

Traffic Calming Guidance

The following is excerpted from the Virginia Department of Transportation (VDOT):
Traffic Calming Guide For Neighborhood Streets (November 2017)

Purpose of Traffic Calming

The purpose of traffic calming is to lower vehicle speeds on a neighborhood street, without restricting access.

Step 1: Initial Review/Confirm Eligibility

A street must meet the following basic eligibility requirements to participate in VDOT's traffic calming program:

1. Street is in the state system of highways (owned and maintained by VDOT).
2. Street is within a neighborhood where dwellings face the street and are connected to the street with driveways.
3. Street must have a speed limit of 25 mph or less.

Step 2: Initiate Traffic Calming Review/Study

An engineering review and traffic calming study may be initiated by a Home Owners Association (HOA) or Civic Association (CA). If there is no HOA or CA, a letter containing signatures from a minimum of 10 residents along the street(s) being requested for review/study is acceptable.

The request must be submitted to the Board of Supervisors, and the Board must support the request.

The request should include:

- 1) Name and location of street(s) being requested for review/study
- 2) Names/contact information for community residents (typically 4 or 5) who will serve as Task Force Members
- 3) One resident identified as the lead contact for Task Force Members

Responsibilities of Task Force Members:

- Inform community through informational meetings, attended by County staff, of actions related to the traffic calming request such as details of VDOT's traffic calming process, development of the traffic calming plan, etc.
- Review and approve the conceptual traffic calming plan
- Build community support for the conceptual traffic calming plan
- Secure signed agreement of Affected Property Owners
- Distribute ballots to property owners (via mail, electronic means etc.) in the Ballot Survey Area. (Ballot Survey Area is different from Impacted Area)

Definitions:

- Task Force Members: the group of residents within the Ballot Survey Area or Impacted Area that carry out development of the traffic calming plan.
- Ballot Survey Area:
 - 1) Dwellings located along a street identified for traffic calming measures, and
 - 2) Dwellings on other streets whose sole or primary access is onto streets identified for traffic calming measures and who would be considerably inconvenienced if they chose an alternate route
- Impacted Area: Area (identified by County) which includes dwellings that may use streets where traffic calming is being considered but have alternate access routes.

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- Affected Property Owner: Dwelling adjacent to any physical device indicated on the traffic calming plan and whose written signature must be obtained.

Upon agreement by the Board of Supervisors to pursue traffic calming, proceed to Step 3.

Step 3: Engineering Review, Speed Study, and Traffic Counts to Confirm Eligibility

The County initiates an engineering review, traffic count, and speed study of the street(s) to determine if it qualifies for a conceptual traffic calming plan. The County can request VDoT to undertake the work, or the work can be completed by a qualified engineering firm.

- 1) An engineering review determines if the geometry of the street is suitable for traffic calming measures (e.g., horizontal curves, steep grades, sight distance, drainage, or location of road access points).
- 2) To be eligible for further consideration for traffic calming, a street must have an operating speed (85th percentile speed) of 10 mph or more above the speed limit (e.g., 35 mph where speed limit is 25 mph) in at least one travel direction.

The volume of traffic determines the type and extent of traffic calming eligible to be considered:

- Street with less than 600 vpd may be considered for pavement marking and administrative options.
- Street with traffic volume between 600 and 4,000 vehicles per day (vpd) may be considered for the full range of traffic calming measures included in VDoT's Traffic Calming Guide.
- For streets that exceed 4,000 vehicles per day, alternative actions should be considered. This volume of traffic indicates issues due to capacity of the overall road network.

The locality provides the results of these reports to the Board, County Fire-Rescue, public schools, and VDoT for review.

Step 4: Develop Conceptual Traffic Calming Plan

The County, in coordination with VDoT, chooses among eligible options to develop a conceptual traffic calming plan. The County works with Task Force Members and the Board to:

- Identify the Impacted Area and Ballot Survey Area
- Review the conceptual traffic calming plan and eligible options
- Solicit comments
- Obtain signatures of agreement from each of the Affected Property Owners (templates will be provided by the County to the Task Force Members)
- Secure concurrence of the plan from the Task Force Members.

Step 5: Public Meeting, Ballot Survey, and Community Voting Rules

The conceptual traffic calming plan is presented to the community at a formal public meeting held by the County. A ballot survey drawn solely from the Ballot Survey Area is conducted to measure community support for the proposed plan. The ballot survey shall comprise the following:

- Single ballot per dwelling or business address.
- A "No" ballot indicates disapproval of the entire plan. A "Yes" ballot indicates concurrence with the entire plan.
- A minimum of 50% of dwellings (or businesses) in the Ballot Survey Area must cast and return a ballot for the survey to be considered valid.
- A minimum of 60% of the total number of ballots cast must support the traffic calming plan.

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- Ballots that do not clearly indicate “Yes” or “No” (e.g., ballots indicating partial approval of items in the plan, blank ballots, or ballots marked with more than one vote) will not be counted as either “Yes” or “No,” but are considered a “non-response” and only count as part of the 50% minimum ballot return requirement for the ballot survey area.

