



RECEIVED
TOWN CLERK
BELMONT, MA

DATE: April 11, 2024
TIME: 9:42 AM

Belmont Transportation Advisory Committee (TAC) Meeting

Minutes for Thursday, 14 March, 2024

Present: Chip Gaysunas (newly elected) (Chair), Daniel Eldridge (Vice Chair, newly elected), Katie Baratta, Heather Barr, Jane Lappin, Ken Lind, and Jeffrey Roth (Secretary).

Also present:

Town Staff: Glenn Clancy (Belmont Office of Community Development (CD) Director),

Town Public Residents: Bill <no last name provided>,

Andrea Carrillo-Rhoads (207 White St.), Ben Miller,

Brian Kangas, Christopher Cleary, Conor Hansen, Danielle Stevens, David <no last name provided>, Eileen Hanson, Kathleen Haverty, Lisa Pargoli, Paul <no last name provided>, Peg <no last name provided>, Sheila Flewelling, Steve <no last name provided>, Tess and Ben <no last name provided>.

Final minutes, compiled on 4 April 2024; finalized on 8 April 2024.

Announcements

1. Tonight's public meeting occurred online using a zoom video conference forum.

This meeting was held remotely using Zoom video conferencing technology, as permitted by the Massachusetts Act Relative to Extending Certain State of Emergency Accommodations, that became effective July 16, 2022.

The meeting was called to order at 7:05p by a majority of TAC members being present at this time. The agenda for tonight's meeting is included in Appendix 1.

Washington Street to Shaw Road Passageway

Discussion and possible vote of signage

Jeffrey Roth (TAC) — Jeffrey Roth presented the briefing in Appendix 2 describing the approximately 200-foot path between Washington St. and Shaw Rd. He suggested some signage to better identify the passageway, as well as possible surface improvements, as well as addition of the route to Google Maps' bicycle routes, as described in Appendix 2.

Dan Eldridge (TAC Vice Chairperson) — Dan Eldridge mentioned that the pathway was actually already on Google maps, but did not show up yet in the bicycle routes mode.

Glenn Clancy (CD Director) — Glenn Clancy said all the abutters were notified about this meeting to discuss signage on this path, and that he did not hear any concerns from any of the neighbors about this proposal. Glenn said that way-finding signs on each end would be possible to implement.

Voting Motion — **Jeffrey Roth made a motion to recommend signs be installed on this path, and Daniel Eldridge seconded the motion.**

Vote by Roll-Call — A roll-call vote was held. All TAC members voted in favor of this motion, and it therefore passed unanimously.

Dan Eldridge (TAC Vice Chairperson) — Dan Eldridge asked if other similar way-finding signs could be possible elsewhere in Town.

Heather Barr (TAC) — Heather Barr asked about looking again at the Orchard St. bicycle route and Safe Routes to School. She offered to look further at this, and will discuss with Dan Eldridge further offline.

Glenn Clancy (CD Director) — Glenn Clancy said that he could look at these things if TAC investigated them further.

Grove Street – Right-of-Way Cross-Section Layout Discussion

Glenn Clancy (CD Director) — Glenn Clancy presented a list of potential options for new cross-section designs for Grove St. These potential cross sections are shown in the presentation in Appendix 3.

The Committee initially discussed the section from Belmont St. to Marion Rd.

Ken Lind (TAC) — Ken Lind said he would prefer the bicycle-lanes option in this section from Belmont St. to Marion Rd.

Jane Lappin (TAC) — Jane Lappin said that she also supports the bicycle-lane options.

Katie Baratta (TAC) — Katie Baratta said she supports the bicycle-lane concept as well, though mentioned that she might not feel safe cycling on that street and may use the sidewalks instead on this stretch.

Glenn Clancy (CD Director) — Glenn Clancy continued with a discussion of the next section from Marion Rd. to Crescent Rd. He said this section has more width because it likely only needs to accommodate one car-parking lane on the south-bound direction. One option he discussed includes parking-protected bicycle lanes.

Continuing northward to the next section, Glenn discussed the segment from Crescent Rd. to Choate Rd., where the car-parking lane shifts to the other side of Grove St., and would continue to permit protected bicycle lanes in both directions. He mentioned that there could also be a parking chicane that might help with traffic-calming. He said he was looking for feedback on having car parking on only one side of the street there.

Dan Eldridge (TAC Vice Chairperson) — Dan Eldridge pointed out that some of the houses along this stretch have double-wide driveways, or had driveways that did not front Grove St., so not having additional on-street parking might be less of an issue there. He said that there are also side streets that can be used for parking if needed.

Ken Lind (TAC) — Ken Lind said that adding crosswalks is be something that would satisfy the desires requested by residents at previous TAC meetings on this topic.

Heather Barr (TAC) — Heather Barr mentioned the advantages of slower street and benefits to safety for having a parking chicane. She also agreed that adding crosswalks would be a benefit.

Jeffrey Roth (TAC) — Jeffrey Roth said that on-street car parking may not needed along all the shoulders of this road. He said that there are adequate driveways for most conditions, drivers could use the other side of the street, and also many side streets existed that could providing parking spaces. He also mentioned that less parking will improve sight-lines for making the foot crossings safer for residents walking along or across the street, and this would also allow for safer bicycle infrastructure.

Chip Gaysunas (TAC Chairperson) — Chip Gaysunas said some residents might be more supportive of the proposals if more crosswalks could be added.

Glenn Clancy (CD Director) — Glenn Clancy discussed enhanced amenities that could be included. He showed a diagram of some potential raised crosswalks across Grove St. Glenn said that one of his goals was to improve alignment near Fairview Ave., making the traffic flow safer and improving the pedestrian crossings there. He added that these changes could temper some of the speed issues of the downhill approaches into the Huron Ave. intersection from both directions. Glenn said that he wants to identify the top cross section candidates, to limit down the trade space. He added that the walker street crossings will be shorter at least, but he has not yet determined whether island refuges could be included as well.

Dan Eldridge (TAC Vice Chairperson) — Dan Eldridge said he suggested separating the raised speed tables from the crosswalks.

Glenn Clancy (CD Director) — Glenn Clancy went on to discuss the last segment from Choate Rd. to Huron Ave., near the cemetery section and Grove St. Playground. He said that he is considering a 6' wide section on the cemetery side, that would allow both a wider bicycle lane and a 2' buffer zone. Glenn said the arrangement here could be parking on one side from Grove St. to Marion St., and then car parking on both sides from Choate Rd. to Huron Ave.

Dan Eldridge (TAC Vice Chairperson) — Dan Eldridge said that flipping to a parking-protected bicycle lane where-ever possible would make a lot of sense.

Katie Baratta (TAC) — Katie Baratta said she agrees with the need for parking-protected bicycle lanes.

Ken Lind (TAC) — Ken Lind said that these protected bicycle lanes might be primarily better for bicycle commuters, but that they would also benefit through traffic-calming.

Chip Gaysunas (TAC Chairperson) — Chip Gaysunas asked who would use the sports fields and need to park cars there, and whether other towns would be coming in to sporting games.

Heather Barr (TAC) — Heather Barr asked about the budget for this project, and whether a raised cycle track be considered here to provide enhanced safety for people cycling and walking.

