Appendix C

HOW CAN YOU MAKE YOUR NEIGHBORHOOD STREETS SAFER?

DRIVE SLOWER

The maximum legal speed limit on residential streets is 25 mph. Drive 25 mph or less to give yourself more time to react to the unexpected, such as a child darting out from behind a parked car. Unless you make a conscious effort, you may drive faster than you should on residential streets.

Remind neighbors to drive 25 mph. Make sure that others who use your vehicles also drive 25 mph. Do not speed on major streets either, and avoid bad driving habits.

Studies show that driving at a lower and more responsible speed on residential streets, has very little effect on the time it takes to complete your journeys. Besides, IT IS THE LAW.

AVOID USING NEIGHBORHOOD STREETS AS SHORT CUTS

The more we use residential streets as short cuts, the more we disrupt the quality of life in neighborhoods. Neighborhood cut-through traffic increases noise and pollution in residential areas and results in a greater threat to the safety of pedestrians.

OBSERVE ALL THE RULES OF THE ROAD

Don't take chances, even on short trips. As statistics show, most accidents occur close to home. In particular, make sure you and all of your passengers buckle up.

CHANGE YOUR DRIVING PATTERN ON RESIDENTIAL STREETS

Learn to adopt a different attitude! You should expect the unexpected on residential streets. It may not be your fault if you have an accident, but imagine the pain you would live with if you hit a pedestrian. YIELD TO PEDESTRIANS.

DO YOUR PART TO IMPROVE TRAFFIC SAFETY!

TRAFFIC CALMING PROGRAM

DEPARTMENT OF PUBLIC WORKS
TRAFFIC ENGINEERING BUREAU
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TRAFFIC CALMING GUIDE
FOR
LOCAL RESIDENTIAL STREETS

Traffic Engineering Division
Virginia Department of Transportation
Richmond, Virginia

October 2002
(Revised July, 2008)

PREFACE

Richmond, Virginia 23219
(804) 786-2966

Since the late 1980s, the Virginia Department of Transportation (VDOT) has concerned itself with neighborhood traffic problems on streets and roadways in the state's operated and maintained highway systems.

1. The **Restricting Through Trucks on Secondary Highways Policy**, which was adopted in September 1988, states in part that "the Commonwealth Transportation Board (CTB), in response to a formal request by a local governing body, may prohibit or restrict the use by through trucks of any part of a secondary highway". Approval authority is by the Commissioner on Secondary routes and the CTB on Primary routes.

2. The **Control of Residential Cut-Through Traffic Policy**, adopted in March 1989 and most recently revised in 1996, says in part that "VDOT will recognize the problems associated with residential cut-through traffic and implement appropriate measures wherever possible." Approval authority is by the District Administrator on both Primary and Secondary routes.

3. Pursuant to a 1997 General Assembly amendment to the Code of Virginia regarding the installation and maintenance of "signs alerting motorists that children may be at play nearby", VDOT implemented procedures effective July 1, 1997, that allows counties to request **"Watch for Children"** signs. Approval authority is by the District Administrator on Secondary routes and the State Traffic Engineer on Primary routes.

4. Pursuant to a 1999 General Assembly amendment to the Code of Virginia regarding the "maximum speed limits in certain residence districts, penalty", VDOT implemented procedures on June 17, 1999, that allows local governing bodies to request signs on local residential streets, collector streets, and minor arterials with a posted speed limit of 35 mph or less advising motorists of a maximum punishment of **$200 for exceeding the speed limit**. Approval authority is by the District Administrator on both Primary and Secondary routes.

The ***Traffic Calming Guide for Local Residential Streets***, which was adopted in June 2001, provides communities with a traffic management tool dealing specifically with speeding, with the goal being to slow speeders in residential neighborhoods on streets classified as local. Approval authority is by the District Administrator on both Primary and Secondary routes.

These five traffic management tools have been combined under the Department's **Residential Traffic Management Program**. Neighborhoods, through their local governing bodies, are encouraged to choose one or more of these tools to resolve traffic problems on their local streets and highways. For more information contact the

local office of VDOT or the Department's Traffic Engineering Division at the address below.

Traffic Engineering Division
Virginia Department of Transportation
1401 East Broad Street

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TRAFFIC CALMING GUIDE FOR LOCAL RESIDENTIAL STREETS

I. INTRODUCTION

In mid 2001, VDOT implemented the Traffic Calming Guide for Local Residential Streets that provides communities with a traffic management tool dealing specifically with speeding. The guide is based on the premise that the county and VDOT are partners in addressing a speeding problem. For purposes of this guide, the goal of traffic calming is to slow speeders in residential neighborhoods on streets classified as local. The focus is on subdivision streets. Certain collector streets that have many of the characteristics of local residential streets may also qualify for traffic calming measures.

It is important to note that traffic calming efforts generally slow traffic without restricting access. Traffic calming measures are appropriate for slowing traffic when cut-through traffic is not the problem; that is, neighborhoods typically do not qualify for the cut-through traffic program when the majority of the traffic and speeding problems are generated from within the neighborhood.

The county will initiate and take the lead role in coordinating the traffic calming process and VDOT staff will provide technical support. The county and VDOT will determine who is responsible for a particular task where the responsible agency is not specified. For traffic calming, VDOT is represented by the local resident engineer, except in Fairfax, Prince William, and Loudoun Counties where it is the district traffic engineer.

Although this guide is intended for existing streets only, there is concern about preventing traffic problems from developing on new subdivision streets. In its process for reviewing subdivision development plans, participating counties should identify and address potential traffic calming as well as other traffic management concerns that may result from a new development. The review process should ensure that the developer of a new subdivision place emphasis on and address the need to design street geometric concepts that make streets less desirable for speeding and cut-through traffic. In the subdivision design review process, VDOT should also exert its discretionary authority in applying geometric standards to discourage speeding and cut-through traffic. The county should consider planning, enforcement, and transportation together in a comprehensive approach to managing residential traffic.

Ideally, potential traffic calming concerns in new developments should be addressed with roadway design geometry changes, especially roadway width (narrowing) and road curvature. In lieu of or in addition to these geometric changes, traffic calming measures that generally serve to narrow the travel way include pavement markings delineating parking, shoulder, or bike lanes, or mini-roundabouts, chokers, crosswalk refuges, and short medians. The county or subdivision developers should consult with VDOT prior to submitting a plan specifying traffic calming measures on newly developed streets

II. THE RESIDENTIAL TRAFFIC CALMING PROCESS

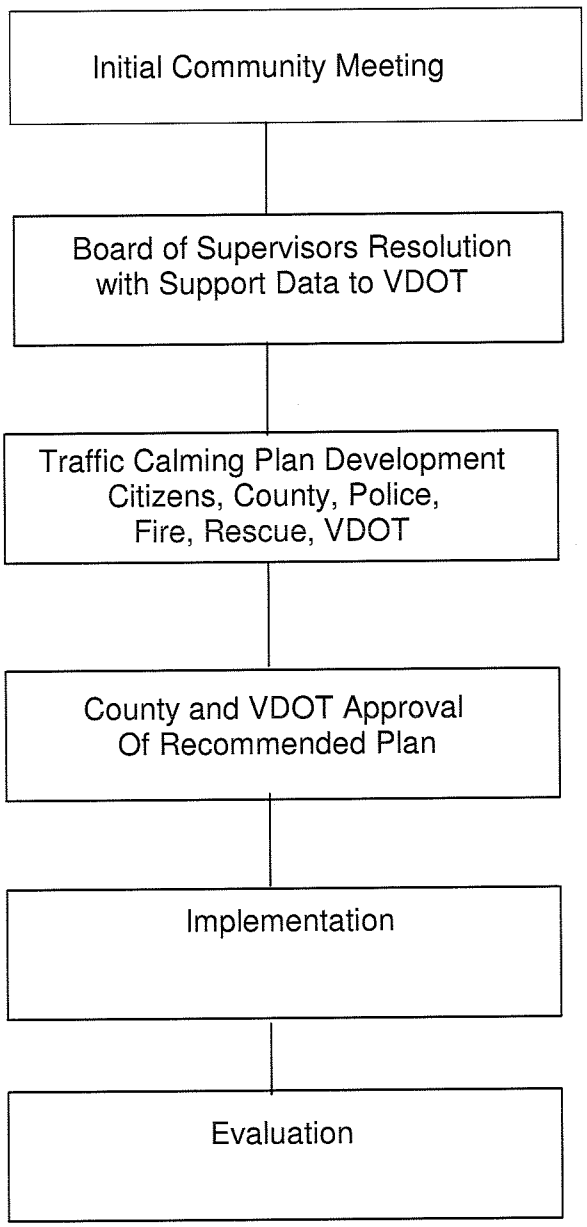


Figure 1. The Residential Traffic Calming Process

A. Initial Community Meeting

The County and VDOT may employ a number of methods to publicize the traffic-calming program, and more generally, residential traffic management tools. VDOT, in cooperation with County staff, is available for an initial community

meeting. All-inclusive participation (community leaders and residents, local politicians, law enforcement, fire, and emergency personnel, and county and VDOT staff) is essential for proper problem solving. Presentations made at the meeting should enhance the community's understanding about the traffic calming process, including the amount of community involvement required and the advantages and disadvantages of traffic calming. The meeting is an opportunity for the County and VDOT to learn more about the concerns of the community as well as to help the community assess its traffic concerns. County staff arranges the meeting and determines its size and scope. At this initial meeting, all participants can work together to develop a plan for continuous involvement by and communication with the community during the traffic calming process.

B. Board Resolution with Support Data Requirements

The Board of Supervisors initiates the traffic calming process by forwarding to VDOT a resolution that requests the initiation of a traffic calming project along with the following information:

- Street functional classification
- Average daily traffic volumes
- Average speed
- Description of petition area
- Description of impacted areas
- Petition with signatures

The support data provided by the county should verify that the following requirements are met:

1. Eligible Streets: Local residential streets are eligible for traffic calming provided the posted speed limit does not exceed 25 mph. A local residential street provides direct access to abutting residences and serves only to provide mobility within the neighborhood. Traffic on these streets is expected to be entering or exiting from the residences.

