



TOWN OF BELMONT  
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## **TRAFFIC CALMING POLICY**

Adopted by the Select Board on January 13, 2020

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### **I. INTRODUCTION**

Belmont is committed to protecting its pedestrians, bicyclists, and those travelling in motor vehicles. While urgent concerns about pedestrian, bicyclist, and car safety should be reported to the Belmont Police Department, non-urgent concerns should be reported in writing to the Town Engineer and the Transportation Advisory Committee (TAC), who will work together with the Belmont Police Department, the Department of Public Works, and other Town staff to document, assess, and address these concerns.

Speeding and cut-through traffic reduce the safety of Belmont streets and the quality of life for those who live on and use these streets. Speeding creates unsafe conditions for pedestrians, bicyclists, those who use public transit, and drivers. Speeding also produces unnecessary noise and air pollution. Many communities in Massachusetts and

throughout the United States have turned to engineering solutions, commonly known as “traffic calming,” to address problems with automobile traffic.

The Institute of Traffic Engineers (ITE) defines traffic calming as, “the combination of mostly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized users.” Traffic calming involves building or retrofitting roadways with certain features and characteristics that induce drivers to slow down and pay more attention to their surroundings.

The Town of Belmont has adopted this comprehensive Traffic Calming Policy to guide the implementation of traffic calming in the Town of Belmont.

## **II. OBJECTIVES OF THE BELMONT TRAFFIC CALMING POLICY**

This Traffic Calming Policy is intended to bring to Belmont the demonstrated benefits of traffic calming, which include:

- Reduced vehicle speeds and increased driver attentiveness;
- Improved safety for pedestrians, bicyclists, users of public transit, and motorists through the reduction of dangerous driving behaviors and the reduction of the probability and severity of collisions;
- Increased mobility for individuals through the use of non-automotive modes of transportation;
- Improved quality of life for residents and visitors by making streets and neighborhoods safer and more appealing.

## **III. TRAFFIC CALMING PROCESS OVERVIEW**

The Belmont Traffic Calming Policy provides a process for making and managing requests to develop, design, and implement traffic calming on Belmont roadways. This process is designed to:

- encourage resident involvement in all phases of the program;
- provide a clear and transparent process for addressing concerns about the safety of pedestrians, bicyclists, public transit users, and motorists;
- maintain a procedure for traffic calming project selection that is guided by objective, needs-driven criteria; and
- implement traffic calming methods that mitigate the detrimental effects of automobile traffic while maintaining access for emergency vehicles, public transit, and commercial trucks, and minimizing hazard or nuisance conditions.

## Traffic Calming Request--Process Steps:

1. Anyone who lives and/or works on Belmont streets can submit a written request for traffic calming (using the form provided in Section XIII) to the TAC.
2. The individual named in item 2 of Section XIII, Traffic Calming Request Form, will provide a contact email address and will serve as the Request Contact for Town staff throughout the request-review period. Unless otherwise indicated by Town staff, this individual will be expected to update those who signed the request under item 11 of Section XIII, and other concerned neighbors, about communications from Town staff about the request.
3. Town staff will provide acknowledgement for each request to the Request Contact.
4. For each request, Town staff will collect preliminary-evaluation data, as outlined in Section VIII, Table One of this policy, to support TAC determination of:
  - a. whether the request is eligible for consideration under the Traffic Calming Policy; and
  - b. whether traffic calming methods are likely to successfully address the identified problem.
5. Town staff will inform the Request Contact of the date on which TAC will review the preliminary-evaluation data and determine whether or not to forward the request to the Town Engineer for a traffic calming needs-assessment report.
6. If the TAC determines that a needs assessment is warranted, Town staff will produce a traffic calming needs-assessment report, as outlined in Section IX, Table Two of this policy.
7. In instances in which a needs assessment is conducted, the TAC will convene a meeting to discuss the traffic calming request, the needs-assessment report, and any proposed traffic-calming improvements.
8. Town staff will notify all residents in the affected area of the date of the TAC meeting at which the needs-assessment report and any proposed traffic-calming improvements will be discussed.
9. The TAC will assess residents' support for proposed traffic calming improvements at the meeting and through a two-week, written, open-comment period.
10. At the next scheduled TAC meeting following the end of the written, open-comment period, the TAC will vote on whether or not to recommend to the Select Board that a traffic-calming plan be approved for implementation in response to a request.
11. Town staff will notify the request contact of the TAC decision.
12. Following review by the Select Board, Town staff will notify the Request Contact of the Select Board vote on the TAC recommendation.
13. The TAC will prioritize each approved traffic calming plan within the context of the full list of approved traffic calming plans using the needs-assessment scoring system in "Table Two: Needs Assessment Scoring" found in Section IX of this document.

