

AGENDA #1

MEMORANDUM

TO: Mayor and Town Council

FROM: W. Calvin Horton, Town Manager

SUBJECT: Draft Options for Traffic Calming Policy and Procedures

DATE: November 24, 2003

This report discusses options for Traffic Calming Policy and Procedures. Options presented for the Council's consideration are: (1) continue the current process of dealing with traffic calming requests on a first come-first served basis when each request is received; (2) establish formal policy and procedures for receiving, prioritizing, and funding traffic calming requests; and (3) include a mechanism in the policy and procedures to allow assessment of some or all of the costs of traffic calming projects to benefited properties.

The Manager recommends that the Council refer this report and attachments to the Town's Transportation Board for review and recommendations prior to scheduling Council action on this matter.

BACKGROUND

At its June 9, 2003 meeting, the Council directed the Manager to schedule a work session in the fall of the year to discuss adoption of formal policy and procedures for neighborhood traffic calming.

The Town regularly receives requests for various means and methods to manage traffic in and around neighborhoods. We receive both non-specific requests for help as well as specific requests for traffic control measures, including but not limited to stop signs, informational signs, striping, raised islands/medians, roundabouts, rumble strips, speed humps/tables, textured crosswalks, etc.

The Town has implemented traffic calming measures in seven neighborhoods over the past three years. We currently have sixteen requests pending, and they are listed in Attachment #3.

DISCUSSION

We have developed the following draft options for the Council's consideration:

Option 1, Continue Existing Process:

The Town currently operates informally with regard to receiving, prioritizing, and funding requests for traffic calming on local streets in Chapel Hill. The Council could choose to continue with this informal process rather than establishing a formal policy and set of procedures for

- All properties abutting the proposed street segment to be modified.
- All properties on adjacent street(s) with ingress/egress only possible via the modified street segment.
- All properties on adjacent street(s) that have alternative points of ingress/egress but are expected to be otherwise affected by the modified street segment.

Defining the service area for traffic calming projects would be challenging. Town staff would do its best to be professional, reasonable and consistent in defining service areas. However, property owners in the vicinity of proposed traffic calming projects could come to different conclusions about the boundaries of the service areas, and Town staff determinations could be challenged. We suggest that the Town Transportation Board consider appeals from citizens regarding the service area boundaries. The Board could adjust service area boundaries as it deems appropriate.

3) Traffic Calming Plans: Town Engineering staff would develop traffic calming plans in conjunction with input from neighborhood meetings. The plans would be developed with consideration of:

- Town Policy for the Placement of Stop Signs and Assignment of Speed Limits (Adopted by the Town Council 04/24/89)
- The characteristics of the neighborhood and street system
- The types of traffic calming measures that would be most effective in addressing identified traffic problem(s)
- Accepted design criteria and public safety issues

Please refer to Appendix A and B of the attached draft policy and procedure documents for further details.

4) Ranking System: Traffic calming projects would be prioritized using a ranking system described in Appendix C of the attached draft policy and procedure documents. This procedure for establishing project priorities would be similar to the process presently used by the Town to rank sidewalk and bicycle improvement projects. An annual prioritized project list, including plans and costs estimates, would be presented to the Transportation Board for consideration and recommendations. The Board's recommendations would be included with the Town Manager's annual report to the Town Council in which traffic management projects would be recommended, subject to the level of funding approved by the Council for the coming year.

5) Annual Report: In the fall of each year, the Town Manager would present for the Council's consideration an annual traffic calming report including:

- A prioritized list of traffic calming projects for which a valid petition was received
- A copy of each petition
- A summary of the data pertaining to each petition.
- The Town Transportation Board's recommendation
- The Town Manager's recommendation

Based on the Town Attorney's guidance and the existing Town policy for "street paving by petition", if the Council wishes to consider assessing property owners for traffic calming projects we would suggest using procedures similar to those used for petition paving projects.

The following language is included in General Statute 160A-218 regarding assessments for street improvements:

- "(1) The frontage abutting on the project, at an equal rate per foot of frontage; or*
- (2) The area of land served, or subject to being served, by the project, at an equal rate per unit of area; or*
- (3) The value added to the land served by the project, or subject to being served by it, being the difference between the appraised value of the land without improvements as shown on the tax records of the county, and the appraised value of the land with improvements according to the appraisal standards and rules adopted by the county at its last revaluation, at an equal rate per dollar of value added; or*
- (4) The number of lots served, or subject to being served, where the project involves extension of an existing system to a residential or commercial subdivision, at an equal rate per lot; or*
- (5) A combination of two or more of these bases.*

Whenever the basis selected for assessment is either area or value added, the council may provide for the laying out of benefit zones according to the distance of benefited property from the project being undertaken, and may establish differing rates of assessment to apply uniformly throughout each benefit zone.