Certain residential collector streets, although classified as collector roads, have the characteristics of local residential streets. Collector streets may be considered for traffic calming measures if they meet the following conditions:

- 25 mph posted speed limit
- Two-lane roadway
- Minimum of 12 dwellings fronting the street per 1,000 feet of roadway, including both sides

Eligible streets are functionally classified as a local or collector street by VDOT.

2. **Documented speeding problem:** The average speed is at least 5 mph over the speed limit. Accordingly, the average speed should be at least 30 mph to qualify.

3. **Petition for traffic calming:** Once the proposed street meets the above technical criteria, a petition requesting traffic calming and signed by at least 75 percent of the total occupied households within the petition area must be obtained. The petition area includes residences on the proposed street section, and residences on all streets that have major access onto the proposed study street section. The county, in cooperation with VDOT, will define the petition area and provide a petition form. The impacted area typically includes the surrounding collector or arterial roads but should be defined by the county in cooperation with VDOT. The county will verify that the petition is valid.

The resolution and appropriate attachments should be sent to VDOT.

C. Plan Development

The traffic calming plan should be developed by a group that includes representatives from the petition area, impacted area, homeowner associations, the board of supervisors, local transportation/planning staff, police, fire, rescue, VDOT, and others as appropriate.

Because the impact of traffic calming measures will extend beyond the petition area, it is important to involve representatives from the larger, impacted area.

The Board of Supervisors and homeowner associations are responsible for scheduling and facilitating meetings. VDOT staff will provide technical support and advise the community of the potential advantages and disadvantages of calming measures. Educating participants about residential traffic management and traffic calming is key to a successful program.

The proposed plan shall be presented to residents at a public meeting, or through some other method such as a petition, to inform and measure support for the plan. This will allow the Board of Supervisors to assess whether community support exists for the proposed measures.

D. Approval and Implementation

The final plan and method of implementation must be jointly approved by the Board of Supervisors and VDOT. The final plan must identify the source of funding for implementation.

E. Evaluation

A follow-up evaluation should be performed to ensure that the traffic calming measures are effective. The Board of Supervisors in cooperation with VDOT will determine the method to disseminate the findings and recommendations to those involved in the plan development and obtain feedback as appropriate.

If the county decides to remove the traffic calming measures, then funding for removal should be from the same funding sources as implementation. If an unforeseen safety problem develops, VDOT may decide to remove the traffic calming measures.

III. TRAFFIC CALMING MEASURES

Community awareness and education is an important first step. The residents should be made aware of the speeding concerns and should be reminded of the importance of driving safely in their neighborhood. VDOT staff is available to speak to homeowner associations about traffic calming measures and to help raise community awareness about advantages, disadvantages, costs, and funding options.

Enforcement is traditionally the primary means of addressing speeding problems. Local police officers monitor and enforce the posted speed limit. Enforcement efforts should be undertaken as much as possible prior to implementation of traffic calming measures.

Non-physical measures are low-cost measures that do not physically restrict driver maneuvers, such as pavement markings to narrow travel lanes (See Figure 2).

Physical measures are designed to reduce speed by creating a vertical or horizontal shift in the roadway or travel lanes (See Figure 2 and Section V).

Alternative actions should be considered when traffic volumes on the study street exceed 4,000 vehicles per day. A network analysis is suggested to thoroughly examine the road network in the area and identify potential improvements on major routes that may provide relief to the "study" street.

IV. TRAFFIC VOLUMES AND TRAFFIC CALMING MEASURES

Traffic volumes on the residential street will determine the appropriate traffic calming measures as follows:

- **Fewer than 600 vehicles per day**
  - education
  - enforcement
  - non-physical measures
- **600- 4,000 vehicles per day**
  - education
  - enforcement
  - non-physical measures
  - physical measures
- **More than 4,000 vehicles per day**
  - education
  - enforcement
  - alternative actions only
  - no traffic calming measures

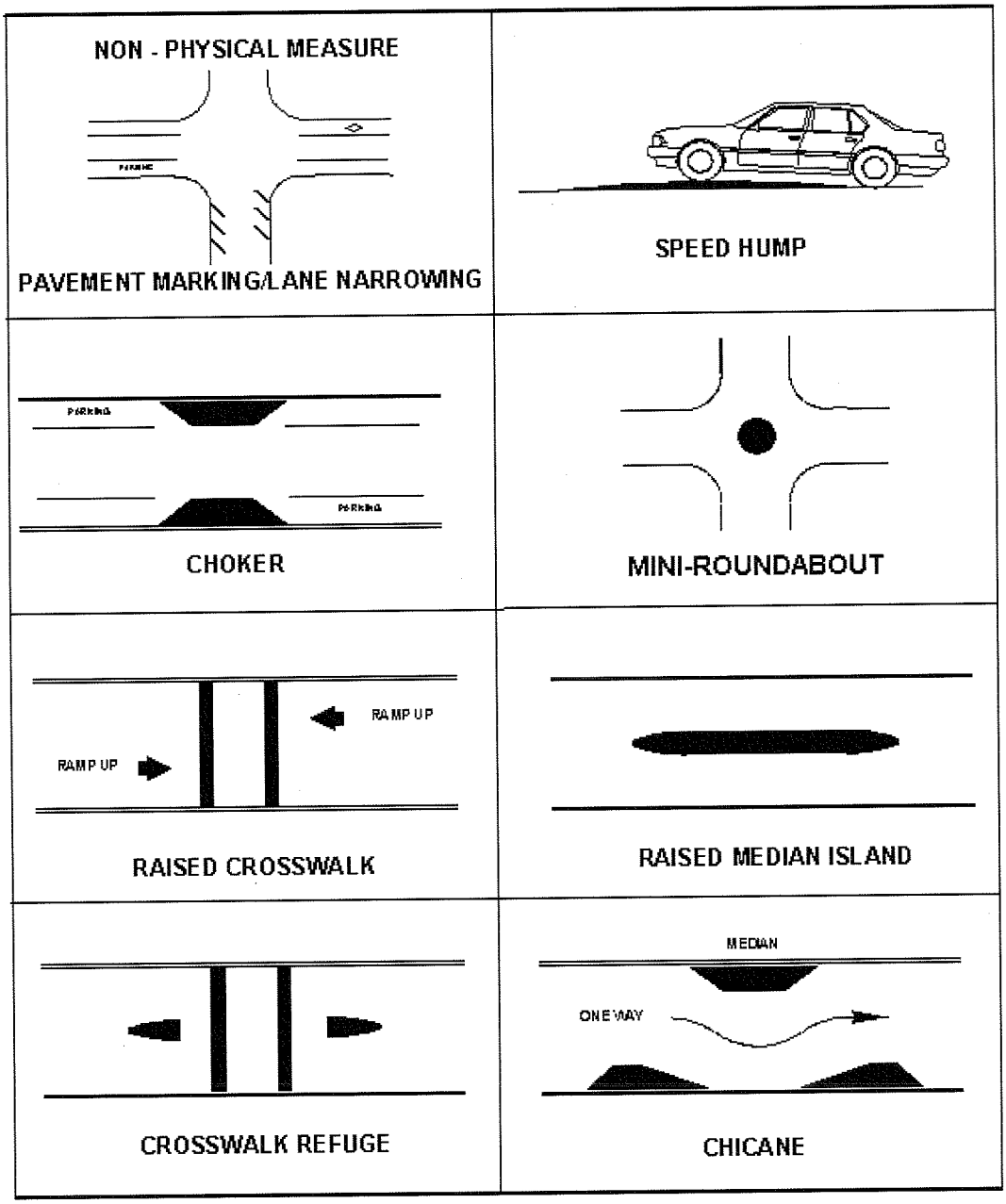


Figure 2. Typical Physical and Non-Physical Traffic Calming Measures

V. PHYSICAL MEASURES FOR TRAFFIC CALMING

The following measures have been effective in slowing traffic in neighborhoods. To ensure minimum delay in emergency response time, the installation of speed humps and raised crosswalks is discouraged on major emergency routes. Costs are provided only as rough estimates; actual construction costs will depend on the number of measures constructed, related signing and pavement markings, and the extent of aesthetic provisions. The estimated costs are derived from Institute of Transportation Engineering's *Traffic Calming State of the Practice* and revised based on VDOT's experience with some of the measures. Physical measures are shown in Figure 2. More details are provided in the "Implementation Guide for Traffic Calming Measures" in the Appendix.

A. Speed Hump

Description: a raised hump in the roadway with a parabolic top, extending across the road at right angles to the traffic.

Placement: spacing should be about 500 feet, clearly visible for 200 feet, and placed at least 200 feet from intersections; should include warning signs.

Advantages: reduces speeds.

Disadvantages: increases emergency response times and slows emergency vehicles and buses, potential drainage problems, increases noise, increases maintenance costs.

Estimated cost: $2,000-$3,000 per speed hump.

B. Choker

Description: a physical constriction built at the curb side of the roadway to reduce the width of the travel lane.

Placement: normal turning radii should be accommodated; should include advance warning signs and delineation.

Advantages: reduces speeds, provides parking protection, shortens pedestrian crossing distance.

Disadvantages: potential drainage problems, maintenance costs.

Estimated cost: $7,000-$10,000 per pair.

C. Raised Crosswalk

Description: a raised hump in the roadway with a 10-foot flat top, extending across the road at right angles to the direction of traffic flow.

Placement: where significant number of pedestrians cross the roadway; should include advance warning signs.

Advantages: reduces speeds, provides improved visibility and safety for pedestrians.

Disadvantages: increases emergency response times and slows emergency vehicles and buses, potential drainage problems, increases noise, increases maintenance costs.

Estimated cost: $2,500-$8,000 per raised crosswalk. The higher estimate includes the construction of two curb ramps.

D. Mini-roundabout

Description: elevated area in the middle of the intersection that provides circular, counterclockwise traffic flow.

Placement: street grades approaching the intersection should not exceed 10 percent and entrances should be a minimum of 100 feet away on all approaches.

Advantages: reduces speeds, reduces left-turn accidents, can be visually attractive.