14. Town staff will maintain an online list of traffic calming requests, whether or not plans have been approved in response to these requests, and prioritization rankings for approved traffic calming plans. The priority ranking for any traffic calming plan may change when other traffic calming plans are approved. Priority ranking is not determined by the chronological order of the submission, but is based on the scoring system presented in “Table Two: Needs Assessment Scoring” of this document.
15. For recommended traffic calming plans that cannot be funded through the annual operating budget, the Town Administrator may consider other funding sources. Due to budgetary constraints, lower prioritized, lower-cost projects may be funded ahead of higher prioritized, higher-cost projects.
16. For additional information, residents may review meeting agendas and minutes for the TAC and the Select Board. Meeting dates, agendas, and minutes are posted on the Town website and individuals may subscribe, via the Town website, for automatic email notifications when new meeting dates, agendas, and minutes are posted.

The process outlined above does not apply to:

- traffic calming measures that may be required on Town streets to comply with State and Federal standards or warrants;
- traffic calming requests from the Belmont Police Department;
- temporary changes in traffic patterns necessary to stage special events or accommodate construction;
- experimental traffic calming measures installed temporarily for research and evaluation by the Town and/or a partner agency or consultant;
- installation of traffic control devices (e.g. signals, Stop signs, etc.);
- the installation of traffic calming devices that may be required for the development of new commercial, residential, mixed-use, or other projects.

Sections IV - XI provide greater detail about the steps in the process and a Traffic Calming Request Form is included in Section XIII of this document.

#### **IV. TRAFFIC CALMING METHODS**

Traffic calming uses the physical characteristics of the roadway, instead of artificially imposed speed limits or Stop signs, to slow drivers. Traffic calming methods help reduce the speed that feels comfortable for motorists and brings driving behavior in better compliance with existing town-wide speed limits. While traffic calming is not intended to reduce the volume of traffic, it may have that effect when installed on local streets subject to speeding or cut-through traffic.

The Massachusetts Highway Department divides traffic calming into three major design categories:

1. Narrowing the real or apparent width of the street, including:
  - a. pavement cross-section features such as on-street parking, spot narrowing, bike lanes, travel lane width reduction, medians, islands, and road diets;
  - b. placement along the street of buildings, trees, signage, and street furniture (e.g. lights, benches, bike racks, bus shelters, etc.);
  - c. pavement edge treatments such as raised curbs, neckdowns, chokers, and bumpouts.
2. Deflecting (introducing curvature to) the vehicle path, including:
  - a. mid-block deflection measures such as chicanes, lane offsets, short medians, crossing islands and mini-traffic circles;
  - b. intersection measures such as roundabouts, traffic circles, curb bumpouts, lane offsets, crossing islands, and neckdowns.
3. Altering the vertical profile of the vehicle path, including:
  - a. speed humps and speed tables;
  - b. raised crosswalks and intersections;
  - c. textured pavement (e.g. pavers, stamped concrete, etc.)

## **V. REGULATORY TRAFFIC CONTROLS AS DISTINCT FROM TRAFFIC CALMING**

Complaints about speeding traffic and requests for speed-limit enforcement will be referred to the Belmont Police Department. Concerns about speeding traffic are often accompanied by requests for new Stop signs, traffic signals, turn restrictions, and speed-limit signs--and these are not traffic calming devices, but regulatory traffic controls. Implementation of most regulatory traffic controls is governed by national engineering guidelines, State laws, or both. Regulatory traffic controls require police enforcement, while traffic calming measures are designed to be self-enforcing.