For each project, the council shall endeavor to establish an assessment method from among the bases set out in this section which will most accurately assess each lot or parcel of land according to the benefit conferred upon it by the project. The council's decision as to the method of assessment shall be final and conclusive and not subject to further review or challenge."

We suggest that the assessment basis for traffic calming projects would be: *"The area of land served, or subject to being served, by the project, at an equal rate per benefited property"*. Following the petition paving model, we also would suggest that the Town share in the costs of traffic calming projects on a 50/50 basis with benefited property owners. Thus, the Town would implement approved traffic calming projects and would pay 50% of the total project costs. Property owners in the service area would be assessed on an equal share per benefited property basis for the other 50% of the project costs. The owners of assessed property would have the option of paying the assessment either in a single payment or in not more than 10 annual installments.

Option #3 Advantages:

1. Allows the Town to recoup some or all of costs for implementing traffic calming projects.
2. Offers neighborhoods a sense of "ownership" in the improvements.

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**DRAFT
POLICY AND PROCEDURES
FOR TRAFFIC CALMING MEASURES
(WITHOUT ASSESSMENTS)**

PURPOSE

To adopt official policy and procedures for the appropriate and consistent application of traffic calming measures on Town-maintained streets in Chapel Hill.

COVERAGE

This policy and the associated procedures shall be applicable until such time that they are officially amended, modified, or rescinded by the Town Council.

POLICY

Traffic calming measures are applicable in residential neighborhoods where speeding vehicles and/or cut-through traffic are the primary concerns, and traditional police enforcement is found to be unfeasible and/or ineffective. Streets must typically be residential in nature for consideration under this policy. Traffic calming devices will not typically be placed on Arterial classification streets. The following policy and procedures are intended to promote traffic calming measures that are appropriately implemented and are supported by the community.

The following procedure will be used to identify, evaluate, and implement traffic calming projects in Chapel Hill.

1. A citizen requesting traffic calming improvements will fill out a Request for Traffic Calming Measures form available in the Town Engineering Department and on the Town web site.
2. Upon receipt of a properly completed Request form, the Engineering Department will determine an applicable "service area" surrounding the requested traffic calming site(s), and will provide the requesting citizen with a Petition form to be signed by interested property owners within the designated service area. The size and extent of the service area will take into consideration the type of traffic calming project being proposed, the layout and type of properties in the vicinity, and the characteristics of the street network surrounding the proposed project site(s). Depending on the circumstances, the service area may include:
 - All properties abutting the proposed street segment to be modified.
 - All properties on adjacent street(s) with ingress/egress only possible via the modified street segment.
 - All properties on adjacent street(s) that have alternative points of ingress/egress but will be otherwise affected by the modified street segment.
3. The requesting citizen will obtain signatures on the Petition form. A valid Petition for traffic calming measures must be signed by 2/3's of the property owners within the service area surrounding the requested traffic calming site(s).

- The Town Manager's recommendations

The Council will receive the Manager's report and recommendations, and will refer it for further consideration during annual budget deliberations.

9. During the budget development process, the Council will consider the proposed traffic calming projects presented in the Manager's annual report, and will allocate funds for construction as it deems appropriate.
10. After the Council adopts a budget for the coming fiscal year, the Engineering Department will contact the person(s) listed on each Request form received for traffic calming projects, and will notify them that the requested traffic calming project has or has not been funded for construction.
11. Once project funding is approved by the Council, the Engineering Department will prepare construction plans and specifications and an updated cost estimate.
12. When the final project drawings are complete, the Engineering Department will schedule a neighborhood meeting to discuss the plans, estimated costs, and construction procedures/schedule. Each property owner in the service area of the project will be notified when and where the meeting is scheduled.
13. The project will be constructed by Town forces or by private contractor.
14. Town staff will monitor the performance of completed traffic management projects, and will report to the Council and Transportation Board regarding the operation and effectiveness of the traffic calming measures within 12-18 months following installation. This follow-up report could result in Council action to revise or remove a previously approved traffic management measure.

APPENDIX A

Adopted by the Chapel Hill Town Council: 04/24/89

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TOWN OF CHAPEL HILL POLICY FOR PLACEMENT OF STOP SIGNS AND ASSIGNMENT OF SPEED LIMITS

OBJECTIVE: It is the policy of the Town of Chapel Hill to install stop signs and assign speed limits that will promote the safe, efficient, and orderly movement of vehicles throughout the Town while preserving existing residential neighborhoods and providing safe and accessible means for pedestrian movement adjacent to and across Town streets.