Glenn Clancy (CD Director) — Glenn Clancy said that there is no funding source for this construction project yet, and that there have only been early conversations about the funding process. He said that he is hoping to get a cost estimate at end of this conceptual design

phase. Glenn added that the project would likely be re-constructing sidewalks through a lot of the sections near the Grove St. Playground, and so moving the curbs in some places like near playground would be an option to consider proposing. He agreed that looking at raised cycle tracks in some segments would be possible and make sense. Glenn said he would proceed with working in these various comments, and that he would work on setting up a public forum after the conceptual design work is further along.

Crosswalk Policy

Glenn Clancy (CD Director) — Glenn Clancy summarized the comments from Roy Epstein, which are included in Appendix 4. A discussion of the crosswalk policy's evaluation criteria ensued.

Voting Motion — **Daniel Eldridge made a motion to recommend adoption of this version of the Crosswalk Policy as amended, with proviso that the Town Engineer can review within a year of operation and bring it back to the TAC if needed to evaluate other potential changes. Ken Lind seconded the motion.**

Vote by Roll-Call — A roll-call vote was held. All TAC members voted in favor of this motion, and it therefore passed unanimously.

Automated Traffic Enforcement Status

Jane Lappin (TAC) — Jane Lappin delivered the briefing in Appendix 5 which provides an introduction and overview on Automated Traffic Enforcement (ATE) systems. The briefing stimulated discussion among the Committee about the topics of ATE.

Ken Lind (TAC) — Ken Lind suggested that it might help if the briefing included how these programs could impact Belmont.

Heather Barr (TAC) — Heather Barr asked who was opposed to the systems. She also asked whether a local municipality like Belmont would have jurisdiction over how the funds are spent.

Jane Lappin (TAC) — Jane Lappin said opponents could be both residents of the town where ATE is implemented, as well as those driving through the municipality. She also said that the funds would go back to State for those municipalities that are early adopters.

Jeffrey Roth (TAC) — Jeffrey Roth suggested discussing why a pilot program is proposed for Massachusetts, and whether other states also did similarly. He also suggested defining what the projected scope would be of this pilot program. Finally, he suggested that for the safety impacts on slide #7, the briefing should at least mention what the data shows from larger municipalities, what the expected safety-improvement trends would be for a town like Belmont, and a caveat stating that limited data exists for towns like Belmont.

Chip Gaysunas (TAC Chairperson) — Chip Gaysunas said that it would be useful to know what other town are also considering this, and to include that information in the briefing.

Approval of Minutes

10/05/2023

The Committee reviewed the amended meeting minutes from the TAC meeting on 5 October 2023, with amendments requested by former Committee member Larry Link. These TAC meeting minutes were reviewed, and no changes or corrections were pointed out.

Chip Gaysunas made a motion to approve these amended minutes as-is, and Daniel Eldridge seconded the motion. The Committee voted unanimously by roll call in favor of approving these minutes as amended.

02/01/2024

The Committee reviewed the amended meeting minutes from the TAC meeting on 1 February 2024. These TAC meeting minutes were reviewed, and no changes or corrections were pointed out.

Chip Gaysunas made a motion to approve these minutes as-is, and Daniel Eldridge seconded the motion. The Committee voted unanimously by roll call in favor of approving these minutes as drafted.

Old Business

White Street

Glenn Clancy (CD Director) — Glenn Clancy reported that he is still working on developing a plan for White St., and will discuss this at a future meeting. He is considering some kind of traffic mitigation measures and alternatives to the truck ban requested by the neighborhood's residents. It was reported that the electronic speed-sensing signs obtained by the Belmont Police Department through a grant have been installed.

New Business

Harvard Lawn Neighborhood Parking Concerns

Glenn Clancy (CD Director) — Glenn Clancy said that he needs to discuss this at a future TAC meeting. He said that the impact from the planned re-zoning development are being evaluated. He reported that no action is needed from TAC at this point.

ADJOURNMENT

Jeffrey Roth motioned to adjourn tonight's meeting, and Ken Lind seconded the motion. All voted unanimously for this measure, and the meeting adjourned at 9:53p.

These minutes were respectfully submitted by Jeffrey Roth.

Appendix 1: Agenda for 2024-03-14 TAC Meeting

**RECEIVED
TOWN CLERK
BELMONT, MA**

DATE: March 11, 2024
TIME: 9:12 AM

Reserved for Town Clerk Use Only

BELMONT, MASSACHUSETTS
THERE WILL BE A PUBLIC MEETING OF

Committee Name: Transportation Advisory Committee

Subcommittee Name if Applicable: [Click here to enter text.](#)

Date: Thursday, March 14, 2024

Time: 7:00 PM

This meeting will be held remotely using Zoom video conferencing technology, as permitted by the Massachusetts Act Relative to Extending Certain State of Emergency Accommodations, that became effective July 16, 2022. Should the audio function stop working during the Zoom meeting and it cannot be restored, the meeting will end and be rescheduled.

Topic: TAC - March 14, 2024

Time: Mar 14, 2024 07:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/83188421524>

Meeting ID: 831 8842 1524

One tap mobile

+13092053325,,83188421524# US

+13126266799,,83188421524# US (Chicago)

7:00 PM	Call to Order
7:05 - 7:20	Washington Street to Shaw Road passageway <ul style="list-style-type: none">• Discussion and possible vote of signage
7:20 - 7:40	Grove Street – Right of Way Cross-section Discussion <ul style="list-style-type: none">▪ Presentation of Options – Town Engineer▪ Discussion and possible vote – TAC Members
7:40 - 8:10	Crosswalk Policy <ul style="list-style-type: none">▪ Final Review – Town Engineer / TAC Members▪ Discussion and possible vote – TAC Members
8:10 - 8:30	Automated Traffic Enforcement Status
8:30 - 8:40	Approval of Minutes
8:40 - 8:50	Old Business <ul style="list-style-type: none">• Traffic Calming Requests – Updates• White Street Progress Report<ul style="list-style-type: none">• Resolution April TAC Meeting
8:50 - 9:00	New Business <ul style="list-style-type: none">• Harvard Lawn Neighborhood Parking Concerns
9:00	Adjourn

Appendix 2: Shaw Rd. to Washington St. Footpath (2024-02-01)