Community Voting Rules

The following rules govern the voting and approval of the traffic calming plan:

- Only dwellings (and businesses) in the Ballot Survey Area are entitled to vote.
- Voting shall be conducted by ballot, with only one vote per dwelling (or business address).
- Wording on the ballot must be approved by the County. (Sample ballot template to be provided by the County).
- Accompanying the ballot shall be voting procedures, a copy of the tax map-based plan, and a communication (e-mail, letter, etc.) providing information about the proposed types and locations of all traffic-calming devices.
- Ballots must be received (or postmarked) to the Board by a date pre-determined by the Task Force Members.
- A renter of a dwelling may vote in lieu of the property owner if the owner does not currently reside at the address and is approved by the HOA/CA or the Board of Supervisors.
- Properties that are vacant, bank-owned properties, and properties in foreclosure may be considered as vacant and are not included in the balloting process.
- The traffic calming plan must be approved as a whole, integrated plan, (e.g., a “Yes” vote indicates approval for all measures in the plan; a “No” vote indicates disapproval of one or more proposed traffic calming measures in the plan).
- A minimum of 50% of dwellings in the Ballot Survey Area must cast (return) a ballot for the vote to be considered valid (a higher minimum may be required by the Board).
- Of total ballots cast, a minimum of 60% must approve the traffic calming plan for the plan to be implemented.
- Ballots received after the postmark or ‘received by’ date are to be unopened and not counted.
- Ballots that do not clearly indicate approval or disapproval for the whole, integrated traffic-calming plan (e.g., ballots modified and indicating partial approval of specific elements in the plan) are considered a “non-response.”
- Blank ballots or ballots marked with more than one vote are considered a “non-response.”
- “Non-response” ballots are counted as part of the total eligible dwellings in the Ballot Survey Area from which the minimum return is determined.

Step 6: Board of Supervisors Endorsement

If the traffic calming plan is approved, the County must endorse the plan by Board resolution. The resolution must state that an official public meeting was held whereby the traffic calming plan was presented and approved by 60% of dwellings (or businesses) in accordance with the ballot survey process. The County must forward the Board resolution with related documentation to VDOT and request implementation and installation. The resolution should convey the proposed traffic calming plan, the type of funding to be used, the engineering study/review, the streets and dwellings identified for the Ballot Survey Area and the results of the ballot survey.

Step 7: Consideration for Implementation and Funding – VDOT

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Upon receipt the of the approved plan and Board resolution, VDoT will consider implementation of the traffic calming plan depending on local funding priorities, and availability of necessary resources, materials, and equipment.

Where multiple streets are proposed for traffic calming measures and are competing for limited funds, a prioritization process may be used to select the priority of streets for implementation.

Funding

The type and extent of funds that may be utilized must be discussed with the VDoT residency.

Step 8: Evaluation -VDoT

VDoT will confirm that the traffic calming plan was implemented, traffic calming devices properly installed, and ensure no safety, operational, or maintenance issues exist. Following installation, a follow-up review may be conducted to evaluate the effectiveness of the traffic calming measures. VDoT may disseminate any findings and recommendations from such review through the Board of Supervisors to obtain feedback from those involved in plan development.

Modification of Traffic Calming Devices

Where an unforeseen safety, maintenance, or operational issue develops, VDoT reserves the right to modify (adjust, relocate, remove etc.) relevant traffic calming measures to resolve the issue. Where the County wishes to add, remove, or substantially alter traffic calming devices approved and implemented in their traffic calming plan, they must use the identical process utilized for the original plan (e.g. develop revised plan, approval signatures of affected residents, community approval via ballot survey, BoS resolution, and VDoT review and approval)

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TRAFFIC CALMING MEASURES

Non-Intrusive Traffic Calming Measures

Non-intrusive measures include administrative activities (e.g., public information campaign) and non-intrusive devices. Non-intrusive devices do not physically constrain vehicle maneuvers and typically involve pavement markings or signs that are easily recognized by motorists and are generally less costly.

Non-intrusive measures include community education, pavement markings (e.g., travelway narrowing), and signage including neighborhood gateway signs, speed display signs, and Additional \$200 Fine signs.

Horizontal, Vertical, and Narrowing Devices

Horizontal, Vertical, and Narrowing Devices are constructed and installed on the pavement surface and physically narrow or create vertical or horizontal shifts in the travel lane that confine vehicles to travel through or over them. These devices are effective in slowing vehicles because they physically force a vehicle to pass over, through, or around a physical obstruction.

Horizontal, vertical, and narrowing devices include speed humps, speed lumps, chokers, raised crosswalks, crosswalk refuges, curb extensions, raised median islands, chicanes, and speed tables.

These devices impact emergency response times, typically 3 to 10 seconds per device depending on the type of device and the vehicle traversing it. The delay would be compounded by multiple devices. (Speed lumps are specifically designed for emergency vehicle use).

Horizontal, vertical, and narrowing devices also: 1) impede bicyclists, 2) introduce additional maintenance costs, and 3) must be located and constructed in manner to prevent creating drainage issues. Also, vertical devices (e.g. speed humps, speed lumps) increase noise to nearby residents.

3. Traffic Calming Measures Not Included in VDoT Guide

Measures considered and either prohibited for use as a traffic calming device or not recommended due to cost, ineffectiveness etc. include: (1) stop signs, (2) enforcement of speed limits, (3) devices that impose onerous restrictions on certain traffic movements, (4) speed reduction markings, (5) zigzag pavement markings, (6) in-roadway warning lights, and (7) roundabouts.

1. Stop Signs are not suitable for use as traffic calming devices.
2. Enforcement of speed limits is a traditional, proven, and effective approach to reduce speeding, however, it is unreasonable to expect local enforcement agencies to continuously enforce speed
3. Roundabouts provide many benefits including speed reduction, but they are not considered traffic calming devices. The cost and effort to implement a roundabout does not fit within the scope and budget for traffic calming on neighborhood streets. Where appropriate a roundabout can be pursued via other processes as provided by VDOT

Additional information can be found in VDoT's *Traffic Calming Guide For Neighborhood Streets* (November 2017).