

BOARD OF ALDERMEN

ITEM NO. D(7)

AGENDA ITEM ABSTRACT

MEETING DATE: JUNE 6, 2006

TITLE: Traffic Calming Requests for Morningside Drive, Spring Valley Road, and Blueridge Road

DEPARTMENT: PLANNING	PUBLIC HEARING: YES ___NO__X__
ATTACHMENTS: <ul style="list-style-type: none">A. ResolutionB. Town Code AmendmentC. Petition from Morningside and Spring ValleyD. Petition from BlueridgeE. Traffic Count TableF. Traffic Calming Criteria WorksheetsG. Proposed Location of Speed TablesH. TAB RecommendationI. Residential Traffic Management Plan	FOR INFORMATION CONTACT: Dale McKeel – 918-7329

PURPOSE

Residents of Blueridge Road, Morningside Drive, and Spring Valley Road (between Morningside and Pathway) have expressed concerns about speeding traffic and submitted petitions under the Town's Residential Traffic Management Plan. Town staff has collected data and evaluated traffic conditions on these streets and recommends the following:

1. The installation of two speed tables on Morningside Drive.
2. The installation of two speed tables on Spring Valley Road (between Morningside and Pathway)
3. The creation of a three-way stop at the Morningside-Spring Valley intersection.
4. The scheduling of one or more meetings with residents of Blueridge Road to discuss traffic concerns and possible solutions.
5. The monitoring by Town staff of traffic volume and speed on Blueridge Road following any changes to Morningside and Spring Valley.

A resolution and town code amendment have been prepared for the Board's adoption.

INFORMATION

Morningside Drive, Spring Valley Road, and Blueridge Road are residential streets consisting primarily of single-family detached homes. All three streets have a 25 mph speed limit, curb and gutter, and 60-foot right of way. Other characteristics of the streets are as follows:

- Morningside Drive is about 1990 feet in length.
- Spring Valley Road between Morningside and Pathway is about 1515 feet in length.
- Blueridge Road is about 2480 feet in length.

None of the streets have sidewalks. However, sidewalks are shown on all three streets in the sidewalk master plan. In the sidewalk priority matrix that was used in 2003 to review possible sidewalk bond projects, sidewalks on Blueridge and Morningside ranked slightly higher than Spring Valley, though all three streets ranked in the bottom half of the priority list.

The Town of Carrboro's Residential Traffic Management Plan (RTMP) provides a mechanism for addressing residents' concerns about speeding on residential streets (see Attachment I). Residents of Spring Valley Road and Morningside Drive submitted a petition to the Town in September 2005 (Attachment C). The petition met the 75 percent threshold in the RTMP (55 out of 62 residents – 88.7 percent).

In reviewing the petition, Town staff had concerns that traffic calming devices on Spring Valley and Morningside would divert traffic to Blueridge Road. A meeting was set up with representatives of Blueridge Road, who proceeded to collect signatures and submitted a petition in February 2006 (Attachment D). Because of their proximity to Blueridge Road, residents of Aberdeen Court and Webb Drive were also asked to sign the petition. The petition met the 75 percent threshold in the RTMP (42 out of 55 residents – 76.4 percent).

The cover letter for the Blueridge Road petition states:

- Overwhelmingly, the residents do not want any speed bumps on Blueridge Road.
- While some are reluctant to have extra stop signs on Blueridge Road, they prefer this solution over speed humps.
- One resident did not think there was a traffic problem and wanted any available money to go toward education issues.
- Quite a few neighbors cited as a consistent offender of traffic laws to be public school bus drivers. (This comment has been passed along to the transportation director of the Chapel Hill-Carrboro School System).

TRAFFIC COUNTS, VEHICLE SPEEDS, AND ENFORCEMENT

Public Works staff recorded traffic counts and vehicle speeds on the streets in March, September, and December 2005. Attachment E shows the results of these counts. Some of this data is also shown on the map in Attachment G.

The "Volume" column shows the total number of vehicles that passed the point in both directions during a 24-hour period. The "85th percentile speed" is that speed at or below which 85 percent of the vehicles were moving during a 24-hour period. For instance, if the 85th percentile speed is 35 mph, then 85 percent of the vehicles were going 35 mph or lower, while 15 percent of the vehicles were going faster than 35 mph.

The Carrboro Police Department concentrated traffic enforcement in this area in 2005 and 2006. Between January 26 and May 26, 2005, there were nine verbal warnings and seven citations for speeding. Between April 3 and May 19, 2006 there were 13 verbal warnings and eight citations. One citation was issued for 55mph in a 25mph zone.

TRAFFIC CALMING CRITERIA AND STAFF REVIEW

The Residential Traffic Management Plan provides six criteria to be used in evaluating the traffic conditions on a street. The six criteria are traffic volume, 85th percentile speed, pedestrian volume, bicycle volume, bus stops, and proximity to pedestrian generators.