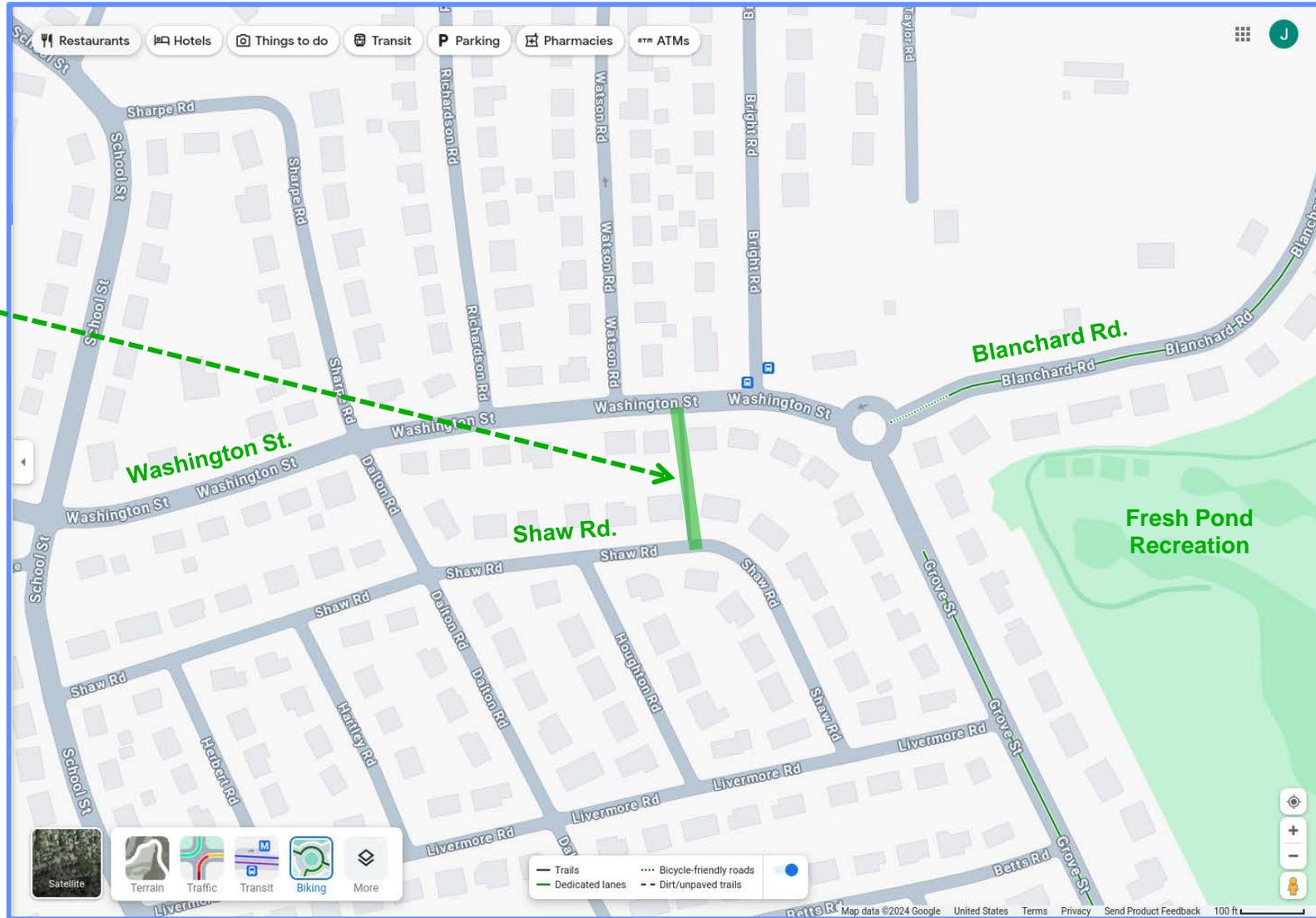
Shaw Rd. to Washington St. Footpath

Belmont Transportation Advisory Committee

1 February 2024

Location of Shaw to Washington Path

Pathway of Interest
(Length ~ 200 feet)



Scale: 100 feet

Location of Shaw to Washington Path

Pathway of Interest
(Length ~ 200 feet)



Scale: 100 feet

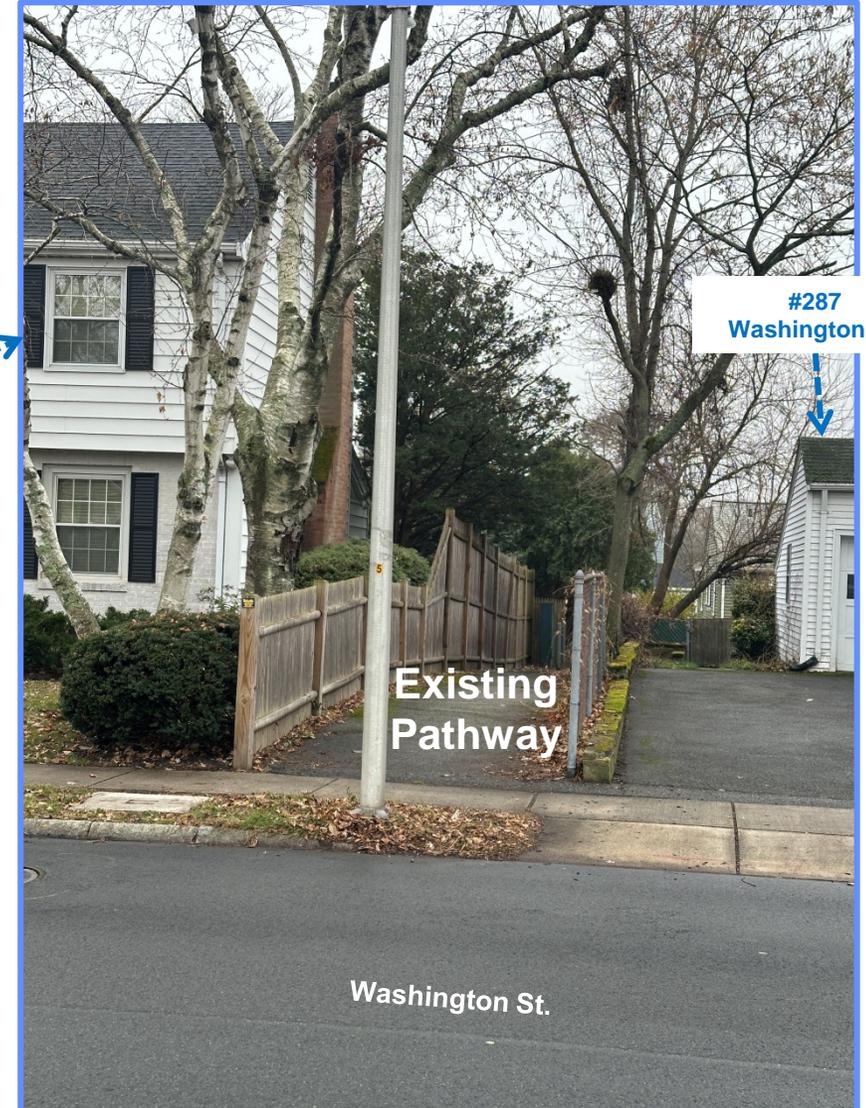
View from Shaw Road

View from Washington St.



#80
Shaw Rd.

Existing
Pathway



#291/#293
Washington St.

#287
Washington St.

Existing
Pathway

Washington St.

Pathway Approx. Specs:

