

Traffic Calming Policy

1. Purpose

1.1. The purpose of the Traffic Calming Policy is to work with residents to develop strategies and plans that are intended to affect driver behavior on Town Highways in such a way that reduces vehicle speeds and connector traffic and improves the quality of life for residents, pedestrians, bicyclists and motorists. This goal shall be balanced with the need to provide quick emergency response times for emergency vehicles including fire trucks, police and ambulances.

1.2. Implementing traffic calming measures is not a solution for all speeding and connector traffic issues. Each area may have its own unique set of problems that must be analyzed to identify solutions. This policy has been adopted by the Selectboard to use as a guide for Town traffic calming staff and inform residents about the processes and procedures for developing strategies and plans that may lead to the installation of calming measures on Town Highways. Under this program, Town traffic calming staff will work with residents to identify traffic issues on their local roads and seek appropriate solutions.

1.3. Nothing in the Traffic Calming Policy is meant to, or will, diminish or interfere with the Selectboard's authority and responsibilities under Vermont law to control town highways.

1.4. The goals of the Traffic Calming Policy are to:

- Define a process to evaluate concerns;
- Implement "quick response" measures when possible;
- Prioritize Town Highways for additional traffic calming devices based on fair and impartial methodologies;
- Work with the residents to identify and approve a traffic calming strategy;
- Establish the means to pay for and maintain the devices; and
- Implement traffic calming measures through the Capital Improvement Program

2. Background

2.1 The Town receives numerous requests, complaints and suggestions from residents about traffic related issues. In many cases driver behavior—in the form of speeding or connector traffic—is the root cause of these complaints. Traditionally police enforcement has been successful in deterring speeding traffic. However, it is inefficient to conduct enforcement on low volume residential streets. Enforcement often works on a temporary basis, but there is a need for more permanent measures to reduce the speed of vehicles and discourage connector traffic on low volume residential streets.

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2.2. The Town of Richmond Traffic Calming Program is designed to provide consistent, town wide policies to traffic management and to ensure equitable and effective solutions to a variety of traffic concerns expressed by local residents are examined. The program intent is to treat similar traffic problems equally, while recognizing the differences in individual resident levels of concern and traffic tolerances. This policy is designed to provide guidelines and methods of evaluation to systematically address traffic problems.

2.3. Traffic concerns are as varied as the residents who perceive them and include a wide range of issues from site specific safety concerns to neighborhood-wide concerns with increased traffic from motorists who don't have a destination in the neighborhood.. The nature of the problems should drive the approach as well as the solution.

3. Policy Statement

3.1. When making changes to the signage, speed limits, road alignment and other changes that may impact the safety of motorists, bicyclists, pedestrians and others using Town Highways, it is important to base decisions on sound principles developed using evidence-based information.

3.2. Traffic calming is a traffic management strategy designed to reduce vehicle speeds or volumes by utilizing of a number of strategies, including physical roadway changes, to improve the quality of life in both residential and commercial areas and increase the safety and comfort of walking and bicycling.

3.3. It is a policy of the Town to implement industry best practices when making physical changes to a roadway for the purpose of traffic calming. These best practices are informed by the Federal Highway Administration (FHWA) and Vermont Agency of Transportation (VTrans), and interpreted by professional engineers serving as consultants.

3.4. It is a policy of the Town to follow the Manual on Uniform Traffic Control Devices (MUTCD). This manual has been developed using evidence-based principles and is being successfully used across the country to make roads safer with appropriate traffic control devices. In addition, the State of Vermont has adopted the MUTCD as the standard practice to follow. With no exceptions, all traffic control devices must follow the MUTCD.

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- 3.5. It is important to distinguish the roles traffic calming and traffic control devices have. Physical roadway changes for traffic calming may require MUTCD compliant signage and markings. Additionally, added MUTCD compliant signage may be a recommendation in some circumstances to calm traffic. Traffic control devices are primarily regulatory in nature, and their implementation in many circumstances must be warranted by data collected from a roadway study. For the purpose of this policy, a change to a traffic control device in a study area is a complementary outcome from research conducted and is not in itself a means of traffic calming.
- 3.6. Public involvement in decisions that affect traffic safety and quality of life issues is an important tenet of the Selectboard's decision making process. This Traffic Calming Policy is intended to guide town traffic calming staff and inform residents about the processes and procedures for implementing traffic calming and to utilize public involvement to identify traffic problems in neighborhoods and identify possible solutions.