GUIDELINES: The following guidelines shall be considered when evaluating placement of stop signs and assignment of speed limits on Town streets. In general, the Town of Chapel Hill places signs of all types in accordance with the recommendations of the Manual on Uniform Traffic Control Devices for Streets and Highways (M.U.T.C.D.), published by the U.S. Department of Transportation. This policy includes the general M.U.T.C.D. recommendations and supplements them with more specific guidelines directed to situations expected to arise in Chapel Hill.

STOP SIGNS

Stop sign(s) may be warranted at an intersection where one or more of the following conditions exist:

1. Intersection of less important road with a main road where application of the normal right-of-way rule is unduly hazardous.
2. Intersection of a minor street entering a through highway or street.
3. Unsignalized intersection in a signalized area.
4. Intersection where a combination of high speed, restricted sight distance, and serious accident record indicates a need for control by stop sign(s).
5. Intersection which intercepts identified pedestrian route(s) carrying significant pedestrian volume.
6. Intersection on a street without curbs or sidewalks when such streets are carrying traffic volume significantly above that for which the street was designed.
7. Intersection with existing irregular stop sign placement, where additional sign(s) would improve safety.

Changes in existing speed limits and/or posting of speed limits other than those generally recommended by street classification will be considered in situations where:

1. Changes in use of property adjacent to a street creates changed speed limit conditions.
2. Changes in vehicular or pedestrian traffic patterns on a given street creates changed speed limit conditions.
3. The proximity or locations of parks, pools, schools, driveways or other facilities increases and concentrates vehicular and pedestrian traffic on a given street or streets.
4. Street design will not accommodate the speed limit normally recommended, or the posted speed limit.
5. Changes will create a more uniform, continuous speed limit throughout a defined travel corridor.

Speed limits below 25 mph will not be considered on public streets with the exception of special zones such as schools or hospitals.

Speed limits will be evaluated by Town engineering staff to create conditions where the Town street system can be utilized efficiently and safely at speeds that can be adequately enforced. Evaluations will include review of alternatives to speed limit changes which may include street improvements, construction of alternative routes, control of access, or other site-specific improvements in lieu of speed limit changes.

APPENDIX B

TYPES OF TRAFFIC CALMING MEASURES AND DESIGN CRITERIA

Traffic Calming Device	Street Classification (Intersection)	Average Daily Traffic Volume (ADT) Minimum & Maximum	Street Width (Edge to Edge)	Street Grade or Intersecting Street Grades	Line of Sight (Minimum)	Adjacent On-Street Parking	Posted Speed Limit	Minimum 85 th Percentile Speed
Speed Humps	Local or Local Collector	800 - 3000 vpd	25 ft.	4%	360 ft.	Removed	25 mph	35 mph
Speed Tables	Local or Local Collector	800 - 3000 vpd	20 ft.	4%	360 ft.	Removed	25 - 35 mph	35 to 45 mph
Pavement Treatments	Local	800 - 1500 vpd	25 ft.	1%	360 ft.	Removed	25 mph	35 mph
Semi-Diverter	Local	800 - 1500 vpd	(Note 1)	(Note 2)	360 ft.	Removed	25 mph	35 mph
Cul-de-sac	Local	800 - 1500 vpd	25 ft.	(Note 2)	360 ft.	Removed	25 mph	35 mph
Mid-block Closure	Local	800 - 1500 vpd	25 ft.	(Note 1)	360 ft.	Removed	25 mph	35 mph
Forced Turn Channelization	Major Street - Local or Local Collector Minor Street - Local	800 - 1000 vpd	25 ft.	(Note 1)	360 ft.	Removed	25 - 35 mph	35 to 45 mph
Traffic Circle	Major Street - Local or Local Collector Minor Street - Local	800 - 3000 vpd	(Note 1)	1%	360 ft.	Removed	25 - 35 mph	35 to 45 mph
Chicanes	Local Collector	800 - 3000 vpd	(Note 1)	4%	360 ft.	Removed	25 - 35 mph	35 to 45 mph
Chokers	Local or Local Collector	800 - 3000 vpd	(Note 1)	4%	360 ft.	Removed	25 - 35 mph	35 to 45 mph

Note 1: Existing Street conditions must be able to accommodate Emergency vehicle requirements.

Note 2: Existing Street conditions must be able to maintain drainage requirements.

Note 3: The criteria in this table were developed by the Chapel Hill Engineering Department. They are based on accepted traffic engineering practices and similar traffic calming applications in other parts of the country.