Disadvantages: placement of center island may reduce parking spaces and require additional right of way.

Estimated cost: $3,500-$15,000 each.

E. Crosswalk Refuge

Description: a raised median in the middle of the roadway with a cut provided for the crosswalk.

Placement: where a significant number of pedestrians cross the roadway.

Advantages: reduces speeds, provides refuge for pedestrians crossing roadway.

Disadvantages: increases maintenance costs.

Estimated cost: $5,000-$15,000 per crosswalk refuge.

F. Raised Median Island

Description: a raised median in the middle of the roadway.

Placement: should accommodate normal turning radii near intersections where applicable; placed in the middle of the roadway with proper warning signing and delineation.

Advantages: reduces speeds, shortens pedestrian crossing time and distance.

Disadvantages: drainage problems, maintenance costs, expensive.

Estimated cost: $5,000-$15,000 per island.

G. Chicane

Description: alternating constrictions built curbside to create a bend in a formerly straight street, forcing vehicles to negotiate the narrowed street in a snake-like fashion.

Placement: should accommodate normal turning radii; sets are to be placed 400-600 feet apart; should include advance warning signing and delineation; used only on roadways divided with a median.

Advantages: reduces speeds, shortens pedestrian crossing time and distance.

Disadvantages: limited to divided roadways, potential drainage problems, maintenance costs.

Estimated cost: $5,000-$15,000 per set.

VI. OPTIONS FOR COUNTIES

A. County-Specific Modifications

The *Traffic Calming Guide for Local Residential Streets* is applicable to all counties. However, if a particular county believes that minor modifications are necessary to serve the needs of its citizens, modifications may be requested. The request should be addressed to VDOT.

VDOT has received requests to use All Way Stop Control (AWSC) as a traffic calming measure. AWSC is acceptable as a measure under the "County-Specific Modifications" provision if the criteria defined in the "All Way Stop Control Criteria for Traffic Calming" in Chapter V of the Appendix are satisfied.

B. Point System for Prioritizing Projects (Optional)

The point system in Table 1 is provided as an option for counties to use in prioritizing projects eligible for physical measures. The point system is based on speeds, volumes, and accident history. VDOT will work with the locality to help develop a county-specific method of prioritization.

Table 1. Optional Point System for Prioritizing Projects

Speed Related Accidents		**Traffic Volume**		**Speeds**	
Accidents / Year	Points	Average Daily Traffic	Points	Average Speed	Points
1	1.0	600-1,000	0.5	30-34	1.0
2	2.0	1,001-3,000	1.0	35-39	2.0
3+	3.0	3,001+	1.5	40+	3.0

VII. FUNDING

Traffic calming measures may be funded using one of the following:

- 100 percent exclusively county-generated or other funds (no VDOT funding).
- Revenue sharing funds with 50 percent exclusively county-generated or other funds and 50 percent VDOT funds.
- Secondary road construction funds; a maximum of 2 percent of the county's secondary road construction funds can be used with a three-year limit on its accumulation.

Maintenance will be funded through the county's VDOT secondary road maintenance funds. Implementation and maintenance of optional landscaping will be provided by the community

REFERENCES

For further information on traffic calming, see the following sources.

1. Federal Highway Administration. *Manual on Uniform Traffic Control Devices For Streets and Highways (MUTCD)*, Washington, D.C., 1988. (The Millennium Edition of the Manual, which is scheduled for release in 2001, will replace the 1988 version. For information, see the following web page: http://mutcd.fhwa.dot.gov/kno-proposed2000.htm.

2. Institute of Transportation Engineers and Federal Highway Administration. *Traffic Calming: State of the Practice*, Washington, D.C., August 1999. (Available for downloading at http://www.ite.org/traffic/tcstate.htm#tcsop .)

3. Institute of Transportation Engineers. *Traffic Engineering Handbook*, Fifth Edition, Chapter 9, "Traffic Calming Applications", Washington, D.C., 1999.

4. Institute of Transportation Engineers. *Transportation Planning Handbook*, Second Edition, Chapter 17, "Traffic Calming", Washington, D.C., 1999.

5. Institute of Transportation Engineers. *Guidelines for the Design and Application of Speed Humps*, A Recommended Practice, Washington, D.C., 1997.

6. Pat Noyes & Associates. *Traffic Calming Primer*, Boulder, CO, 1998.

7. South Western Regional Planning Agency. *Traffic Calming Toolbox, Traffic Calming: Devices, Applications, & Program Management*, Norwalk, CT, June 1998.

8. Texas Transportation Institute. *Handbook of Speed Management Techniques*, Research Report 1770-2, College Station, TX, September 1998.

9. Virginia Transportation Research Council. *An Operating Guide for the Control of Residential Cut-Through Traffic*, B. H. Cottrell, Jr., Charlottesville, VA, 1990. (Appendix contains "Guidelines for Use of Speed Humps".)

10. Washington State Department of Transportation, *A Guidebook for Residential Traffic Management*, Olympia, WA, 1994.

Traffic Calming Internet Web Sites

1. The Institute of Transportation Engineers has a comprehensive internet web site at: http://www.ite.org/traffic/index.htm.

   The site (which contains the downloadable Reference # 4 above) includes an overview of traffic calming and calming measures, a searchable library of references including a topical index (many of which are downloadable), a listing of other traffic calming web sites, and downloadable seminar materials (PowerPoint presentation).

2. The City of Portland has an excellent internet web site describing its traffic calming program at:
   http://www.trans.ci.portland.or.us/Traffic_Management/trafficcalming/

APPENDIX

IMPLEMENTATION GUIDE FOR TRAFFIC CALMING MEASURES

CHAPTER I
INTRODUCTION

The purpose of residential traffic management is to address traffic problems in residential neighborhoods. Traffic calming is intended to reduce speeds without restricting access. This "Implementation Guide for Traffic Calming Measures" will:

- Explain the difference between traffic control devices and traffic calming measures
- Give lessons learned in the planning process
- List things to consider before and during measure installation
- Show typical design standards and specifications

Traffic control devices are frequently confused with traffic calming measures. Traffic control devices are signs, signals, and markings that are designed to regulate, warn, guide, and inform. Traffic calming measures are usually physical measures in the roadway used to slow traffic. Although a traffic control device and a traffic calming measure could share the goal of slowing motorists, the purpose of a traffic control device is to attempt to communicate, while the traffic calming measure is a part of the design of the street or intersection. A traffic control device may, however, supplement a traffic calming measure.

CHAPTER II
DO'S OF TRAFFIC CALMING

1. **Quantify the problem.** Identify the real problem(s). Speed, volume and noise are frequent complaints, but often the real problem on a street is just one of these.

   Undertake traffic counts, speed studies, and accident data analyses.

   Remember that you are hearing mostly from people who are dissatisfied. There are other aspects to the situation that you are not likely hearing about.

2. **Involve the community.** Do not develop or implement a plan without the community's involvement. Regardless of how technically sound a plan might be, it will not work as well if the community is not involved.

3. **Educate decision makers.** Avoid uninformed (often political or emotional) decisions.

4. **Look at the arterial network first.** No one uses a short-cut unless there's a reason to. The reason is often congestion on nearby arterials.

5. **Favor self-enforcing measures.** "Self-enforcing" measures maintain a 24-hour presence and are effective without police enforcement.

6. **Consult with all services.** Police, fire, ambulance, transit, sanitation services, and snow plow operators should be involved from the beginning.

7. **Sign and delineate.** Install appropriate warning signs, and delineate the traffic calming measures.

8. **Implement measures on an area wide basis.** Avoid creating more problems or relocating a problem. Always consider the impacts on adjacent local streets and arterial roads. Identify groups of measures to be implemented in stages if funding for the entire transportation management plan cannot be secured at once.

9. **Monitor and follow-up.** Report back to the community as to the success of traffic calming measures. This helps to justify additional expenditures and enhances the credibility of the traffic management program.

   Implement measures as demonstrations if decided by consensus.

10. **Remember that everybody drives differently.** Some motorists will drive around or over some calming measures and some may not readily understand Mini-roundabouts regardless of how well they are signed.

    Some people resist change.

11. **Expect problems.** Some problems (such as regional traffic issues) cannot be addressed by a neighborhood wide plan.

    Some problems cannot be resolved at a reasonable cost. For example, it may simply be too expensive to acquire property to widen an intersection or a road.

    Refer other problems to the appropriate agency, such as the planning department, the police, etc.

CHAPTER III
DESIGN AND INSTALLATION

A. Key Points with Design

1. Some designers appear to focus solely on traffic calming measures rather than using traditional traffic management and traffic calming measures in combination.
2. Speed humps are an effective means of speed reduction but are often opposed by bus operators and emergency services. In some situations, it should be possible to achieve a sufficiently effective scheme without the need for vertical deflections.
3. While speed humps slow traffic, they can attract criticism because of the inconvenience, discomfort, and vehicle damage.
4. Narrowing travel lanes can be very effective, particularly when the two-way traffic volume is high. Lanes need adequate signing and marking.
5. If systematic monitoring takes place, it will be easier to decide which measures are appropriate for different circumstances.

B. Design Aspects of Residential Traffic Calming Measures

1. **Visibility.** Measures should be clearly visible day and night. Reflectors, buttons, highly reflective paint, or illumination should be used as appropriate to ensure visibility. Additionally, traffic calming measures should not be placed where drivers do not have adequate stopping sight distance for the operating speed of the road.

2. **Signing.** Advance signs should warn motorists of upcoming traffic calming measures and, to the extent possible, guide the motorists' response to such measures.

3. **Streetscape.** Traffic calming measures should blend naturally with the streetscape and enhance the appearance and feel of the street. They should alert drivers that they are in or entering a residential place.

4. **Design vehicles.** Traffic calming measures should be designed to accommodate emergency service and other large vehicles at an acceptable speed.

5. **Maintenance.** Long-term maintenance needs should be anticipated in the design process and minimized to the extent possible. Some jurisdictions contract with the neighborhood to maintain plantings or simply eliminate landscaping in the absence of a willingness on the part of residents to participate.