- Length ~ 200 feet
- Width ~ 6 – 8 feet
- Paved Surface

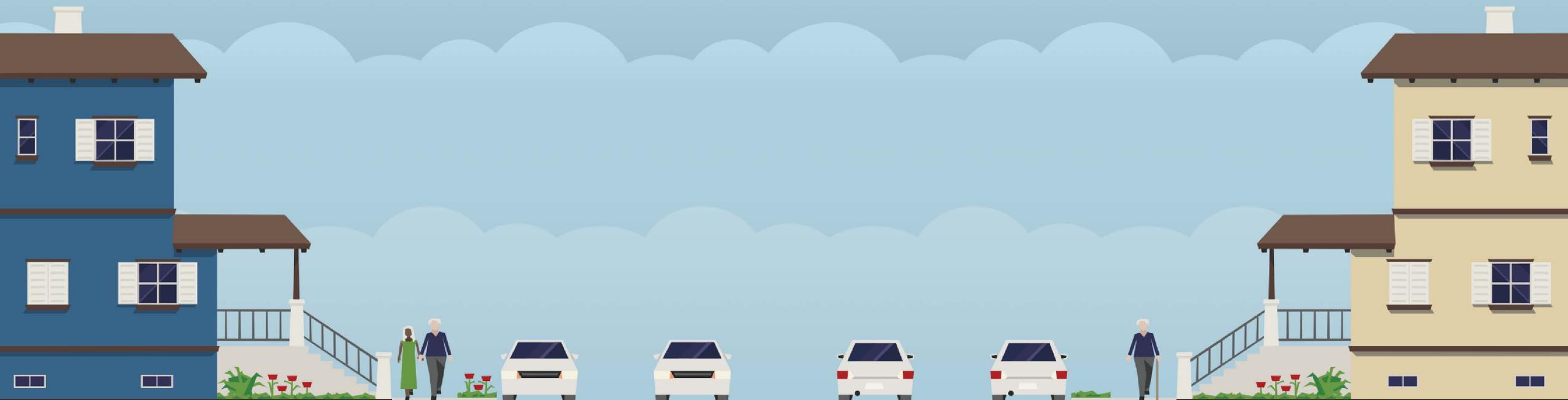
Discussion Items

- **Path provides safe walking and cycling passageway; route to Burbank School**
- **Path is currently unmarked and not shown on maps**
- **Potential enhancements:**
 1. **Adding navigational signage to lamp-posts on each end stating:**
 - “Bike/Walking Route to Washington St.”
 - “Bike/Walking Route to Shaw Rd.”
 2. **Patching or resurfacing portions of path that are rough or uneven**
 - Consider including in future roadway paving projects
 3. **Including on google-maps bike routes, or town-wide bicycling map**
- **Neighborhood engagement on path**
 - **Feedback on signage**
 - **Trimming of shrubbery**
 - **Usage**



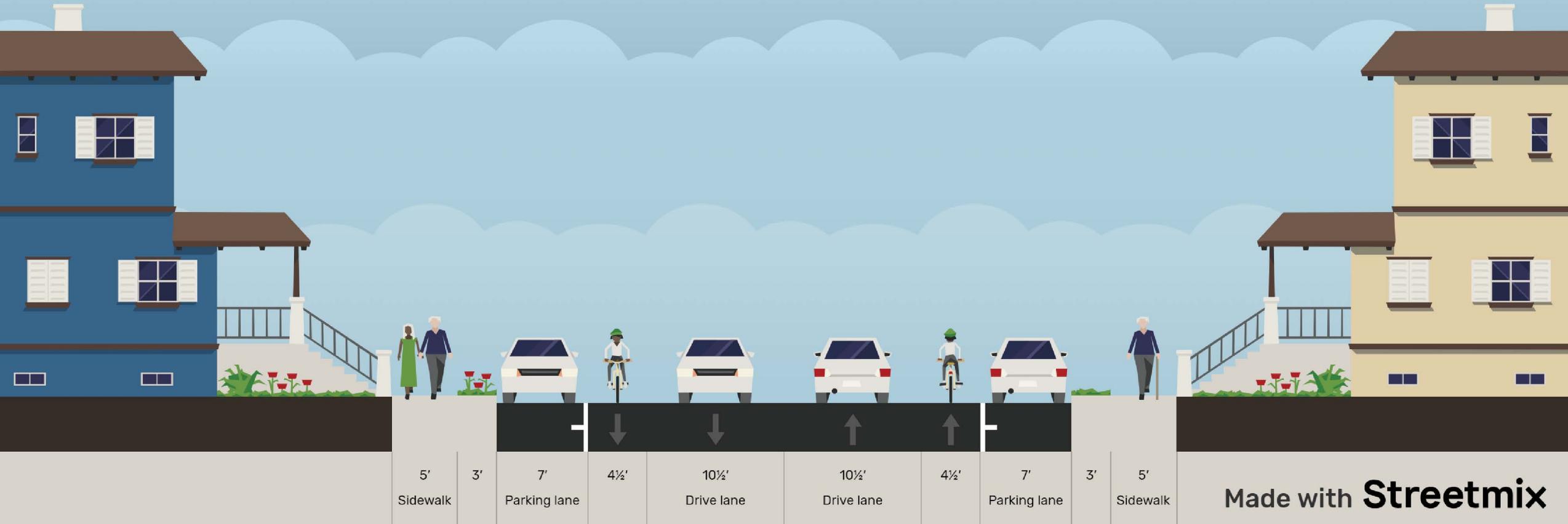
Appendix 3: Potential Grove St. Cross-Sections