- Stop Signs

The Town frequently receives requests for new Stop signs to reduce traffic speed and improve safety on local streets. According to the Federal Highway Administration, Stop signs are used to determine vehicular right-of-way at an intersection and should not be used to control vehicle speeds. Research shows that installing unnecessary Stop signs often results in an increased number of collisions and more speeding.

- Posted Speed Limits

Another common traffic-related request is that posted speed limits be lowered on Belmont roadways. Posted speed limits are regulatory controls governed by the Massachusetts

Department of Transportation (Mass DOT) through a state approval process that requires documented speed and engineering studies. In the Spring of 2017, Belmont Town Meeting voted to opt into MGL c. 90 § 17C, which sets the speed limit at 25 mph on all Town-owned streets within thickly settled or business districts that do not have existing special speed regulations. Further adjustments to posted speed-limits on Belmont's streets will be subject to Mass DOT Procedures for Speed Zoning.

Enforcing speed limits on roads designed to accommodate higher-speed traffic is challenging. In addition, most research demonstrates that driver speed is less often a function of posted speed limits and more often a function of real or perceived driving conditions.

- Other Regulatory Traffic Controls

Other regulatory traffic controls that require engineering studies, and generally require review and approval by State or Federal entities include truck exclusions and signalized intersections.

- Procedures for Requesting Regulatory Traffic Controls
  - Requests are submitted to the TAC.
  - The Town Engineer and Belmont Police Department complete required engineering and traffic studies.
  - In the event that a request for regulatory traffic controls is made with the goal of increasing pedestrian safety and reducing vehicle speed, the TAC may recommend initiation of a Traffic Calming Request as an alternative to a request for regulatory traffic controls.

## **VI. INDIVIDUALS AND ORGANIZATIONS THAT MAY SUBMIT TRAFFIC CALMING REQUESTS**

Town residents and abutters of Town-owned streets, those who own or work in Town businesses, Town boards, and Town departments may submit traffic calming requests to the TAC. With each completed Belmont Traffic Calming Request form, residents, business owners, and employees must submit signatures on the form representing either

- a. at least five different street addresses or
- b. fifty percent of the abutters in the directly affected area (whichever is less).

Additional signature space is provided and the signature of additional residents may be submitted to demonstrate broader support for the request.

A copy of the Traffic Calming Request Form appears at the end of this document and is available online at the Town of Belmont website.

## VII. ROADS THAT ARE ELIGIBLE FOR TRAFFIC CALMING PROJECTS

Only roads under the jurisdiction of the Town of Belmont are eligible for traffic calming interventions. Roads outside of the town jurisdiction, including private ways, are not eligible. Traffic calming will be considered for all eligible roads, but options for arterial roads, truck routes, emergency-response routes, and public bus routes may be limited by Federal and State law or functional considerations.

## VIII. PRELIMINARY EVALUATION OF TRAFFIC CALMING REQUESTS

Town staff will conduct a preliminary evaluation based upon the criteria shown below in Table One.

**Table One: Preliminary Evaluation Criteria**

<b>Criteria</b>	<b>Evaluation</b>
Speed	If the 85 <sup>th</sup> percentile of automobile speed documented by the Belmont Police Department is at least 5 mph above the legal speed limit, then speeding has been documented on the roadway.
Cut-Through Traffic Volume	If the traffic volume during the peak-traffic hour is greater than 10% of the average daily traffic (ADT) volume, as documented by the Belmont Police Department, then cut-through traffic has been established on the roadway.
Traffic Collisions	Any documented collision involving an automobile and a pedestrian and/or a bicyclist establishes that collisions are a problem on the road. Any collisions resulting in a fatality or serious bodily harm establishes that traffic collisions are a problem on the road. If there have been at least 3 documented car collisions over the past three years, then collisions are established as a problem on the road.