6. **Parking.** On-street parking in residential areas creates a sense of activity; some jurisdictions encourage on-street parking for this reason. However, in some instances, on-street parking also creates sight line restrictions, which may be unsafe for drivers who are speeding.

7. **Speed control.** Traffic calming measures should be located and designed to limit speeds in residential areas.

C. Do's of the Design Process

1. Consider installing temporary traffic calming measures and monitor them for a period of time before installing the permanent measures.

2. Have an organized program including public involvement with plans and policies approved and supported by the local government.

3. Involve the local service agencies, including fire, police, and emergency medical service personnel from the beginning.

4. Consult with fire department and EMS personnel to develop the design, particularly with speed humps and Mini-roundabouts. Set up Mini-roundabouts with cones and have the fire trucks and other emergency vehicles drive around them. This will help determine what radius is best for the types of emergency vehicles found in different areas. The same process can be used in the design of speed humps.

5. Review traffic patterns in the neighborhood as a whole. Avoid solving the problem on one neighborhood street by shifting the traffic to another neighborhood street.

6. Make certain that all signing and channelization are in accordance with the *Manual on Uniform Traffic Control Devices* (MUTCD), the Supplement to the MUTCD, and the American Association of State Highway and Transportation Officials (AASHTO) *Policy on Geometric Design of Highways and Streets.*

7. Check sight distances for vehicles, pedestrians, and bicyclists. Sight distance is to meet the requirements of the AASHTO *Policy on Geometric Design of Highways and Streets.*

8. Check sight distances by visiting the site before and after installation. Do parked cars obstruct sight distances? Does landscaping (now or after it grows) or other features obstruct sight distance?

9. Review the on-street parking. Will parked cars block access of emergency vehicles through or around the proposed neighborhood traffic calming measures? Add additional no parking zones where needed.

10. Review the site for utility conflicts. Is there a fire hydrant? Does it need to be moved? Are there utilities in the way?

11. Check the storm water drainage. Will the storm drain system need to be moved or revised? Can the runoff get through or around the measure?

12. When installing traffic calming measures on streets without curbs, supplemental features (e.g., bollards, delineators) may be necessary to keep vehicles within the traveled way.

13. Traffic calming measures may need to be adjusted on streets with grades of greater than 10 percent.

14. Traffic calming measures should be installed on curving, winding roads with limited sight distance only if reduced speed limits and adequate warning signs are used in conjunction with the measures.

15. Traffic calming measures should be away from driveways.

D. Checklist for the Installation of Residential Traffic Calming Measures

As a minimum, the following items should be reviewed by the design professional for each residential traffic calming measure installation:

Geometrics

- Turning radius
- Horizontal and vertical alignment
- Super elevation
- Major geometric features such as sidewalks, curbs, etc.
- Roadway width
- Sight distances

Safety

- Channelization
- Illumination
- Signing
- Clear zone (the total roadside border area starting at the edge of the travel way available for safe use by errant vehicles)
- Crosswalk locations

Utilities

- Water and sewer
- Franchise utilities (such as gas, power, telephone, etc.)
- Storm drainage
- Location of hydrants

Design Vehicles

- Local emergency vehicle characteristics
- Minimum design vehicle - bus, single-unit truck, or passenger car
- Public transit and school bus stops and routes
- Bicycles and wheelchairs

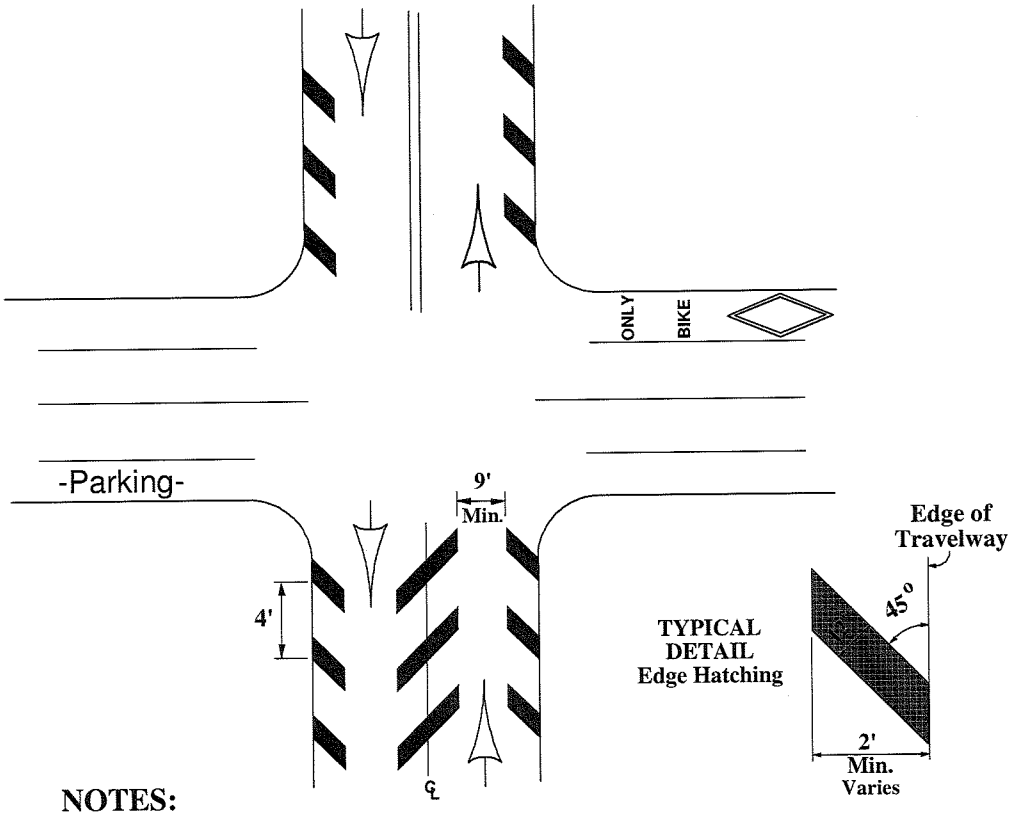
Other

- Landscaping
- Pedestrians and bicycles
- Access for the mobility impaired
- Parking
- Mail delivery routes
- Emergency access

CHAPTER IV
RESIDENTIAL TRAFFIC CALMING MEASURES

TRAFFIC CALMING MEASURE

Figure A-1. NON-PHYSICAL MEASURE PAVEMENT MARKING / LANE NARROWING



NOTES:

1) Markings shall be in accordance with the MUTCD, VDOT's Road and Bridge Standards and Specification, and Road Design Manual, Sec A5.

2) Narrowing Design Options:
   a) Hatching
   b) Parking Lanes
   c) Bike Lanes

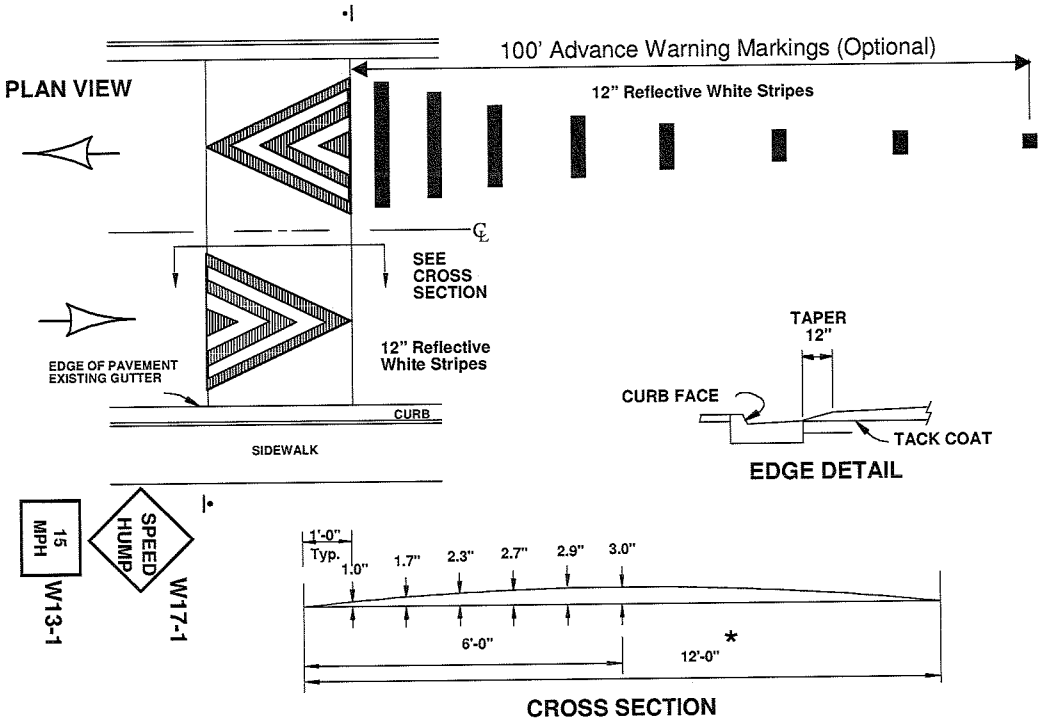
3) The amount of hatching as well as widths, lengths and spacing to be determined by the Engineer. Centerline hatching optional.

4) Travel lanes not to be less than 9' in width.

5) Engineer to modify design to accommodate field conditions while conforming to AASHTO publications and acceptable engineering practices.

TRAFFIC CALMING MEASURE

Figure A-2. SPEED HUMP



NOTES:

1) Signs and Markings shall be in accordance with the MUTCD & ITE practices.

2) Advance signing at each location is optional when part of an area wide scheme.

3) Cross-section shows approximate elevation for 3" (maximum) speed hump.

4) Design Options:
   a) 22' section (See Raised Crosswalk for cross-section.)