Grove Street NB - Existing

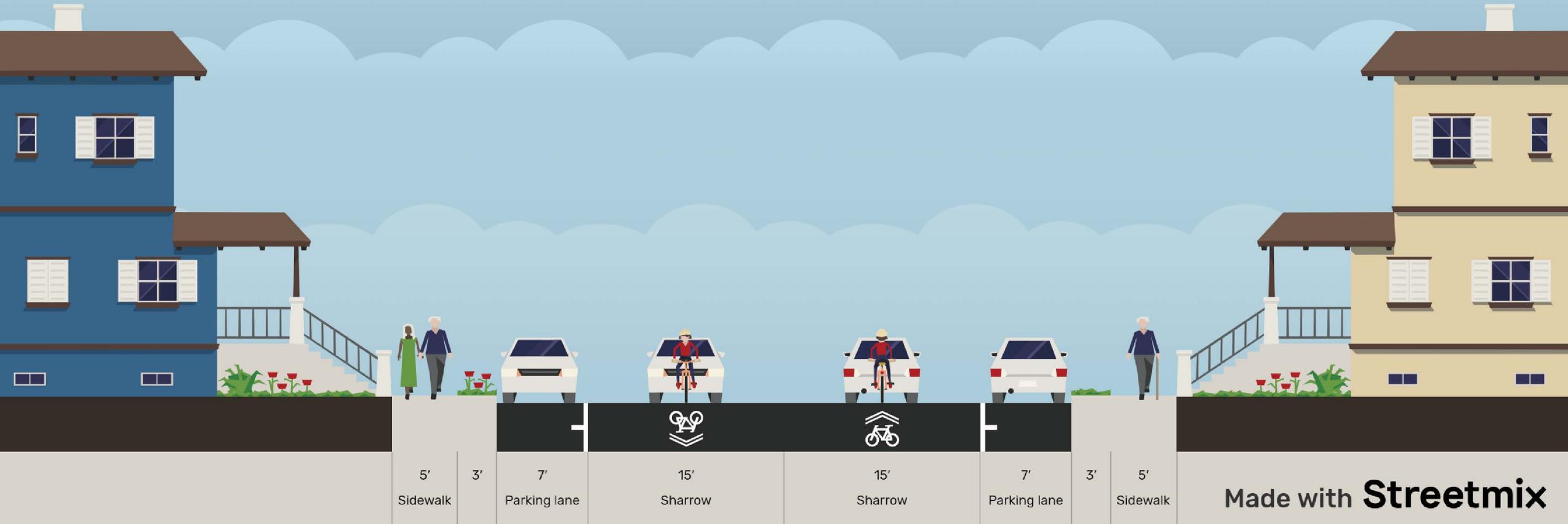


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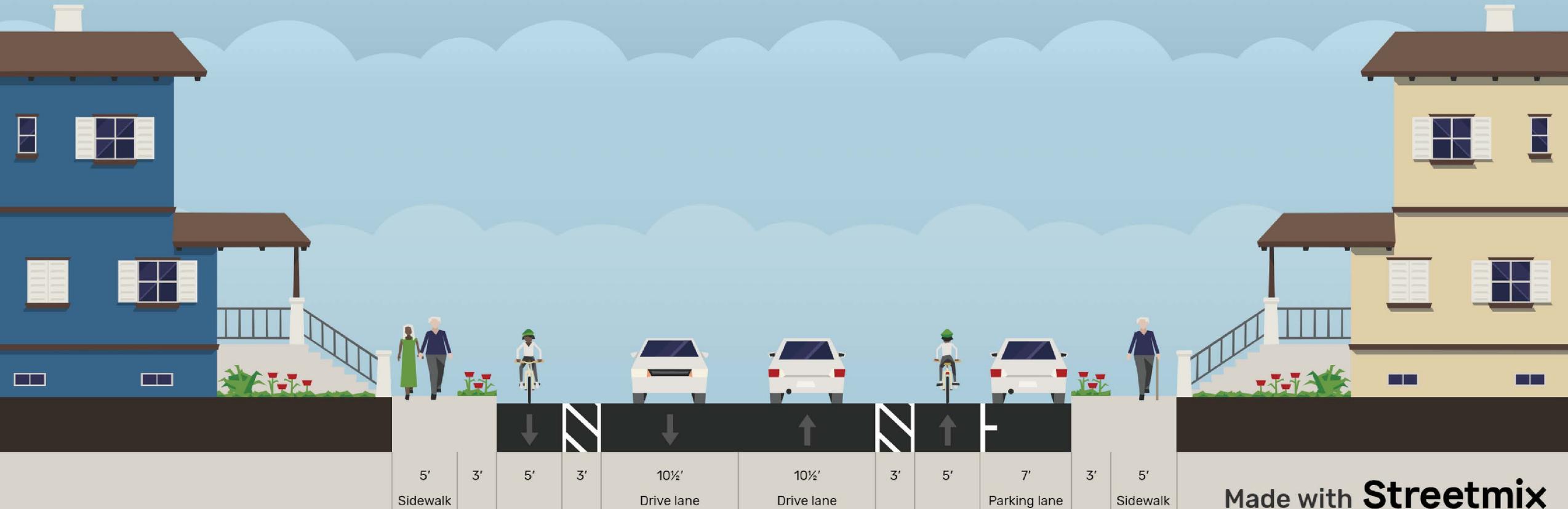
Grove St NB - Belmont St to Marion 1



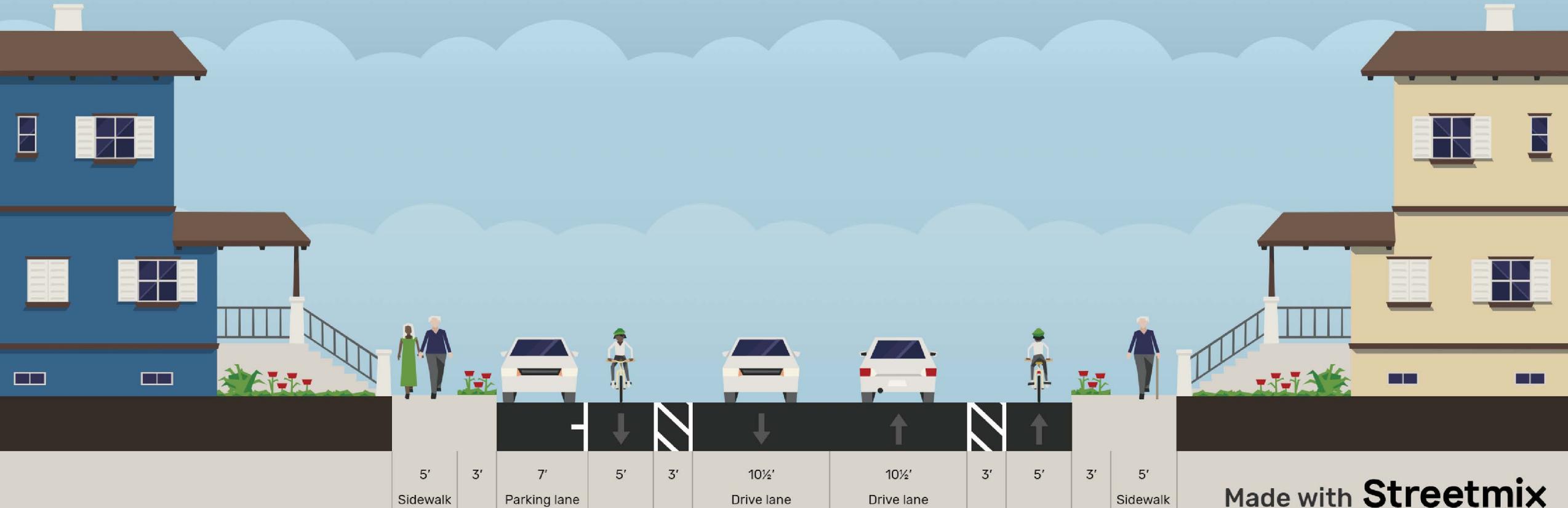
Grove St NB - Belmont St to Marion 2



Grove St NB - Marion to Crescent

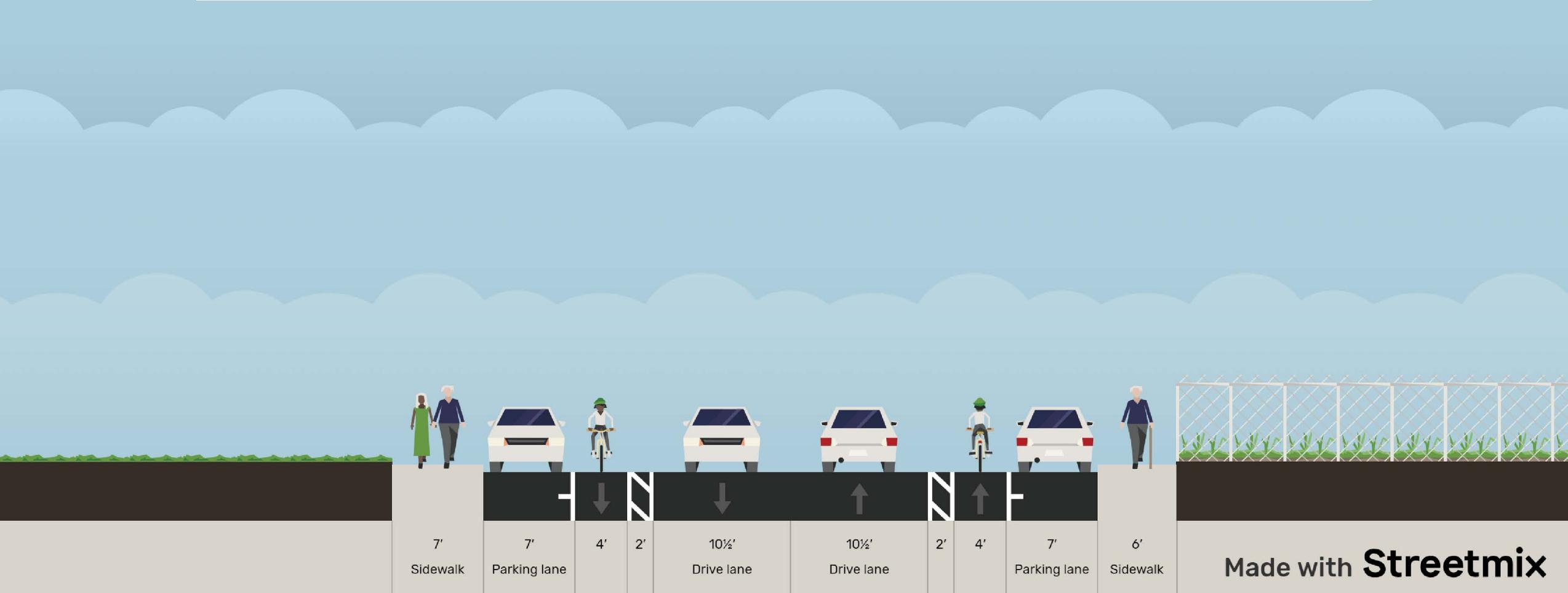


Grove St NB - Crescent to Choate



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Grove St NB - Choate to Huron