If the preliminary evaluation documents speeding, cut-through traffic, or traffic collisions as described in Table One, then the TAC will request that a traffic calming needs assessment be completed by the Belmont Town Engineer and presented to the TAC.

If the preliminary evaluation does not document speeding, cut-through traffic, or traffic collisions, then the TAC will not forward the request to the Town Engineer for a traffic calming needs assessment and no further action will be pursued under the Belmont Traffic Calming Policy. The Town may consider the extent to which the reported

concerns can be addressed with regulatory controls, low-cost engineering improvements, increased enforcement, and/or improvements to public sidewalks.

## **IX. TRAFFIC CALMING NEEDS ASSESSMENT**

When supported by findings in the preliminary evaluation, the TAC will request that the Town Engineer prepare a “Traffic Calming Needs Assessment” report for presentation at a regularly scheduled TAC meeting.

The Town Engineer, working in coordination with other Town staff (e.g. Police, Fire, DPW, etc.), will compile the following data in a standardized report for the geographic area of the traffic calming request:

### Roadway Attributes

- Physical description (roadway width, grade and alignment, number and width of lanes, pavement condition, parking, sidewalks, crosswalks, school crossings, bike lanes, and other relevant descriptors)
- Street classification (e.g. local street, major collector, etc.)
- Whether the roadway is a designated route for emergency vehicles
- Posted speed limits and other regulatory signage or traffic controls
- 85th percentile traffic speed
- Average traffic speed
- Average daily traffic volume
- Peak-hour traffic volume

### Evaluation Scoring

The Town Engineer will score each traffic calming request according to the criteria listed below in Table Two. This scoring will be used to prioritize requests for which the Select Board approves traffic calming plans.

**Table Two: Needs Assessment Scoring**

<b>Criteria</b>	<b>Measure</b>	<b>Score</b>
Speeding	For each 5-mph increment that the 85th-percentile speed is above the legal speed limit	10
Traffic Volume	For each 100 motorized vehicles that make up the average daily traffic volume (ADT)	10
Traffic Volume	For each 5-percent increment of peak-hour volume above the 10 percent of ADT threshold	10
Collisions	For each single-vehicle or vehicle-to-vehicle collision with no injury	10
Collisions	For each single-vehicle or vehicle-to-vehicle collision with injury	20
Collisions	For each vehicle and pedestrian or bike collision	30
Collisions	For each fatality or serious bodily injury	50
Users: Students	Roadway segment is on designated route for walking access to a public school	20
Users: Bicyclists	Roadway segment is on designated route for bicyclists	20
Users: Public Transit	Roadway segment is within 500 feet from an intersection with designated route for transit buses	20
Users: General Pedestrian Activity	For each community facility, school, park, playground, place of worship, and/or commercial area within 500 feet along public roadway from any section of the area under study	20

Engineering recommendations will answer the following questions:

- Is the problem area a candidate for traffic calming installation?
- Which traffic calming measure(s) may be appropriate?
- Could the measures be designed and implemented by the DPW or would outside engineering services be required?
- What would be the approximate design and installation costs based on local experience or state and national averages?
- Does the problem merit experimental installation of temporary traffic calming measures before a final determination is made?
- What might be trade-offs of the proposed traffic calming on the area that is the subject of the proposed traffic calming measures--for example, will parking or travel lanes be removed?
- What other areas of Belmont might be affected by the proposed traffic calming measures--for example, is it anticipated that traffic might seek alternative routes to avoid the traffic calming and, if so, what are the anticipated consequences of the traffic flowing onto these alternative routes?

## **X. REVIEW OF NEEDS ASSESSMENT AND FINAL RECOMMENDATION**

The Town Engineer will present the findings of the Traffic Calming Needs Assessment and the engineering recommendations to the TAC at a public meeting and the Committee may hear additional public comment during this meeting.