Using the worksheet on page 3 of the RTMP, Morningside Drive received a score of 41, Spring Valley Road received a score of 34, and Blueridge Road received a score of 32 (see Attachment F). Since all three streets received a combined total of at least 12 points in the "Traffic Volume" and "85th Percentile Speed" criteria and more than 25 points total, they are eligible for both Stage 1 and Stage 2 Traffic Calming. Stage 1 involves primarily education and enforcement measures, while Stage 2 includes physical modifications to the street such as speed humps.

STAFF RECOMMENDATION

The characteristics and function of Morningside Drive, Spring Valley Road, and Blueridge Road suggest that traffic calming devices would address the residents' concerns about speeding traffic. However, residents of Blueridge Drive do not support the installation of speed bumps at this time. Town staff recommends the following:

1. The installation of two speed tables on Morningside Drive.
2. The installation of two speed tables on Spring Valley Road (between Morningside and Pathway)
3. The creation of a three-way stop at the Morningside-Spring Valley intersection.
4. The scheduling of one or more meetings with residents of Blueridge Road to discuss traffic concerns and possible solutions.
5. The monitoring by Town staff of traffic volume and speed on Blueridge Road following any changes to Morningside and Spring Valley.

Note that speed tables rather than speed humps are recommended. Speed tables are 8 feet longer than speed humps (22 feet versus 14 feet), and have a more gradual rise with a flat area on top of at least ten feet. Speed tables are recommended because they effectively reduce speeding but are less jarring than speed humps to buses, fire trucks, and emergency vehicles.

Two speed tables were recently constructed on High Street, and both residents and Town staff have been pleased with these devices. The speed tables proposed for Morningside and Spring Valley are similar to those on High Street. The marking and signage for the speed tables will also be similar to that used on High Street and will follow the recommendations of the *Manual of Uniform Traffic Control Devices*.

The proposed locations for speed tables are shown on Attachment G. The exact location of the speed tables will be determined in the field by the Town Engineer and Public Works Department. This is to ensure that the speed tables do not negatively impact drainage on the street or impede other operations, such as driveway access, street sweeping, and snow removal.

Town staff considered the feasibility of traffic calming devices other than speed tables. The RTMP lists several traffic calming devices that rely on roadway narrowing (e.g., mid-block choker, bulbout, center island median) or horizontal shift (e.g., chicane, neighborhood traffic circle) to reduce speed. An island median was considered on Spring Valley Road, but was not considered feasible due to driveway conflicts.

The staff Traffic and Parking Committee, made up of representatives from the fire, police, planning, public works, community and economic development, and recreation and parks departments, on May 12 reviewed and by consensus supported the above recommendations.

Please note that Town staff reviewed several possible locations for multi-way stop signs in the neighborhood and generally could support a multi-way stop only at the Morningside-Spring Valley intersection. In doing so, Town staff reviewed the guidelines for multi-way stops in the *Manual of Uniform Traffic Control Devices*. Research has found that multi-way stops are generally not effective at controlling speeds in residential neighborhoods. Among the reasons stated in this research are the following: (1) Stop compliance is poor at unwarranted multi-way stop signs, based on the drivers feeling that the signs have no traffic control purpose and there is little reason to yield the right-of-way because there are usually no vehicles on the minor street; (2) Before-After studies show multi-way stop signs do not reduce speeds on residential streets; (3) Unwarranted multi-way stops lead to increased speed some distance from intersections; the studies hypothesize that motorists are making up the time they lost at the "unnecessary" stop sign; (4) Multi-way stop locations contribute to higher vehicle operating costs, travel times, fuel consumption, and emissions.

SUMMARY OF TAB REVIEW

The Transportation Advisory Board (TAB) reviewed this request on May 18. The TAB recommends that the Board of Aldermen support the staff recommendation with the additional recommendation of lowering the speed limit on all residential streets to 20 mph (Attachment H). Please note that in its report to the Board of Aldermen last January, the Transportation Advisory Board stated that there was conflicting evidence about whether reducing the speed limit to 20 mph would reduce travel speeds on neighborhood streets, and stated that the Police department has given a similarly mixed response to this proposal. The Board of Aldermen has requested a follow-up report on reducing the speed limit to 20 mph on residential streets town-wide, and staff recommends that no action be taken to reduce the speed limit at this time.

FISCAL IMPACT

The estimated installation cost for each speed table is about \$2100 and includes asphalt work, pavement markings, and signage. If approved, the speed tables will be installed by Public Works

staff. Funds are available in the proposed 06-07 fiscal year budget to construct about six speed tables.

RECOMMENDATION

A town code amendment and resolution have been prepared for the Board's adoption (Attachments A and B).