Made with **Streetmix**

**Appendix 4: Crosswalk Policy Final Draft, Addendum to Traffic Calming Request –
2 November 2023**

Appendix 1: Crosswalk Safety Improvement Policy – FINAL DRAFT 11/2/23

I. INTRODUCTION

This policy is modeled after the Town of Belmont Traffic Calming Policy and is focused on the promotion of pedestrian safety and improving walkability in the Town. This policy is based on the guidance for unregulated crossings as described by Mass DOT and Federal Guidance found in the Manual on Uniform Traffic Control Devices (MUTCD).

An unregulated crossing is one where there is no existing method of traffic regulation such as Stop Signs and Traffic Lights. The Town approaches improving crosswalk safety with both reactive (response to alerts/complaints) and proactive (as a result of planning or project design) methods. The Crosswalk Safety Improvement Policy is meant to support both methods, making improvements while evolving a plan to make Belmont a safe walking community.

II. OBJECTIVES OF THE CROSSWALK SAFETY IMPROVEMENT POLICY

The objective of this policy is to:

- Increase driver observance of the rights of pedestrians/cyclists at designated crosswalk locations.
- Decrease delays in stopping time of drivers approaching pedestrians and cyclists in a crosswalk.
- Increase the use of walking routes in Belmont for residents and visitors by linking safer crossings to make walking/cycling more appealing across the town.

III. CROSSWALK SAFETY EVALUATION PROCESS OVERVIEW

The crosswalk safety evaluation process is meant to provide a method for making and managing requests to improve the safety of crosswalks in Belmont. The emphasis on most crosswalk improvements is on unregulated crossings, as defined above, and school crossings.

This process starts by considering whether action under the Traffic Calming Policy is indicated for the street containing the crosswalk. The crosswalk safety evaluation process may begin as a separate process if either of these situations apply:

- It is part of a Traffic Calming Request that does not meet the traffic calming policy Preliminary Evaluation Criteria
- The Select Board votes not to recommend a traffic calming plan (recommended by the TAC) that would apply to the crosswalk

A request for a crosswalk safety evaluation is to be directed to the Town Engineer.

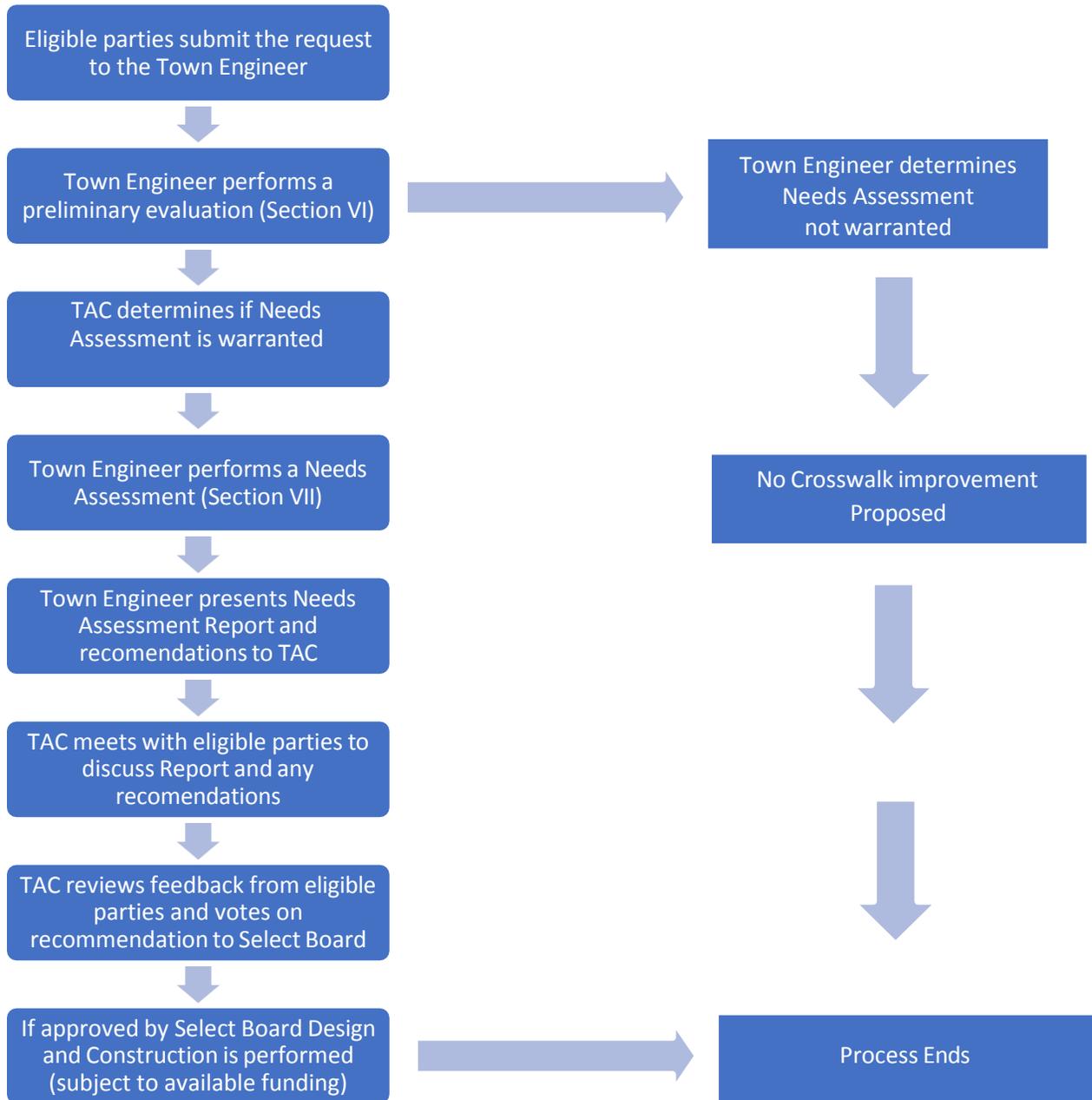
A candidate crosswalk should be characterized by at least one of the following:

- The issue is with a specific unsignalized / uncontrolled crossing on a specific street or intersection of streets (not with a length of the street itself).
- The improvement is needed for pedestrian/bicycle safety and to support walking routes that use the crossing.

Note: Crosswalk improvements may occur outside of this process as a result of an infrastructure project, such as:

- Recommendations included in town planning documents such as a transportation plan, Complete Streets Prioritization Plan, Safe Streets and Roads 4 All Plan, or School/Town construction design documents.
- As part of a Pavement Management Program reconstruction project, or an intersection or roadway redesign within the Town.