The TAC will work with the Town Engineer to determine the appropriate catchment area for public notification of this meeting and the Town will send advance notification for this meeting to those in the catchment area. The meeting date, time, place and agenda will also be posted on the Town website.

After review and discussion of the Needs Assessment and the presentation of engineering recommendations, the TAC will allow two weeks for written public comment. At the next scheduled TAC meeting following the end of the written open-comment period, the TAC will vote to recommend or not recommend that the Select Board approve any proposed traffic calming plan and place each approved plan on the Town of Belmont's "Priority List of Traffic Calming Plans." In the event that the Committee does not have sufficient information to make a final recommendation, or a traffic problem first merits an initial test of experimental traffic calming measures, a vote on the matter may be tabled for a period not to exceed ninety (90) days.

Traffic calming requests that receive a "Not Recommend" vote may be resubmitted for future consideration after a one-year deferral.

## **XI. PRIORITY LIST OF TRAFFIC CALMING PROJECTS**

The Town of Belmont may approve more traffic calming plans than it can implement in a given year. The TAC will use the criteria from "Table Two: Needs Assessment Scoring" in Section IX of the Traffic Calming Policy to create and maintain a priority ranking of traffic calming projects. The priority ranking is not determined by the chronological order of the submission, but is based on the Table Two scoring system, and the priority ranking for any traffic calming plan may change as other traffic calming plans are approved.

The Town Engineer will review the list of priority projects in the context of multiple factors, **including budgetary constraints**, and the timing of utility maintenance and pavement-management projects, and make a final recommendation for projects to be completed within each budget cycle. Recommended traffic calming projects that must be reviewed as part of the Town's annual capital budgeting process will be subject to final approval and appropriation by Town Meeting. Due to budgetary constraints, lower prioritized, lower-cost projects could be funded ahead of higher prioritized, higher-cost projects.

**XII. Reference Standards:** Federal Highway Administration Course, Lesson 11: Traffic Calming: [https://safety.fhwa.dot.gov/ped\\_bike/univcourse/pdf/swless11.pdf](https://safety.fhwa.dot.gov/ped_bike/univcourse/pdf/swless11.pdf)



### XIII. Traffic Calming Request Form

**Please complete both sides of this form and return it to:**

Traffic Calming Program  
Department of Public Works - Engineering Division  
19 Moore Street  
Homer Municipal Building  
Belmont, MA 02478-0900  
Telephone: (617) 993-2665

1. Today's Date: \_\_\_\_\_
2. Your Name (Request Contact): \_\_\_\_\_
3. Your Home and/or Belmont Business Address:  
\_\_\_\_\_
4. Your Email Address: \_\_\_\_\_
5. Your Telephone Numbers  
Day: \_\_\_\_\_  
Night: \_\_\_\_\_

6. Please circle the best way to reach you during the day: Phone or Email

7. About which street(s)/intersection/location are you making this request for traffic calming?

\_\_\_\_\_  
\_\_\_\_\_

8. Are there particular times of day, days of the week, or circumstances that are related to the problems that you have observed at the street(s)/intersection/location?

\_\_\_\_\_  
\_\_\_\_\_

9. Please circle each problem that applies to the street(s)/intersection/location listed above:

Speeding

Cars Parked Too Close to Corner

Difficult to Bike

Difficult to Cross Street

Drivers Not Yielding to Pedestrians

Other (please describe):

**Please Complete Both Pages Of This Form**

10. Please use the space below or an attached document to describe your concerns about the street(s)/ intersection/ location. It may be useful to draw a picture to more clearly identify the concerns that have prompted your traffic calming request.

11. Please use the formatted space below to provide the name and address for each traffic calming request signatory. A sheet may be appended with additional signatory information.

	<u>Name</u>	<u>Address</u>	<u>Signature</u>
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____
11.	_____	_____	_____
12.	_____	_____	_____
13.	_____	_____	_____
14.	_____	_____	_____
15.	_____	_____	_____
16.	_____	_____	_____
17.	_____	_____	_____
18.	_____	_____	_____
19.	_____	_____	_____
20.	_____	_____	_____