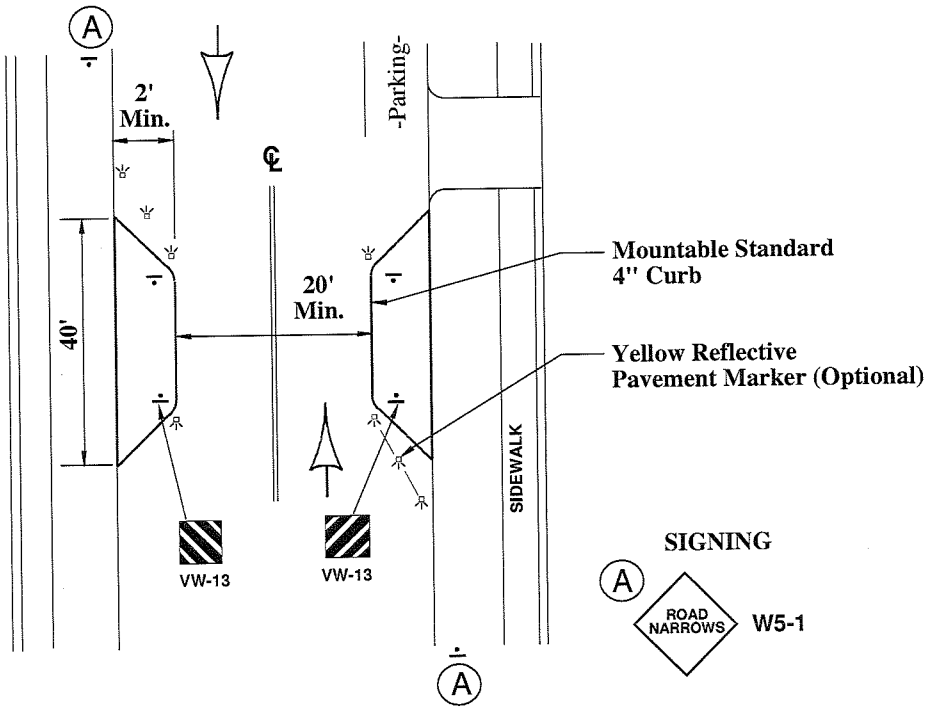
5) Speed Humps shall not be placed over manholes, watergates, junction chambers, etc.

6) Speed Humps must be placed at locations approved by Engineer.

7) Engineer to modify design and location to accommodate field conditions (ex. drainage) while conforming to VDOT's Road and Bridge Standards and Specification manuals, AASHTO publications and acceptable engineering practices.

TRAFFIC CALMING MEASURE

Figure A-3. CHOKER



NOTES:

1) Signs and Markings shall be in accordance with the MUTCD.

2) Advance signing at each location is optional when part of an area wide scheme.

3) Landscaping designs, if any, to be determined by the community and approved by the Engineer. Sight distance shall not be impacted by landscaping. Fixed objects shall not be placed in any portion of the measures that are within the clear zone.

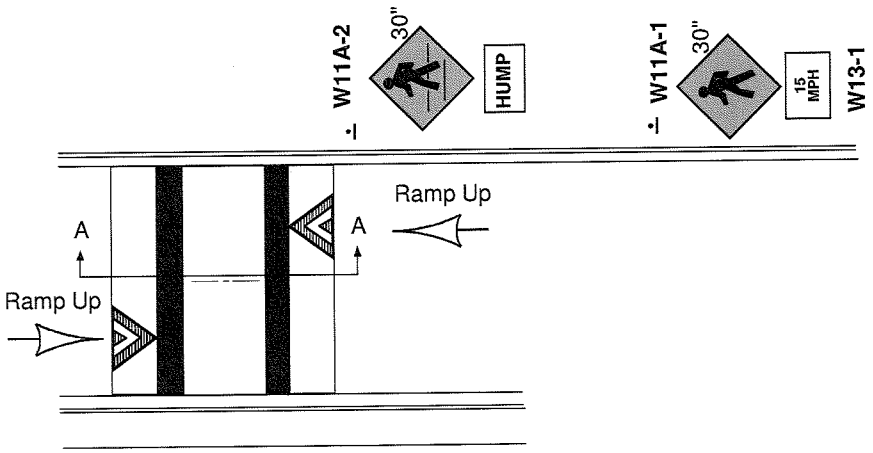
4) The transition of the approach curb, and accompanying raised pavement markers, shall be in conformance to the design speed.

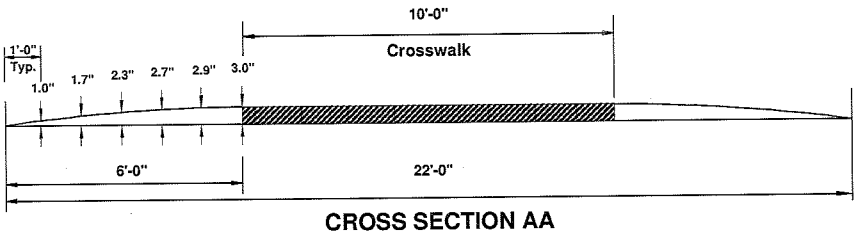
5) Design Options:
   a) Intersection or Mid-block
   b) One-side or Two-side
   c) Combined with Raised Crosswalk

6) Engineer to modify design and location to accommodate field conditions (ex. drainage) while conforming to VDOT's Road and Bridge Standards and Specification manuals, AASHTO publications and acceptable engineering practices.

TRAFFIC CALMING MEASURE

Figure A-4. RAISED CROSSWALK





CROSS SECTION AA

NOTES:

1) Signs and Markings shall be in accordance with the MUTCD.

2) Advance signing at each location is optional when part of an area wide scheme.

3) Cross-section shows approximate elevation for 3" (maximum) raised crosswalk.

4) Design Options: can be combined with choker.

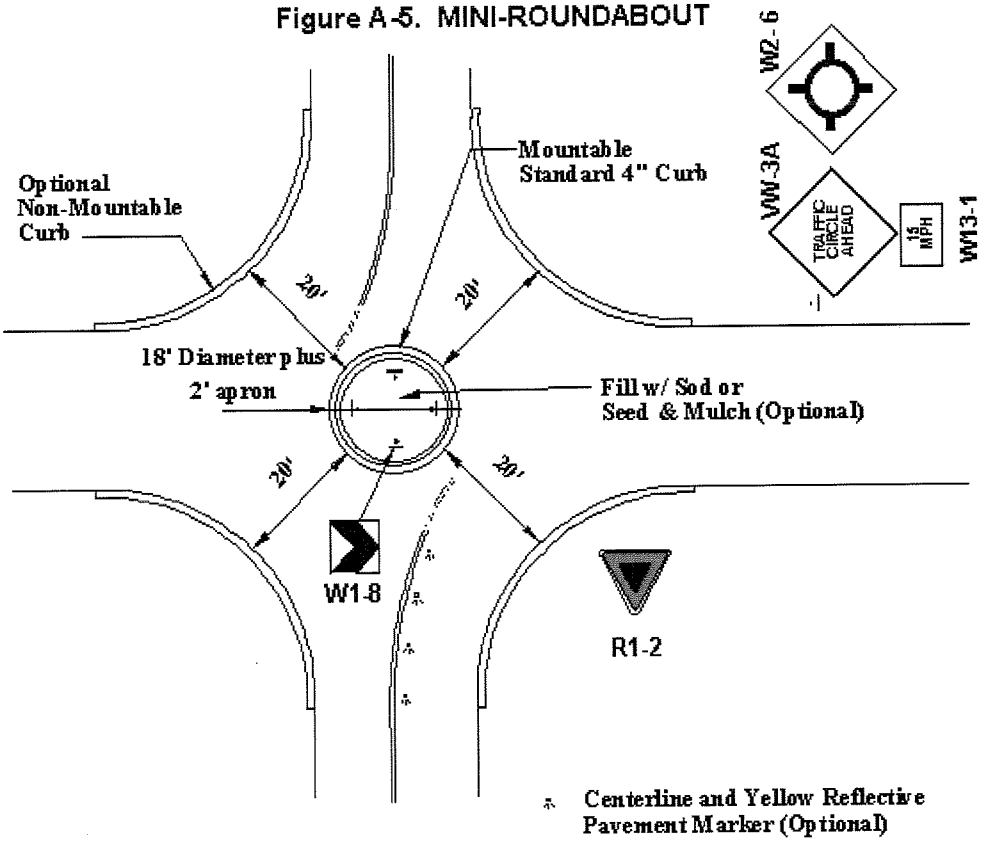
5) Raised Crosswalks should be located mid-block (edge of ramp at least 20' from intersection) and shall not be placed over manholes, watergates, junction chambers, etc.

6) Raised Crosswalk material and placement to be approved by Engineer.

7) Engineer to modify design to accommodate field conditions (ex. drainage and curb cuts) while conforming to VDOT's Road and Bridge Standards and Specification manuals, AASHTO publications and acceptable engineering practices.

TRAFFIC CALMING MEASURE

Figure A-5. MINI-ROUNDABOUT



NOTES:

1) Signs and Markings shall be in accordance with the MUTCD.

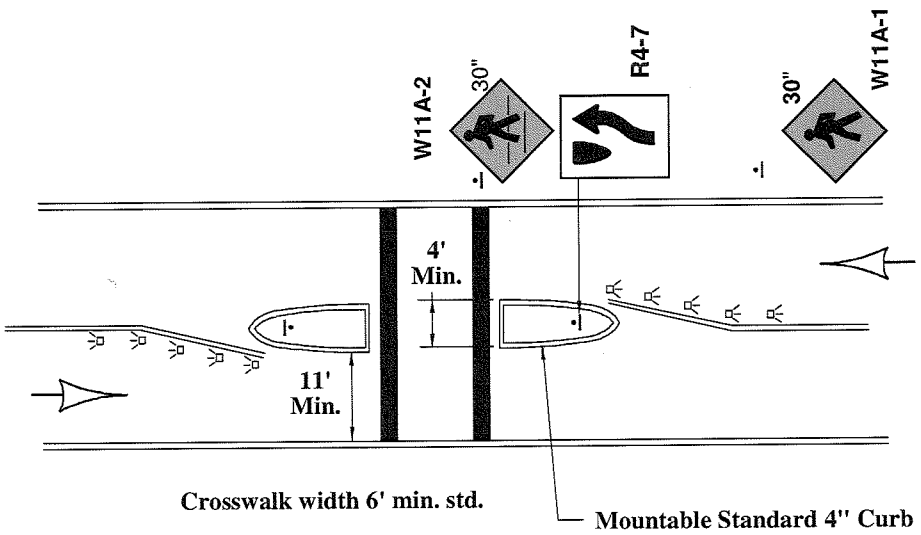
2) Advance signing at each location is optional when part of an area wide scheme.