4. Definition of Terms

- 4.1. ADT (Average Daily Traffic) - The average number of trips a roadway carries per day.
- 4.2. Arterial Street - A roadway which feeds through traffic to freeways, provides access to adjacent land uses primarily at intersections, and features traffic control measures. Typical volumes for these streets are 10,000-45,000 ADT.
- 4.3. Collector Street - A roadway which provides access to adjacent land uses and feeds local traffic to arterials. Typical volumes for these streets are 4,000-10,000 ADT.
- 4.4. Connector Traffic - The diversion of non-residential traffic from a congested street to a less congested alternative route. Usually associated with the diversion of traffic from an arterial street to a local street.
- 4.5. Local Street - A roadway designed to serve only adjacent land uses in commercial and residential areas. Typical volumes for these streets are 500-3,000 ADT.
- 4.6. Manual on Uniform Traffic Control Devices (MUTCD) - a Federal Document that regulates design and roadway treatment implementation measures and warrants. The State of Vermont has adopted the MUTCD as the standard practice to follow.
- 4.7. Residential Collector Street - A roadway which provides access to residential areas and feeds traffic to arterials. Typical volumes for these streets are 3,000-6,000 ADT.
- 4.8. Traffic Calming - Process of using physical design and other measures to improve safety for all users on a roadway, inclusive of motorists, pedestrians and cyclists.
- 4.9. Traffic Control Devices - All signs, signals, markings, and other devices used to regulate, warn, or guide traffic, placed on, over, or adjacent to a street, highway, pedestrian

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facility, bikeway, or private road open to public travel by authority of a public agency or official having jurisdiction, or, in the case of a private road, by authority of the private owner or private official having jurisdiction.

4.10. Warrant Analysis- An investigation of traffic conditions to determine the necessity for traffic calming measures and to furnish necessary data for the proper design and operation of a traffic calming measure that is found to be warranted.

4.11. Richmond Town Traffic Calming Staff (TTCS) – consists of Richmond Road Foreman, Richmond Police Chief, Richmond Town Planner and Richmond Town Manager

5. Traffic Calming Evaluation Process

5.1. Initial Request - In most cases, the process for identifying a need and possible solutions to motor vehicles speeding on Town Highways starts with residents or groups of residents reporting their concerns to Town staff.

5.2. Response Levels - Levels are used to describe the range of responses to traffic calming requests. There are 4 factors which are used to help define each level:

- Cost of installation and maintenance
- Level of Public Involvement;
- Enhancements or physical changes to road; and
- Implementation ease/speed

5.3. The intent of this policy is to attempt to resolve each concern raised by residents at lower levels while providing a process for evaluating the effectiveness of changes and offering opportunities for residents to continue to pursue possible traffic calming measures through advocacy. The following table defines each Level and associated action measures drawn from the traffic calming toolbox.

	Level 1	Level 2	Level 3
Toolbox Measures	Education Enforcement	Enhancement <i>Education Enforcement</i>	Engineering <i>Enhancement Enforcement Education</i>

The number of traffic calming toolbox action measure categories increase as the level classification goes up. See Appendix A for further explanation of specific toolbox items that fall under each measure category. These specific items are referred to as implementation mechanisms.

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- 5.4. Cost Considerations – Most traffic calming measures involve the expenditure of money. Any measure that has a financial cost, is subject to the Town’s budgetary process.
- 5.5. Interest Group Coalition- The intent of this policy is to encourage the formation of interest group coalitions focused on developing a response strategy to a safety issue on a Town Highway using a collaborative process. A coalition may consist of residents where the issue was identified, town traffic calming staff and others. In cases where differing opinions cannot be overcome, the Selectboard will have the final say, as prescribed in the appeal process in section 9.2.

6. Level 1 Response

- 6.1. Description – Responses falling under this Level do not include any physical changes to the roadway. A Level 1 response involves little expense beyond staff time and any staff-initiated studies, like speed, used to further investigate the issue raised. The level of public involvement may vary depending on location of the Town Highway and public interest expressed regarding the issue, but extensive efforts should be made to make all affected aware of the issue and the mechanisms identified for action-based solutions. Most of the effort to address concerns will involve education to provide information through a variety of outlets to help residents make informed decisions about traffic concerns and influence driving behavior. The collective buy-in to the solution is critical to its success to change the driving behavior of residents on the Town Highway. Some police enforcement may also be called for.
- 6.2 Initial Level Classification - When the Town is informed of a roadway safety issue, town traffic calming staff will first classify it as a Level 1 issue and investigate further to determine what, if any, additional action(s) to take, including level reclassification. The party that raised the issue will be informed of this process. One or more of the following measures/mechanisms will be utilized:
- Condition study (most commonly speed)
 - Education
 - Enforcement
- 6.3. Implementation Plan - Town traffic calming staff will develop an implementation plan to address the issue using education and/or enforcement mechanisms from the Town’s traffic calming toolbox. This plan will be shared and discussed with the resident(s) in the affected issue area delineated by the town traffic calming staff. If the town traffic calming Staff decides a condition study is necessary, like speed, and determines through such a study that the issue raised requires greater mitigation work beyond Level 1, it will be reclassified as a Level 2 issue.
- 6.4. Non-speed Related Safety Issues If as part of the initial evaluation safety problems other than speed are identified town traffic calming staff will work to resolve the