The crosswalk safety evaluation process is summarized in the flow chart below:



IV. CROSSWALK SAFETY IMPROVEMENT METHODS

Different methods that meet standard engineering practice exist for enhancing the safety and visibility of a crosswalk. Some examples are:

Pedestrian Warning Signs

At Uncontrolled Crossings

Pedestrian in crosswalk signs (W11A-2 with downward arrow plaque W16-7p) - installed at each end of the crosswalk location. The signs are placed in advance of the crosswalk adjacent to the travel lane and facing the driver.

Advance pedestrian warning signs (W11-2) - installed at a distance of at least 150 feet, but not exceeding 700 feet, in advance of the crosswalk. Advance pedestrian warning signs may be accompanied by supplemental plaques with the legend "AHEAD" (W16-9p) or "XXX FEET" (W16-2a).

At School Crossings

A School Crossing Warning Assembly (SCWA) consisting of a School Crossing Sign (S1-1) with a diagonal downward arrow plaque (W16-7p) - installed at each end of the crosswalk location. The signs are placed in advance of the crosswalk adjacent to the travel lane and facing the driver. The SCWA are not used at marked crosswalks other than those adjacent to schools or on established school routes. The SCWA shall not be installed on intersection approaches controlled by traffic signal or Stop Sign.

A School Advance Warning Assembly consisting of a School Crossing Sign (S1-1) and a supplemental plaque with the legend "AHEAD" (W16-9p) or "XXX FEET" (W16-2a) shall be installed at a distance of at least 150 feet, but not exceeding 700 feet in advance of the crosswalk, in either direction.

No Parking Zones

Restricting parking within 20 feet of a marked crosswalk, as measured by the gap between the parking space and the closest crosswalk marking, can help improve motorist visibility.

Street Lighting

The addition of street lighting, when practicable, can help to further identify the presence of pedestrians at a crosswalk.

In-Street Pedestrian Crossing Signs

In-street pedestrian crossing signs may be used at crosswalks as to remind road users of the applicable laws. The signs shall read "Yield To Pedestrians". Signs indicating "Stop For Pedestrians" shall not be used. The signs shall include the legend "STATE LAW". The yellow portion of the sign background shall be fluorescent yellow-green in color.

The signs shall not be used at signalized intersections and may be used seasonally to prevent damage caused by snow plowing operations. In-street pedestrian crossing signs may be installed or removed by the Department of Public Works, Chief of Police or his designee.

Rectangular Rapid Flashing Beacon signs can be added to crosswalks to increase the visibility of the crossing and warn drivers of an impending crossing by a pedestrian.

In a few cases, an unregulated crossing can be changed to a regulated crossing by the addition of a pedestrian activated stoplight with examples of this on Trapelo Rd in Waverly square and on Concord Ave. at Orchard St.

Pavement Markings

Refreshing existing crosswalk lines or delineating the edge of roadway on the approach to the crosswalk can help improve motorist awareness of the crossing. Markings in protected bike lanes can also alert bicyclists they are approaching a crosswalk.

Raised Elements and Bump-Outs

Raised crosswalks and the placement of speed tables in advance of a crosswalk are two methods to slow vehicles approaching a crosswalk. Bump-outs reduce the distance and amount of time needed to cross the street.

Removing Visual Obstructions

Cutting back shrubbery and removing/relocating parking spaces are two methods to improve visibility of pedestrians using a crosswalk.

V. INDIVIDUALS AND ORGANIZATIONS THAT MAY SUBMIT CROSSWALK IMPROVEMENT REQUESTS

A Crosswalk Safety Improvement request may be submitted to the Town Engineer by any of the following:

- Town residents and abutters of Town-owned streets, those who own or work in Town businesses.
- The Belmont Police Department, the Town Engineer, the Select Board, the Transportation Advisory Committee (TAC).

Applicants should utilize the application form found at the end of this section. With each completed form, the applicant must submit signatures representing either:

- At least five different street addresses or
- Fifty percent of the abutters in the directly affected area (whichever is less).

VI. PRELIMINARY EVALUATION OF CROSSWALK SAFETY IMPROVEMENT REQUESTS

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

Table One: Preliminary Evaluation Criteria

Criteria	Evaluation
Vehicles Not Stopping	If more than 3 vehicles drive through the crosswalk, from either direction, before the traffic stops, a wait time condition has been determined if this situation is documented on three different days in a two week period.
Excessive Crossing Distance	If the width of the roadway, measured from the edge of the crosswalk to the opposite edge or a raised pedestrian island, whichever is less, is more than 26 feet, then excessive crossing distance has been determined.
Traffic Collisions	Any documented collision involving an automobile and a pedestrian (including cyclist) in the crosswalk establishes collisions as a problem.

If the preliminary evaluation documents Vehicles Not Stopping, Excessive Crossing Distance, or Traffic Collisions, as described in Table One, the Town Engineer will conduct a full Crosswalk Safety Improvement Needs Assessment.

If the preliminary evaluation does not document Vehicles Not Stopping, Excessive Crossing Distance, or Traffic Collisions, no further action will be pursued under the Belmont Crosswalk Safety Improvement Program.

VII. CROSSWALK SAFETY IMPROVEMENT NEEDS ASSESSMENT

If an application satisfies one of the three preliminary evaluation criteria (Vehicles Not Stopping, Excessive Crossing Distance, or Traffic Collisions), The Town Engineer shall compile the following data to prepare the Crosswalk Safety Improvement needs assessment:

Crosswalk Attributes

- Roadway Description (width, grade and alignment, number and width of lanes, pavement condition, , bike lanes, and other relevant descriptors)
- Location
- 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
- On-street parking
- Required / Actual Stopping Site Distance
- Existing roadway lighting
- Visual obstructions (e.g., shrubbery)

Evaluation Scoring

If an application satisfies one of the three preliminary evaluation criteria (Vehicles Not Stopping, Excessive Crossing Distance, or Traffic Collisions), The TAC will hold the initial review of the application at a TAC meeting and invite the application filing parties. The Town Engineer will score each Crosswalk Safety Improvement request according to the criteria listed below in Table Two.¹ The scoring will be used to prioritize TAC recommendations approved by the Select Board.

Table Two: Needs Assessment Scoring

Criteria	Criteria Threshold/ Remediation	Score
Speeding	For each 5-mph increment that the 85 th -percentile speed is above the legal speed limit	10
Traffic Volume (a)	Average daily traffic (ADT) volume less than or equal to 3,000	0
Traffic Volume (b)	ADT volume in the range 3,001–8,000	10
Traffic Volume (c)	ADT volume greater than 8,000	20

¹ Examples of streets with ADT volume less than or equal to 3,000 are School St, Goden St, and Louise Rd. Examples of streets with ADT volume in the range 3,001–8,000 are Washington St and Winter St. Examples of streets with ADT volume greater than 8,000 are Park Ave and Pleasant St.

High Pedestrian Volume	More than 25 pedestrians using the crossing during the 7–9am; 3-6pm periods averaged over 3 different days when the Belmont public schools are open	10
Stopping Site Distance	For each 10 feet less than the required stopping site distance	10
Obstructions	For each instance of an obstruction limiting visibility of pedestrians using the crosswalk (shrubbery, parking space, utility pole, etc.)	10
School Walking Route	Crosswalk is located along a designated School Walking Route	20
Proximity to Commercial District	Crosswalk is located within 200 feet of a commercial district	20
Collisions- Personal Injuries	For each vehicle collision with a pedestrian or cyclist in last five years	80

Engineering recommendations will answer the following questions:

- Which Crosswalk Safety measure(s) may be appropriate?
- Could the measures be designed and implemented by Community Development or DPW or would outside engineering services be required?
- What is the best estimate of design and installation costs?
- Does the problem merit experimental installation of temporary measures before a final determination is made?