3) Landscaping designs, if any, to be determined by the community and approved by the Engineer. Sight distance shall not be impacted by landscaping. Fixed objects shall not be placed in any portion of the measures that are within the clear zone.

4) Engineer to modify design to accommodate field conditions (ex. drainage) and available ROW while conforming to VDOT's Road and Bridge Standards and Specification manuals, AASHTO publications and acceptable engineering practices.

TRAFFIC CALMING MEASURE

Figure A-6. CROSSWALK REFUGE



Yellow Reflective Pavement Marker (Optional)

NOTES:

1) Signs and Markings shall be in accordance with the MUTCD.

2) Advance signing at each location is optional when part of an area wide scheme.

3) Landscaping designs, if any, to be determined by the community and approved by the Engineer. Sight distance shall not be impacted by landscaping. Fixed objects shall not be placed in any portion of the measures that are within the clear zone.

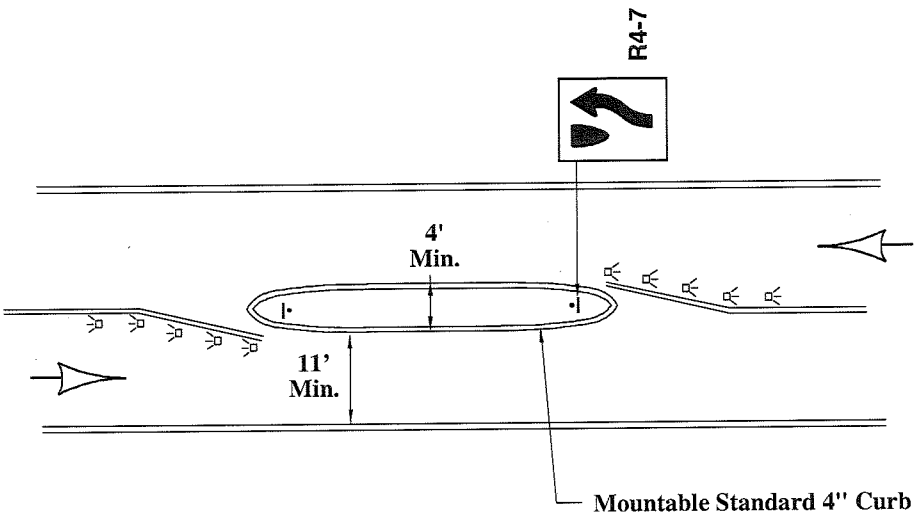
4) Design Options:
   a) Intersection or Mid-block.
   b) Combined with Raised Crosswalk.

5) The transition of the approach curb, and accompanying raised pavement markers shall be in conformance to the design speed.

6) Engineer to modify design and location to accommodate field conditions (ex. drainage) while conforming to VDOT's Road and Bridge Standards and Specification manuals, AASHTO publications and acceptable engineering practices.

TRAFFIC CALMING MEASURE

Figure A-7. RAISED MEDIAN ISLAND



Yellow Reflective Pavement Marker (Optional)

NOTES:

1) Signs and Markings shall be in accordance with the MUTCD.

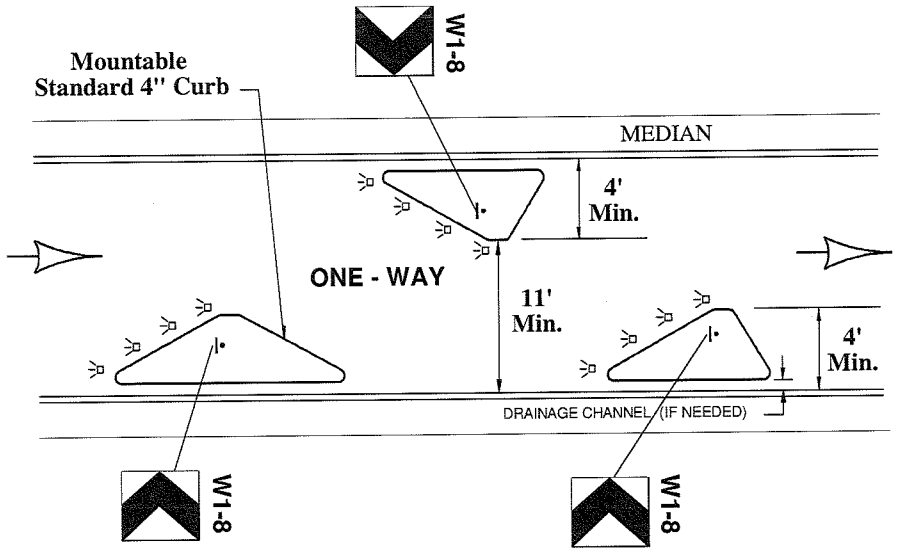
2) Landscaping designs, if any, to be determined by the community and approved by the Engineer. Sight distance shall not be impacted by landscaping. Fixed objects shall not be placed in any portion of the measures that are within the clear zone.

3) The transition of the approach curb, and accompanying raised pavement markers, shall be in conformance to the design speed.

4) Engineer to modify design and location to accommodate field conditions (ex. Island length and drainage) while conforming to VDOT's Road and Bridge Standards and Specification manuals, AASHTO publications and acceptable engineering practices.

TRAFFIC CALMING MEASURE

Figure A-8. CHICANE



Yellow Reflective Pavement Marker (Optional)

NOTES:

1) Signs and Markings shall be in accordance with the MUTCD.

2) Advance signing at each location is optional when part of an area wide scheme.

3) Landscaping designs, if any, to be determined by the community and approved by the Engineer. Sight distance shall not be impacted by landscaping. Fixed objects shall not be placed in any portion of the measures that are within the clear zone.

4) The transition of the approach curb, and accompanying raised pavement markers, shall be in conformance to the design speed.

5) Engineer to modify design and location to accommodate field conditions (ex.drainage) while conforming to VDOT's Road and Bridge Standards and Specification manuals, AASHTO publications and acceptable engineering practices.

CHAPTER V
ALL WAY STOP CONTROL CRITERIA FOR TRAFFIC CALMING

General Criteria

1. As described in Section VI. A. of the *Traffic Calming Guide for Local Residential Streets*, the County must request and VDOT must agree to the use of All Way Stop Control (AWSC) as a traffic calming measure as a county-specific modification.

2. The use of AWSC must result from the application of the residential traffic calming process outlined in Section II of the *Traffic Calming Guide for Local Residential Streets* and be included as a part of the traffic calming plan that is developed.

3. AWSC should be used in combination with other traffic calming measures in the traffic calming plan.

Site Specific Criteria

4. The volume criteria for eligibility of AWSC at an intersection are a minimum of 1,000 vehicles per day entering the intersection and a 3:1 or less ratio of the main street to minor street volume measured in vehicles per day. This ratio is equivalent to a minimum of 25 percent of the total volume entering from the minor street. These criteria serve to provide some sense of balanced flow between the intersecting streets and to avoid intersecting streets with extremely imbalanced volumes.

5. AWSC intersections should be at least 1,200 feet apart.

6. Geometrics such as sight distance and grade must be considered as a factor in determining if AWSC is appropriate.

7. The proposed use of AWSC must be approved by the District Traffic Engineer (DTE). The DTE or his designee should have been a part of the traffic calming plan development. The DTE and the Resident Engineer should cooperate and coordinate on this effort.

(1)

Adopted by Commonwealth Transportation Board September 15, 1988

GUIDELINES FOR CONSIDERING REQUEST FOR RESTRICTING THROUGH TRUCKS ON SECONDARY HIGHWAYS

Section 46.2-809 of the Code of Virginia provides:

> "The Commonwealth Transportation Board in response to a formal request by a local governing body, after said body has held public hearings, may, after due notice and a proper hearing, prohibit or restrict the use by through traffic of any part of a secondary highway if a reasonable alternate route is provided. Such restriction may apply to any truck or truck and trailer or semitrailer combination, except a pickup or panel truck, as may be necessary to promote the health, safety and welfare of the citizens of the Commonwealth. Nothing herein shall affect the validity of any city charter provision or city ordinance heretofore adopted."

To conform to requirements of the Code, the local governing body must hold a public hearing and make a formal request of the Department. To insure that all concerned have an opportunity to provide input concerning the proposed restriction and alternate route, the following must be adhered to:

(A) The public notices for the hearing must include a description of the proposed through truck restriction and the alternate route with the same termini. A copy of the notices must be provided.

(B) A public hearing must be held by the local governing body and a transcript of the hearing must be provided with the resolution.

(C) The resolution must describe the proposed through truck restriction and a description of the alternate, including termini.

(D) The governing body must include in the resolution that it will use its good offices for enforcement of the proposed restriction by the appropriate local law enforcement agency.

Failure to comply with (A), (B), (C) and (D) will result in the request being returned.

It is the philosophy of the Commonwealth Transportation Board that all vehicles should have access to the roads on which they are legally entitled to travel. Travel by any class of vehicle should be restricted only upon demonstration that it will promote the health, safety and welfare of the citizens of the Commonwealth. Following that philosophy, the Virginia Department of Transportation staff and the Commonwealth Transportation Board will consider the following criteria in reviewing a requested through truck restriction.

(1) Reasonable alternate routing is provided. To be considered "reasonable", the alternate route(s) must be engineered to a standard sufficient for truck travel. The effect on the alternate routing will be evaluated for traffic and safety related impacts. If an alternate contains a Secondary route that must be upgraded, funds must be provided from the county secondary construction funds. The termini of the proposed restriction must be identical to the alternate routing and effectively equivalent to allow a time and distance comparison to be conducted between the two routings. Also, the alternate routing must not create an undue hardship for trucks in reaching their destination.

(2) The road requested for restriction is functionally classified as local or collector.