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problem as quickly as possible. For example, if proper sight distances are obstructed or there are missing signs etc., these problems will be handled as maintenance work.

- 6.5. Assessment Period - Issues designated as Level 1 will be revisited after 6-9 months to assess the effectiveness of the staff plan. If little to no improvement has been realized, it may be elevated to a Level 2 response.

7. Level 2 Response

- 7.1. Description – Responses falling under this Level may include some temporary physical changes to the roadway. A Level 2 response involves the potential for some cost beyond staff time. Public involvement is needed in order to arrive at effective solutions to consider, and traffic calming measures may include education, enforcement, and enhancements- both permanent and temporary for evaluation. Full implementation may take longer than Level 1 measures depending on the nature of the enhancements, but education and enforcement measures can begin fairly quickly. The roadway enhancements may include new signage and roadway markings (if warranted by the MUTCD) and temporary physical roadway enhancements, like speed humps, for an assessment period that will likely extend beyond 9 months to 1 to 2 years.
- 7.2. Implementation Plan - If after initial review town traffic calming staff deem that the issue should be classified as Level 2, then the corresponding action plan may include enhancements for roadway treatment in addition to education and enforcement mechanisms. If the proposed enhancements include physical enhancements to the roadway to be evaluated on a temporary basis, then the local residents will be informed of these proposed temporary evaluative treatments prior to their implementation. Feedback will be gathered at a meeting and through public outreach to ensure there is support for any temporary physical roadway changes prior to their implementation. The Selectboard will be kept apprised of any temporary physical enhancements being utilized under a Level 2 classification before implementation, and the funds to cover the cost of such enhancements should be available in the budget.
- 7.3. Assessment Period - The assessment period for a Level 2 classification will be 1-2 years. Feedback will be sought from the neighborhood after the assessment period to help determine whether any temporary physical roadway enhancements implemented should be permanent. If town traffic calming staff concludes the physical roadway changes are needed on a permanent basis, then the funding required for construction will be included for consideration during a future town budget process. Town traffic calming staff should base its recommendation on neighborhood feedback and any relevant data collected during the post-implementation assessment.

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8. Level 3 Response

- 8.1. Description – Responses falling under this Level will likely include permanent physical changes to the roadway that are recommended from an engineering study. A Level 3 response has the potential for significant costs associated with a formal traffic calming study and permanent physical changes to the roadway. Consequently, public involvement should be extensive and full implementation might take a number of years depending on the availability of funding, the extent of permitting required and if any rights of way or easements are required. Shorter-term implementation measures falling under the education, enforcement and enhancement categories may take place as first solutions until the permanent physical roadway changes can occur.
- 8.2. Implementation Plan - If after initial review town traffic calming staff deem that the issue should be classified as Level 3, then the corresponding action plan will include engineering through a formal traffic calming study for roadway treatment in addition to education, enforcement and possible enhancement mechanisms. The traffic calming study process will then be initiated, which is a multi-step process described in detail in Appendix B. The Town Administrative Staff will develop and use a prioritization matrix for traffic calming projects that involve physical roadway changes as a means to assist in planning when these projects will be implemented. The prioritization matrix will be revised as necessary.
- 8.3. Assessment Period - After permanent physical changes to the road have been made traffic speeds will be re-examined after 2 years.

9. Public Involvement

- 9.1. Involvement at all Level classifications - Public involvement and feedback is important at all traffic calming level classifications in order to foster successful outcomes that are effective and supported by the local residents involved.
- 9.2. Appeal of Staff Implementation Plan - Should resident(s) wish to appeal the implementation plan developed by staff to address an identified issue, an appeal may be brought in the form of a signed letter or petition. For the Selectboard to consider such an appeal, at least 5 percent of the voters within the town must sign the letter or petition.
- 9.3. Inclusion of Homeowners' Associations - Residents who live in neighborhoods that have a formal Homeowners' Association are encouraged to inform and engage Association Board Leadership on traffic-related issues. The resident(s) may initiate a request to the Town to investigate and classify the issue under this policy directly, or the Association may contact the Town with the request on its resident's behalf. The Association can be

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a partner in engaging and educating residents to implement the traffic calming measures on private and public roads as outlined in this policy.

