stops would be enhanced with new bus shelters, trash receptacles and newspaper boxes. The Arlington Transit Program has agreed to pay for and to install the new shelters.

This project has been supported by 69 percent of the affected residents in the Fairlington community on the west end of the project street. The three apartment complexes were represented by management, and all three managements sent letters of support for the project. Residents of the apartments were informed of the working group meetings and of the open house through the posting of notices and were invited to participate in the process. The project has also received support of the Fairlington Citizens Association. (See Attachments 4A through 4D.)

Staff has estimated the cost to construct this project to be $150,000. Staff recommends to move forward with construction of the bus nubs, improved crosswalks, and parking edge line. Speed data would be gathered and evaluated, and if travel speeds have not been reduced at the level at which speed cushions are approvable, the five speed cushions would then be constructed.

3. North Barton Street from 10th Street North to North Pershing Drive: This street is classified as a neighborhood-principal street and is located in the Lyon Park neighborhood. The 24-hour count on North Barton Street showed 3,603 vehicles per day, with an 85th-percentile speed of 31 mph. The average speed was measured at 26.6 mph. The number of vehicles exceeding the speed limit on North Barton Street was 2,210, or 61 percent.

North Barton Street was originally selected and funded to receive traffic calming measures in 2000 when funds in the amount of $155,000 were approved. At that time, two gateways, and four textured crosswalks were installed. Permanent speed displays were approved, but not installed since the residents could not agree on locations. The Neighborhood Conservation program installed nubs at 9th Street North a few years earlier. An all-way stop sign at 9th Street North was installed in 2003; however, the data showed it did not have an effect on speeds elsewhere on the street. Although the measures enhanced pedestrian and bicycle safety, travel speeds remained the same.

The neighborhood appealed to the NTCC to request a speed hump to slow traffic. On September 7, 2005 the Neighborhood Traffic Calming Committee agreed to make an exception to the 32-mph minimum requirement for a speed hump, since previous measures did not reduce the speeds. The plan consists of one speed hump located mid-block between 9th Street North and North Pershing Drive. The plan was supported by 84 percent of the households in the affected area.

Staff estimates the cost of the one speed hump to be $9,000. Should the project be approved, the speed hump will be scheduled for construction this summer.

4. 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 has 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 this spring.

**FISCAL IMPACT:** Funding in the amount of $301,000 is available for these projects in the approved FY06 PAYG Funds for the Neighborhood Traffic Calming (NTC) Program. 013.319/NTC