(3) The character and/or frequency of the truck traffic on the route proposed for restriction is not compatible with the affected area. Evaluation will include safety and other traffic engineering related issues, and will take into account the volumes of truck traffic in relation to the remaining traffic as indicated by the following table:

Total Traffic Volume Ranges	Total Truck Volume Ranges
4000+	200
2000 - 4000	100 - 200
1000 - 2000	50 - 100
400 - 1000	20 - 50
250 - 400	13 - 20
50 - 250	3 - 13

(4) The engineering of the roadway and/or the accident history of the route proposed for restriction indicate that it is not suitable for truck traffic.

(5) Within 150' of the existing or proposed roadway center line there must be at least 12 dwellings per 1000 feet of roadway.

Failure to satisfy at least three (3) of the five (5) criteria will normally result in the rejection of the requested restriction.

The Commonwealth Transportation Board, from time to time as appropriate and when deemed necessary, may modify and/or revise any provisions or criteria contained in these guidelines.

(2)

ADOPTED BY THE COMMONWEALTH TRANSPORTATION BOARD MAY 9, 1996

POLICY AND PROCEDURES

CONTROL OF RESIDENTIAL CUT-THROUGH TRAFFIC

POLICY ON RESIDENTIAL CUT-THROUGH TRAFFIC

It is Commonwealth Transportation Board policy that the Virginia Department of Transportation (VDOT) will recognize the problems associated with residential cut-through traffic and implement appropriate remedial measures wherever feasible.

INTRODUCTION

This policy and attendant procedures identify the specific responsibilities and requirements of VDOT and of the affected county/town in addressing concerns relating to cut-through traffic on local residential streets.

VDOT and the Counties/Towns are partners in the administration of these processes and procedures. A good working relationship between VDOT and the Counties/Towns is important for this partnership to function effectively.

DEFINITIONS

Residential Cut-Through Traffic is traffic passing through a specific residential area without stopping or without at least one trip end within the area. It is traffic that would be better served by the local street system intended for through traffic, but, for various reasons, uses the residential street system.

Local Residential Streets are streets within a neighborhood that provide direct access to abutting land uses and serve only to provide mobility within that locality.

Primary Use Area is all local residential streets within a community whose traffic operational characteristics may be altered by operational changes to the candidate street(s) for residential cut-through traffic study, or by a change to any street that provides access to that community.

PURPOSE

The purpose of these procedures is to provide clear guidelines for studying the issues of residential cut-through traffic and implementing the recommended remedial measures.

COUNTY/TOWN RESPONSIBILITIES

To initiate these procedures, the county/town must:

* Identify the problem of residential cut-through traffic.

* Request, by resolution of the local governing body, that VDOT review and address possible solutions to the identified problem. This request is submitted to the local resident engineer, along with the following support data.

Support Data Requirements

1. Functional classification of the street(s) in question as a local residential street and its relationship to the comprehensive plan.

2. Identification of the primary use area, including all streets that are accessed primarily by using the street(s) in question and the associated peripheral roadway networks. Also, include the functional classification and relationship to the comprehensive plan for all streets in the primary use area.

3. Verification by the county/town that cut-through traffic on the local residential street to be studied is 40% or more of the total one hour, single direction volume, and that a minimum of 150 cut-through trips occur in one hour in one direction. Acceptable planning techniques may be used to determine the amount of cut-through traffic. A description of the technique used should be provided to VDOT along with the vehicle volume data.

4. Verification by the county/town that a petition outlining the perceived problem and signed by at least 75 percent of the total occupied households within the primary use area is valid.

5. Identification of alternative routes for through traffic if travel is restricted on the street(s) in question.

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* It is suggested that the support data requirements be collected in the above order as a means of screening requests.

* It is further suggested that the county/town consider documenting procedures for performing its responsibilities.

* If the support data requirements are not met, the process is terminated, except as otherwise set forth herein.

VDOT RESPONSIBILITIES

It is the responsibility of VDOT to complete a study of the roadway network identified in the formal request. This study will be conducted in the following four phases:

1. The resident engineer, upon receipt of the adopted resolution, will review and submit it, along with any recommendations, to the district administrator.

   When the county/town submits a study request to VDOT, a field meeting should be held between the county/town and VDOT staff. If a simple solution can be agreed upon at this meeting, an initial study or public hearings may not be necessary. VDOT should implement the solution and, following an after study, modify as needed.

   When the solution is expected to generate a great deal of public interest or to significantly impact access and traffic circulation, a task force of representatives from VDOT, county/town board of supervisors, and county residents may be formed to support and advise the study effort.

2. As directed by the district administrator, the district traffic engineer will conduct the necessary studies and the evaluation of the county/town request. The district traffic engineer's study may include, but not necessarily be limited to:

* Detailed traffic counts on existing affected streets and potentially affected streets.

* Intersection analyses on the proposed alternative route(s). (Residential cut-through traffic controls can be imposed only if there are acceptable alternate routes).

* Identification of potential adverse safety impacts.

* Identification of the geometrics of the existing facilities in light of the traffic analysis.

* Speed analyses on affected street(s).

* Pedestrian circulation and safety analyses in the study area.

3. Subsequent to completing the necessary traffic studies, the district traffic engineer will provide the district administrator with his findings and recommendations. These recommendations will include alternatives for addressing residential cut-through traffic, including any sketches or diagrams necessary to implement the alternatives and the impact of each alternative on the existing roadway network.

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4. The district administrator will determine the appropriate alternatives and advise the resident engineer, who will convey the findings and recommendations of VDOT to the county/town.

Note: If the local governing body and the district administrator fail to agree on the remedial measures to be implemented, the governing body may appeal to the Commonwealth Transportation Commissioner. The Commonwealth Transportation Commissioner will analyze all the supporting data and render a decision, which will be binding.

COUNTY/TOWN/VDOT JOINT RESPONSIBILITIES

1. The county/town, upon receipt of the VDOT findings and recommendations, shall solicit and receive written comments thereon from appropriate local agencies such as fire, police, rescue, school transportation, and so forth.

2. A formal public hearing shall be held jointly by VDOT and the county/town to provide for citizen input on the VDOT findings and recommendations. Advance notice of the public hearing must be provided by VDOT and will consist of:

   * VDOT publishing notice in a newspaper published in or having general circulation in the county/town once a week for two successive weeks.

   * County/Town posting notice of the proposed hearing at the front door of the courthouse of the county/town ten days prior to the hearing.

   * VDOT placing signs on the affected street(s) identifying, by name and telephone number or address, an individual to answer questions concerning the findings and recommendations.

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3. The county/town shall furnish the resident engineer a synopsis and transcript of the public hearing and an approved resolution of the actions desired.

IMPLEMENTATION

Implementation of remedial measures to remedy the residential cut-through situation shall be accomplished through the following sequence:

* The resident engineer shall notify the appropriate local governing body and media of the action to be taken and of the estimated date of implementation.

* Signs will be placed on the affected street(s) identifying, by name and telephone number or address, an individual to answer questions concerning the pending action.

* The resident engineer will implement the remedial measures, some of which may be of temporary construction pending evaluation of their effectiveness.

EVALUATION

Evaluation of the remedial measures shall be accomplished as follows:

* After the remedial measures have been in place for generally not less than 30 days, but not more than six months, the district traffic engineer will re-study the roadway network and convey his findings and any recommendations to the district administrator.

* The district administrator will review the district traffic engineer's report and will provide this information to the resident engineer for transmittal to the local governing body.

* If it is determined that the implemented remedial measures are not appropriate, the district administrator may terminate such measures and may consider alternate measures, with notification of such action to the local governing body. If the local governing body fails to agree on the remedial measure, it may appeal to the Commonwealth Transportation Commissioner. The Commonwealth Transportation Commissioner will analyze all the supporting data and render a binding decision.

* If it is determined that the implemented remedial measures are an appropriate action, the local governing body will identify the source of funding for any permanent construction, as needed.

FUNDING

Remedial measures utilized on local residential streets that meet the support data requirements set forth above may be fully funded with state secondary roads funds with concurrence of the local boards of supervisors.

CONTROL OF RESIDENTIAL CUT-THROUGH TRAFFIC FOR CERTAIN COLLECTOR ROADS AND LOCAL RESIDENTIAL STREETS NOT MEETING THE RESIDENTIAL CUT-THROUGH TRAFFIC SUPPORT DATA REQUIREMENTS

COLLECTOR ROADS

Some roads, although officially classified as collector, function more like local streets and remedial measures may be appropriate in these cases. Further, it is recognized that each county or town may have unique needs, and difficulties exist in applying a statewide policy to meet all of these needs. The collector roads mentioned above may otherwise qualify for remedial measures but their official classifications make them ineligible under the current support data requirements.

VDOT will therefore cooperate with those counties and towns who wish to pursue a more aggressive program to include certain collector roads provided an agreement is reached between VDOT and the county/town as to the types of remedial measures and the amount of VDOT funding participation (up to 50 percent of the cost) prior to any individual study being conducted.

LOCAL RESIDENTIAL STREETS NOT MEETING SUPPORT DATA REQUIREMENTS

For local residential streets not meeting the support data requirements (e.g., insufficient cut-through traffic), VDOT will cooperate with those counties and towns who wish to pursue a more aggressive program provided an agreement is reached between VDOT and the county/town as to the types of remedial measures and the amount of VDOT funding participation (up to 50 percent of the cost) prior to any individual study being conducted.

MEMORANDUM OF UNDERSTANDING

Prior to providing remedial measures on individual collector roads and local roads not meeting the residential cut-through traffic support data requirements, a Memorandum of Understanding or Memorandum of Agreement shall be negotiated and agreed upon between the local government and the VDOT district administrator.

ALLOWABLE REMEDIAL MEASURES

Traffic control techniques that do not conform with national standard practices for the type of road where the proposed remedial measures are to be placed will be excluded. For example, a collector road identified for remedial measures can not have speed humps installed to discourage residential cut-through traffic. As a second example: Note that four way stops are acceptable.

PROCEDURES

Once the Memorandum of Understanding has been negotiated and agreed upon, processes and procedures as outlined for local residential streets shall be followed.