Appendix A- The Traffic Calming Toolbox

Possible action mechanisms for each toolbox measure are as follows.

Toolbox Measure	Action Mechanisms
Education	<ul style="list-style-type: none"> • Formation of a Traffic Committee • Traffic Safety Campaign • Traffic Pledge Program • Sign Program • Radar Speed Cart Temporary Placement
Enforcement	<ul style="list-style-type: none"> •Richmond Police Patrol increase
Enhancement	<ul style="list-style-type: none"> • Added / New Supplemental Signage* • Added / New Regulatory Signage* • Added / New Pavement Markings* • Temporary treatment evaluation (i.e. speed hump) • Improved street lighting • *If MUTCD Warrants Treatment
Engineering	<ul style="list-style-type: none"> • Further Traffic Calming Study Recommended • Physical Traffic Calming Measures Selected • Implementation of Traffic Calming Measures

The following are traffic control measures by category, and further explanation of the mechanisms that can be enacted within each measure.

Education

AreaTraffic Safety Committee

This group made up of area residents takes the lead in implementing education programs and acts as a liaison to town traffic calming staff. If the area has a homeowners' association, its officers can be active in working to form this group.

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Area Traffic Safety Campaign

Area traffic safety campaigns include: personalized letters, flyers and newsletters as well as meetings, workshops, specific school programs, and neighborhood speed awareness signs or banners. Campaigns focus on subjects such as pedestrian safety, enforcement and speeding impacts in order to heighten community awareness both consciously and subconsciously.

- Uses:
 - Allows residents to discuss views
 - Information targeted to a specific audience
 - Can be applied quickly without a formal review process
- Caveats:
 - May not be very effective
 - Often requires additional measures
 - Potentially time consuming
 - Enforcement still likely required

Area Pledge Program

This program promotes safe and courteous driving through the use of two elements: a pledge and a bumper sticker. Residents are asked to sign a pledge and implement it into their own driving habits and lifestyles. A bumper sticker promotes courteous driving and identifies the person as a "pace" car driver. By setting the example for proper driving, the vehicle sets the pace or speed for other vehicles on the road by requiring cars behind the pace car to also drive within the speed limit. The intended benefit of a neighborhood pledge program is to get residents to recognize that their driving behavior impacts the livability of other residents' streets.

- Uses:
 - Heightens awareness of vehicle travel speeds
 - Residents set the "pace" for drivers behind them
 - Demonstrates neighborhood support for courteous driving habits
 - Involves community
- Caveats:
 - Effectiveness may be limited
 - May not appreciate stickers on their vehicles
 - Might create ill will or tension among neighbors

Area Sign Program

The Town provides yard signs to an area to encourage motorists to respect the area and to drive responsibly. Signs shall be kept out of the Town's right-of-way. Every few days, residents

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move the signs around the area to different yards so drivers and pedestrians notice the newly placed signs.

- Uses:
 - Requires large group of supporters
 - Novelty of new signs draws attention to message
 - Short duration of sign placement helps keep the message fresh
- Caveats:
 - Signs could be vandalized
 - Effectiveness will diminish with repeat usage

RADAR Speed Cart Temporary Placement

The Town places a RADAR Speed Cart in different locations in the area of concern. The intended benefit of the RADAR Speed Cart is to alert drivers when they are traveling too fast, and to collect relevant data about vehicle speeds.

- Uses:
 - Provides a visual alert of speed to the operator of the vehicle
 - Is generally effective at capturing an operator's attention
 - Can collect crucial data that can be analyzed and used to more efficiently address traffic calming measures
- Caveats:
 - Can be very expensive if grant funding is not available
 - RADAR Speed Cart could be vandalized
 - Officers availability to set the RADAR Speed Cart up depends on call volume
 - Will require some indoor storage space when not in use

Enforcement

Targeted Police Enforcement

The Police Department deploys officers to perform targeted enforcement on residential streets. The intended benefit of targeted police enforcement is to make drivers aware of local speed limits and to reduce speeds.