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APPENDIX C

RANKING SYSTEM FOR TRAFFIC CALMING PROJECTS

Item	Points
1. Traffic Volume	Average daily traffic volume on the proposed project street divided by 100. [20 points maximum]
2. Traffic Speed	Percentage of vehicles traveling at or more than 10 mph over the posted speed limit on the proposed project street divided by 2. [40 points maximum]
3. Traffic Accidents	Two points per accident that likely could have been resolved by the recommended traffic calming device, based on accident records for the past three consecutive years. [20 points maximum]
4. Schools	Five points for each private or public elementary, middle, or high school within the area benefited by the proposed traffic calming measure.
5. Other	<p>a) Five points if a street proposed for a traffic management project has a sidewalk on only one side.</p> <p>b) Twenty points if a street proposed for a traffic management project does not have a sidewalk on either side.</p> <p>c) Ten points if a street proposed for a traffic management project has travel lane widths wider than 10 feet.</p> <p>d) Three points for each pedestrian generator or attractor (such as a park, swimming pool, green-way, etc.) within the area benefited by the proposed calming measure.</p> <p>e) One point for each bus stop within the area benefited by the proposed calming measure.</p> <p>f) Five points for each designated school crossing within the area benefited by the proposed calming measure.</p>

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- Transportation Board review comments and recommendations
- The Town Manager's recommendations

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11. Once project funding is approved by the Council, the Engineering Department will prepare construction plans and specifications and an updated cost estimate.
12. When the final project drawings are complete, the Engineering Department will schedule a neighborhood meeting to discuss the plans, estimated costs, and construction procedures/schedule. Each property owner in the service area of the project will be notified when and where the meeting is scheduled.
13. The Council will adopt a Preliminary Resolution stating:
 - a) its intent to undertake the project;
 - b) the nature and location of the project;
 - c) the percentage of the final cost of the project to be equally assessed to the owners of property within the service area;
 - d) the method of distributing assessments among the property owners;
 - e) the assessments, if any, that will be delayed and for how long;
 - f) the proposed terms of payment of the assessment (normally 10 annual installments at a interest rate of up to 8% or payment in full with no interest, at the property owner's option);
 - g) the time and place for a Public Hearing on all matters covered in the Preliminary Resolution (The hearing will not be earlier than 3 weeks or later than 10 weeks from the date of the adoption of the Preliminary Resolution)
14. At least 10 days before the Hearing on the Preliminary Resolution, the Engineering Department will send by certified mail a copy of the Preliminary Resolution and a notice of the date of the Public Hearing to all owners of property to be assessed. The Engineering Department will also publish a notice of the Hearing in the local newspaper(s).
15. The Council will hear every interested person who comes to the Hearing to discuss any matters covered in the Preliminary Resolution.

STATUS OF PENDING TRAFFIC CALMING PETITIONS

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Petition Type and Area	Date Received	Status
1. Traffic Calming Devices on Greenwood Road	04/01/02	Traffic studies completed and neighborhood is working on a plan to petition Town Council
2. Speed Humps in Southern Village	06/02/02	Traffic studies completed
3. Traffic Calming Devices on Dixie Drive	07/01/02	Traffic studies completed
4. Traffic calming devices in the Westwood Neighborhood	08/10/02	Development of traffic calming plan completed
5. Speed hump on Lonebrook Drive	09/25/02	Installation of speed humps suspended by the Town Council. Follow-up studies completed and a report will be submitted at one of Council meetings in January, 2003
6. One speed hump on Burning Tree Drive	04/14/03	Traffic studies completed
7. Traffic calming devices on Purefoy Road	04/28/03	Traffic studies completed
8. Speed humps on Ridgecrest Drive in the Lake Forest Neighborhood	05/28/03	Traffic studies planned
9. Speed humps on Pritchard Avenue between West Rosemary Street and North Columbia Street	06/09/03	Traffic studies planned
10. Traffic calming devices on Silver Creek Trail	06/23/03	Traffic studies planned
11. Traffic calming devices on Pinehurst Drive and Lancaster Street in the Oaks II Neighborhood (Two petitions)	08/25/03 11/11/03	Traffic studies planned
12. Traffic calming measures on Palafox Road in Northwoods Neighborhood	08/25/03	Traffic studies planned
13. Traffic calming measures on Weaver Dairy Road Extension	09/08/03	Traffic studies planned
14. Speed Hump on Brookstone Drive	09/08/03	One speed hump was approved by the Council and installed in September, 2003.
15. Speed humps on Colony Woods Drive	10/08/03	Traffic studies planned
16. Traffic calming devices on Nottingham Drive	11/11/03	Traffic studies planned