* * * End * * *

(3)

TRAFFIC ENGINEERING DIVISION

MEMORANDUM

TE-2 80

Traffic Signs

DATE:

June 11, 1997

SPECIFIC SUBJECT:
Watch for Children Signs

DIRECTED TO:

District Administrators

The 1997 General Assembly enacted an amendment to the Code of Virginia, adding §33.1-710.2 (copy attached) regarding the installation and maintenance of signs alerting motorists that children may be at play nearby.

In accordance with this new law, effective July 1, 1997, counties may request that VDOT install and maintain this type of signing. The following process has been established for handling all such requests:

- The request should be submitted by the county to the local VDOT resident engineer. All requests must be in the form of a resolution directed to the Transportation Commissioner.

- The resolution shall include the source of finding for the installation of signs: (i) out of the secondary system construction allocation to the affected county; (ii) from direct contributions or grants made for such purpose to the governing body; or (iii) from such other source as may be provided by the governing body. In all cases the costs of maintaining such signs shall be paid out of the secondary system maintenance allocation to the affected county.

- The resolution shall also include the location(s) where the signs are desired. However, VDOT reserves the right to review all signing plans and make the final determination as to the exact number and location of signs.

Upon receipt of the resolution from the county, the resident engineer, with assistance from the district traffic engineer as necessary. shall review the request and conduct a field review to ensure the proposed signs will be effectively located and will not be in conflict with any: other traffic control devices.

Generally, WATCH FOR CHILDREN signs shall be installed only on secondary routes within residential areas. Any requests to install such signs on primary routes shall be forwarded to the state traffic engineer for review.

· Within thirty (30) days of receipt of the resolution a written response shall be provided to the governing body of the county granting or denying the request. If the request is granted. the response should include any recommended changes to the signing plan proposed by the county.

· All signs installed by VDOT under this policy shall be designed in accordance with the attached standards.

FMD:gjt
Attachment

cc: Mr. David R. Gehr
Mr. J. G. Browder. Jr.
Mr. Claude D. Garver, Ir.
Mr. P. R. Kolakowski
Division Administrators
Resident Engineers
District Traffic Engineers
Ms. Kathe Jefferson

CHAPTER 167

An Act to amend the Code of Virginia by adding a .section numbered 33. 1-210.2 relating to erection ` certain warning signs in counties.

[S 874]

.Approved. March 8. 1997

Be it enacted by the General Assembly of Virginia:

I. That the Code of Virginia is amended by adding a section numbered 33.1-910 2 as follows:

¢33.1-210.2 Installation and maintenance of certain signs in counties

The governing body of any county may by resolution request the Commissioner to install and maintain at locations specified in such resolution. signs alerting motorists that children may be at play nearby Upon receipt of such resolution, the Commissioner shall, within thirty days, respond in writing to such governing body granting or denying the request. The cost of installation of signs installed under this section shall be paid. at the option of the governing body, either (i) out of the secondary system construction allocation to the affected county. (ii) from direct contributions or grants made for such purpose to the governing body, or (iii) from such other source as may be provided by the governing body and the cost of maintaining such signs shall be paid out of the secondary system maintenance allocation to the affected county.

The provisions of this section shall not apply to any county that has withdrawn its roads from the secondary system of state highways under the provisions of g 11 of Chapter 415 of the Acts of 1932 and has not elected to return

SHAPE		Diamond		
COLOR	Message and Border:	Black (-Non-Reflectorized)		
	Field:	Yellow (Reflectorized)		
SIZE		A	B	C
	Each Side:	30"	36"	48"
MESSAGE	Line 1 Capitals:	4" C	5"C	6"D
	Line 2 Capitals:	4" C	5"C	6"D
MARGIN WIDTH		1/2"	5/8.	3/4
BORDER WIDTH		¾"	7/8"	1-1/4"
CORNER RADIUS		1-1/2"	2"	3"

(4)

ADOPTED BY THE COMMONWEALTH TRANSPORTATION BOARD JUNE 17, 1999

POLICY AND PROCEDURES

APPLICABILITY OF §46.2-878.2 OF THE CODE OF VIRGINIA

INSTALLATION OF SIGNS ADVISING OF MAXIMUM PENALTY FOR EXCEEDING POSTED MAXIMUM SPEED LIMIT IN CERTAIN RESIDENCE DISTRICTS

PURPOSE

The purpose of this policy and attendant procedures is to provide guidelines for addressing the issue of exceeding the maximum speed limit on local residential streets, collector streets, and minor arterial streets with residential characteristics in certain residence districts and installing signs as prescribed in § 46.2-878.2 of the Code of Virginia.

POLICY ON INSTALLATION OF SIGNS IN CERTAIN RESIDENCE DISTRICTS

It is the Commonwealth Transportation Board's policy that the Virginia Department of Transportation (VDOT), upon a formal request from the local governing body, will install signs on local residential streets, collector streets, and minor arterial streets with a posted speed limit of 35 miles per hour or lower advising motorists of a maximum punishment of $200, in addition to other penalties provided by law, for exceeding the speed limit in certain residence districts.

INTRODUCTION

This policy and attendant procedures identify the specific responsibilities and requirements of VDOT and that of the affected counties and towns in addressing concerns relating to motorists exceeding the speed limit in certain residence districts.

VDOT and the counties and towns are partners in the administration of these processes and procedures. A good working relationship between VDOT and the counties and towns is important for this partnership to function effectively.

DEFINITIONS

"Residence district" as defined in §46.2-100 means the territory contiguous to a highway, not comprising a business district, where 75 percent or more of the property abutting such highway, on either side of the highway, for a distance of 300 feet or more along the highway consists of land improved for dwelling purposes, or is occupied by dwellings, or consists of land or buildings in use for business purposes, or consists of territory zoned residential or territory in residential subdivisions created under Chapter 22 (§ 15.2-2200 et seq.) of Title 15.2.

"Highway as defined in §46.2-100 means the entire width between the boundary lines of every way or place open to the use of the public for purposes of vehicular travel in the Commonwealth, including the streets and alleys, and, for law-enforcement purposes, the entire width between the boundary lines of all private roads or private streets which have been specifically designated "highways" by an ordinance adopted by the governing body of the county, city, or town in which such private roads or streets are located.

For purposes of this policy a Local Residential Street is a highway built as part of a residential development or a highway where residential development has taken place resulting in a neighborhood or community resembling a residential development. Further, a local residential street must have the residential units facing the street and provide driveway connections or curbside parking for a majority of the residential units.

For purposes of this policy Collector Streets and Roads are highways exhibiting the residential characteristics listed above for local residential streets as well as serving traffic movements between residential areas and major roadways.

For purposes of this policy Minor Arterial Streets and Roads are highways exhibiting the residential characteristics listed above for local residential streets. These roads and streets also serve trips of moderate lengths at a somewhat lower level of travel mobility than principal arterials, provide access to geographic areas smaller than those served by the higher system, and provide intra-community continuity.

Note: The definitions of local residential streets, collector streets, and minor arterial streets shown above are for administration of this policy only and do not necessarily apply to any other VDOT policies and programs.

CRITERIA

To qualify for sign installation, a highway shall meet the following criteria:

1. Meet the definition of local residential, collector, or minor arterial street as indicated above.
2. Have a posted speed limit of 35 miles per hour or lower.

COUNTY/TOWN RESPONSIBILITIES

To initiate these procedures, the county or town shall request, by resolution of the local governing body, that VDOT install the appropriate signs as stipulated in §46.2-878.2 of the Code of Virginia. This request shall be submitted to the local VDOT resident engineer in the form of a resolution, along with the following support data.

Support Data Requirements:

1. Identification of the neighborhood and specific highway(s) where the signs are requested to be installed.
2. Confirmation that the highway(s) meet the definitions of local residential, collector, or minor arterial streets as described above.
3. Notification that a speeding problem exists and that the increased penalty has community support.

VDOT RESPONSIBILITIES

It is the responsibility of VDOT to provide, install, and maintain the signs. The following procedures will be observed:

1. The VDOT resident engineer, upon receipt of the adopted resolution and support data, will review the assembly and submit it to the VDOT district administrator.

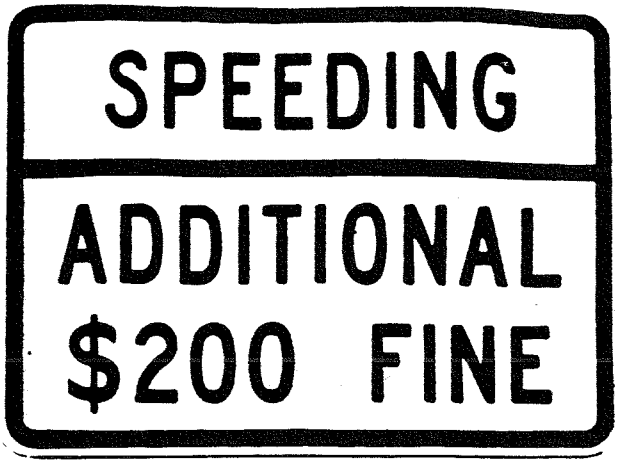
2. The district administrator will have the signs installed.

3. Sign installation under §46.2-878.2 will take place within 60 days of the date the request is approved.

Note: These procedures assign certain action items to the district administrator. A district administrator has the prerogative to assign any or all of these action items to be handled by the regional traffic engineer.

FUNDING

Signs installed in accordance with this policy will be fully funded from countywide traffic services in the secondary or primary road allocations to the respective counties.



SHAPE		Horizontal Rectangle
COLOR	*Line 1:*	
	Message and Border:	Black (Non-reflectorized)
	Field:	Yellow (Reflectorized)
	Lines 2 through 3:	
	Message and Border:	Black (Non-reflectorized)
	Field:	White (Reflectorized)
SIZE	Horizontal:	24"
	Vertical:	18"
MESSAGE	Line 1 Capitals:	3" C
	Solid Bar:	5/8"
	Line 2 Capitals:	3" C
	Line 3 Capitals:	3" C
MARGIN WIDTH		3/8"
BORDER WIDTH		5/8"
CORNER RADIUS		1-1/2"

Notes: Vertical spacing between the top border and the solid bar is 5-1/2". Vertical spacing between message lines 2 and 3 is 1-1/2".