- Uses:
 - Warns drivers and increases awareness
 - Visible enforcement very effective, especially when combined with other actions
 - Can be used on short notice
 - Can reduce speeds temporarily
 - May influence the behavior of other drivers by seeing a Vermont Civil Violation Complaint being issued

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- Caveats:
 - Only temporary
 - Requires officers availability
 - May disrupt traffic
 - Requires repeated use to be effective
 - Cost

Appendix B- Traffic Calming Study Process (Level 3 Designation)

Step 1- Funding Available

Funding for expenses associated with the traffic calming study come from the town budget subject to funding availability

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Step 2- Area Support Confirmed

Each residence and property owner within the proposed project area will be surveyed for his/her opinion regarding potential traffic calming implementation on the particular street(s) in question. The delineation of the proposed study area will be determined by town traffic calming staff. An additional benefit of the survey is to notify residents that the Town is evaluating the situation and is considering changes to the streetscape. If the survey results show strong to very strong disagreement with traffic calming measures being implemented, staff will reassess the situation. The survey step can be waived if a partnership was established with a homeowners' association and collective buy-in from the residents in the area on installing traffic calming measures was previously received.

Residents of an area may request an informational meeting be held to provide further information about traffic calming and what the potential outcomes can be before the survey asking for support is circulated. The residents asked to organize the meeting and town traffic calming staff will attend to provide information and answer questions raised.

Step 3- Kick-Off Meeting

The first step in the development of the traffic calming study is to hold an initial "kickoff" meeting. This meeting should be conducted by town traffic calming staff in conjunction with project partners which may include an engineering firm and the Chittenden County Regional Planning Commission (CCRPC). Registered owners of each tax parcel as well as residents within the project area that will be affected by the installation of the traffic calming measure(s) should be invited to this meeting and outreach should take place using a number of communication channels utilized by the Town.

Step 4 – Area Traffic Calming Committee Formed

An area traffic calming committee (ATCC) should be developed from the residents that attended the initial meeting(s). This committee will help provide focus to the plan development process by providing a link between the area and the Town. The ATCC will help assist the project team in organizing future area events, reviewing preliminary traffic calming plans and reports, and other areas where resident's participation is needed.

Step 5 - Report Development

The deliverable from the traffic calming study will be a report that includes:

- The issue
- Relevant data collected and analyzed
- Possible traffic calming measures to implement to mitigate the issue and the expected degree of effectiveness

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- Possible traffic calming measures identified should be recommended treatments for the roadway segment under examination as identified by the Federal Highway Administration (FHWA) and/or Vermont Agency of Transportation (VTrans) inclusive of industry best practices.
- Possible impacts of each calming measure identified for bicycle and pedestrian roadway users, and any ancillary impacts (i.e. noise created).
- Residential feedback on the options considered
- Cost estimates for each measure
- A recommended preferred alternative

Step 6 - Selection of a Preferred Alternative

The Selectboard will designate a preferred alternative from the treatments identified in the traffic calming report. This designation of a preferred alternative does not necessarily mean the construction of any or all of its components are imminent. Rather, it sets policy for roadway improvements and the town traffic calming staff can exercise discretion for the prioritization and implementation of preferred alternative elements.

Implementation scheduling can be informed by a prioritization methodology developed and updated by public works, the available funds in the municipal operating and capital budgets, and the extent of the work required to obtain any additional permits of rights-of-way.

It's understood the implementation of some or all preferred alternative elements may take multiple years and budget cycles to complete. Once a preferred alternative is designated by the Selectboard the traffic calming study shall be considered final and indicated as such. A possible outcome and recommendation from a traffic calming study may be to not implement any roadway treatments at the present time. Copies of the study will remain public records of the Town and be available for inspection upon request.

Step 7 - Permanent Installation or Modification

A permanent installation of the preferred alternative traffic calming measures should be made in phases or all at once, depending on the scope. A phased approach may include temporary measures that become permanent, or a full or partial plan modification based on the feedback and evaluation of temporary measures, if installed. The implementation of temporary measures can be used as an evaluative tool to gauge their effectiveness and the response from the area residents on their potential use before the investment is made to make the measures permanent.

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Step 8 - Assessment

9 months after the installation of permanent traffic calming measures, whether in full or the completion of one phase in a multi-phase approach, the original data points analyzed in the traffic calming report to make the determination that traffic calming measures were warranted shall be recollected. The original data should be compared to the new data and evaluated to determine the effect the traffic calming measure installation had on neighborhood safety. If a multi-phased approach is being undertaken it's recommended the lower-cost measures are installed first and the results evaluated. If these measures achieve the desired results, then proceeding with the remaining implementation phases that have a higher cost may not be necessary.