VIII. REVIEW OF NEEDS ASSESSMENT AND FINAL RECOMMENDATION

The Town Engineer will present the findings of the Crosswalk Safety Needs Assessment and the engineering recommendations to the TAC at a TAC monthly 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 notification for this meeting and the Town will send advance notification to those in the catchment area. The meeting 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 and will then vote to “Recommend” or “Not Recommend” that the requested crosswalk project be placed on the Town of Belmont’s “Priority List of Crosswalk Improvement Projects”. If the Committee does not have sufficient information to make a final recommendation, or a crosswalk first merits an

initial test of experimental measures, a TAC vote on the matter may be tabled for a period not to exceed ninety (90) days.

Actual placement of a recommended crosswalk improvement on the Priority List of Crosswalk Improvement Projects requires a majority vote by the Select Board. Any initial test of experimental measures for a crosswalk also requires a majority vote by the Select Board.

Crosswalk improvement requests that receive a “Not Recommend” vote may be resubmitted for future consideration starting one year after that vote.

IX. PRIORITY LIST OF CROSSWALK IMPROVEMENT PROJECTS

The Town of Belmont may approve more crosswalk improvement projects than it can implement in a given year. The TAC shall use the Needs Assessment scoring outlined in Section VII of this Policy to create and maintain a prioritization list of approved projects. The Town Engineer shall select projects for implementation using both the Needs Assessment scoring and his or her professional judgment in the context of multiple factors, including budgetary constraints, the timing of pavement-management and sidewalk repair projects, and other utility work, and make a final recommendation for projects to be undertaken in each budget cycle. Recommended crosswalk improvement projects that are funded in whole or in part by the Town’s annual capital budget must also be approved by the Comprehensive Capital Budget Committee and will be subject to final approval and appropriation by Town Meeting.

X. Reference Standards

- **Sources for Crosswalk Safety Improvement Policy/Application Appendix:** USDOT-FHA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations: https://safety.fhwa.dot.gov/ped_bike/step/docs/STEP_Guide_for_Improving_Ped_Safety_at_Unsig_Loc_3-2018_07_17-508compliant.pdf
- SRTS Guide: Marking and Signing Crosswalks
- 2009 MUTCD guidance on Crosswalk Markings
- Main MUTCD site: <https://mutcd.fhwa.dot.gov/>
- Town of Concord Crosswalk Policy and design Guidelines

Appendix 5: Automated Enforcement Systems: An Introduction (2023-12-06)

AUTOMATED ENFORCEMENT SYSTEMS: AN INTRODUCTION

Compiled by

Jane Lappin, Member, Belmont Transportation Advisory
Committee

12/6/23

OVERVIEW

1. Definitions
2. How do automated enforcement systems work?
3. Automated enforcement across the USA (map)
4. Safety Impacts
5. Lessons drawn from other communities' experience
6. Next steps

Three Major Automated Enforcement Technologies Used in the United States



● Automated speed safety cameras



● Red-light safety cameras



● School bus stop-arm cameras



AE for distracted driving and seat belt enforcement is being tested.

DEFINITIONS

- **Red-light safety cameras** take photographs of vehicles entering signalized intersections after the light has turned red. The cameras are connected to the stop line. The sensors provide additional violation data such as vehicle speed and how long the light was red before the vehicle entered the intersection.
- **Automated Speed Enforcement** Safety Cameras photograph a speeding vehicle's license plate, driver or both, then send a citation to the registered owner. Mobile speed cameras are often used to cover multiple road segments, unlike red-light safety cameras that are used only at signalized intersections
- **School bus stop-arm camera** is another form of AE technology available to protect school children. The camera is mounted to the school bus stop arm and the camera is activated when the red stop lights on the arm are flashing, notifying drivers when children are boarding or exiting a school bus.

HOW DO AUTOMATED ENFORCEMENT SYSTEMS WORK?

- **Technically**, a sensor measures vehicle movement and triggers an identifying photograph of the vehicle when the vehicle has been detected to exceed legal speed, run a red light, or violate a stop sign. The ticket is mailed to the registered vehicle owner, whether in state or out.
- **Technical validation** of any candidate camera system can be proven by the vendor and should be an important consideration when procuring the system
- **Costs** can include hardware purchase or lease, system installation, maintenance, cooperation with local law enforcement, and administration of moving violations.
- **Legally**, the state determines the parameters for how the system operates, including warnings, the impact on driver insurance, violation fees, and other penalties, Some of the state's authority may be delegated to municipalities, depending upon the state.
- **Locally**, to ensure support for the system, the town residents should be engaged in the decisions that are made regarding the implementation of the program, such as how much speed should be tolerated over the legal limit. Localities should include signage that alerts motorists that automated enforcement is in use.
- **Impact** includes reduced violations in the region of the camera, fewer car crashes, fewer pedestrian and bicyclist collisions.

Permitted Use of Automated Enforcement Technologies by State Law

U.S. states/ territories that permit both: CT, DE, DC, MD, NY, PA, and RI

- Red-light cameras only
- Speed cameras only
- Both
- Not permitted/
not addressed

Beginning in January 2024, speed cameras will be permitted in six California cities under a state law enacted in October 2023.

Source: Insurance Institute for Highway Safety



SAFETY IMPACT

- This slide is currently blank because most examples that I found are from larger cities with worse safety problems. I can find reasonably good examples, but they're mostly for bigger cities, bigger roads, bigger regions. One reason is because the larger cities have enough money to measure before and after. And, sadly, they have more crashes.

LESSONS FROM EXPERIENCE

Focus on safety: Revenue should support program costs, with any excess revenue dedicated to traffic safety initiatives such as infrastructure enhancements or increased education.

Proper site selection: Cameras should be installed in locations that have risk data justifying their use, particularly for vulnerable road users.

Community participation: Members of the community where the safety cameras will be deployed must be part of the planning and implementation process.

Equity: All decisions about safety camera programs – including public engagement during the planning process, where cameras are placed and how fines are structured – should be viewed through an equity lens.

Transparency and accessibility: Jurisdictions should share the data used to inform the decision-making process, and the cameras' location and hours of service should be highly publicized.

Reciprocity agreements: Jurisdictions should create reciprocity agreements with neighboring states that address out-of-state violators who fail to pay traffic safety camera fines.

NEXT STEPS

- This slide deck was developed to introduce the TAC to Automated Enforcement Systems
- **Decision:** Do we recommend that the Select Board consider Automated Enforcement Systems for Belmont?
- If the Board members think this is a promising solution to improve Belmont traffic safety, the next steps could be:
 - Present a more complete deck to Select Board members for discussion.
 - Develop a more complete educational deck for presentation to Town meeting
 - If agreed in Town meeting, make more complete presentations at listening sessions for Belmont residents along with a framework for program policy. The public presentation should consider all the different ways that people listen, see, discuss, and learn.
 - With the benefit of community input, develop clear protocols for policy, specifically criteria for locations of cameras, public notice of the locations, warnings, fines, appeals, and evaluation of the impact, before and after, for reporting back to the town