

Feasibility Study for the [Mystic River Path Connection to the Minuteman Bikeway]



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Executive Summary

The Feasibility Study for the Mystic River Path Connection to the Minuteman Bikeway has evaluated options for a path that will strengthen the walking and biking network in and around Arlington while bolstering community access to the unique natural areas of Lower Mystic Lake and Mystic River.

The Recommended Conceptual Design offers a continuous, accessible shared use path connecting the Minuteman Commuter Bikeway to the Alewife Brook Greenway via the Mystic Valley Parkway corridor along Lower Mystic Lake and the Mystic River. The path supports the vision and goals of the Town of Arlington's 2021 Connect Arlington Sustainable Transportation Plan, adding safe transportation facilities for all modes, and promoting low-carbon travel in and around Arlington. It will also enhance regional bike and pedestrian connectivity, linking major trails and local active transportation facilities in Arlington, Medford, and surrounding communities.

The recommendations of this report were developed through extensive site analysis, community input, and an iterative process of conceptual design. To accommodate a variety of mobility needs and preserve opportunities for experiencing nature and riverside strolling, the Recommended Conceptual Design includes pedestrian-only paths and on-street bike lanes in addition to the continuous shared use path for multiple non-motorized modes. The path connects through intersections that are redesigned to improve safety, comfort, and ADA accessibility. Connections from neighborhood streets are formalized and made accessible for greater integration of the path into adjacent residential areas.

The plan also proposes various spaces to enhance the experience of path users. Placemaking proposals for the corridor focus on celebrating and protecting parkland trees and the natural ecosystems along the lake and river. A placemaking plan identifies potential gateway spaces to welcome path users with wayfinding, interpretative materials, and seating. Potential locations for waterside overlooks and opportunities for ecological restoration or other nature-based design are also identified.

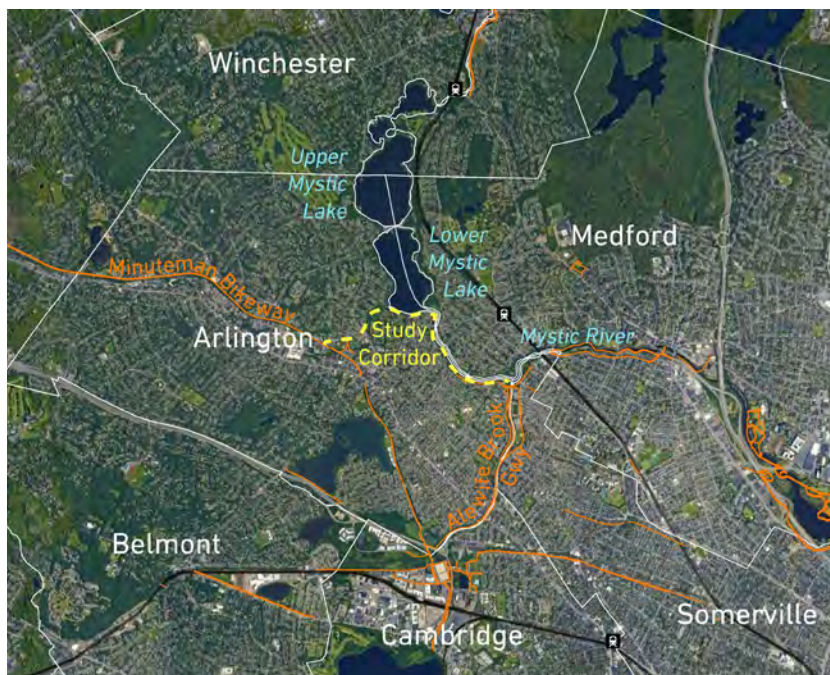


Figure 1: Regional map showing the study corridor (dotted yellow line) south of Lower Mystic Lake and Mystic River and connecting to the Minuteman Bikeway and Alewife Brook Greenway

This feasibility study was a joint effort of the Town of Arlington and the Mystic River Watershed Association, with support from Massachusetts Department of Conservation and Recreation, Massachusetts Department of Transportation, the City of Medford, and the Lawrence and Lillian Solomon Foundation. Extensive input from stakeholders and community members was essential to developing a conceptual design that meet the needs of all potential users.

The project is funded by an \$80,000 grant from the MassTrails program and \$10,000 from the Lawrence and Lillian Solomon Foundation.

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PROJECT CONTEXT

01

Introduction

This project is the result of years of planning in the Town of Arlington to expand active transportation and promote an environment in which non-motorized modes are viable and appealing options for people of all ages, identities, and abilities. The purpose of the Feasibility Study is to weigh options for path implementation that align with the vision of previous planning efforts and goals for future use.

Related Initiatives and Plans

The scope of this project has been identified in several previous plans for expanding active transportation networks in the area, including the Mystic River Watershed Association (MyRWA) [Mystic Greenways Initiative](#), LiveableStreets Alliance [Emerald Network initiative](#), and the Metropolitan Area Planning Council (MAPC) [LandLines Network Plan](#). This project additionally helps meet connectivity, access, safety, and sustainability goals of the Boston Metropolitan Planning Organization’s (MPO) Long-Range Transportation Plan, [Destination 2040](#), and the [MAPC MetroCommon x 2050](#) long-range regional plan.

Priorities for this project align with the recommendations of the Department of Conservation and Recreation (DCR) [2009 Mystic River Master Plan](#) and [2020 Parkways Master Plan](#) related to use of parkland and options for bike facilities along Mystic Valley Parkway.

This project is particularly informed by the priorities laid out in the Town of Arlington’s [2021 Connect Arlington Sustainable Transportation Plan](#) (“Connect Arlington”). Connect Arlington emphasizes a people-first vision that aims to encourage active and shared modes of transportation, such as walking and rolling, bicycling, or taking public transit, and to reduce reliance on driving and private vehicles. The Mystic to Minuteman connection is one of the projects Connect Arlington proposed as a step toward developing a low-stress biking and walking environment. The major intersections along the project corridor are also identified within Connect Arlington as Priority Intersections for safety improvements, as shown in Figure 2 and listed as follows:

1. Summer Street (Rte 2A) at Mill Street / Cutter Hill Road
2. Summer Street (Rte 2A)/Mystic Street (Rte 3)/Mystic Valley Parkway



Figure 2: Map of project area with proposed trail corridor and priority intersections for safety improvements

3. Mystic Valley Parkway / Medford Street (Rte 60) rotary in Arlington

4. Mystic Valley Parkway / High Street (Rte 60) rotary in Medford

5. Mystic Valley Parkway at River Street / Harvard Avenue bridge (Arlington only)

See the Town of Arlington’s [Minuteman Bikeway Planning Project](#) for recommendations at the connection point between the Minuteman Bikeway and the proposed Mystic River Path at Mill Street. Also see the traffic impact report for changes associated with access to Arlington High School. Details on DCR and other Town of Arlington plans and recommendations that informed this feasibility study can be found in the “Appendix A: Memorandum of Existing Conditions” on page 51.

Connections with Medford

This project is a priority for many residents in the City of Medford, which lies north of the Mystic River adjacent to the path corridor. City staff and residents were included in stakeholder and focus group meetings. Their input and review of the City of Medford’s 2016 Bicycle Infrastructure Master Plan helped inform needed bike connections and goals for path development.

Path Connection Goals

Goals for the path connection were established in collaboration with the Project Team and through feedback from the first community meeting. Priorities expressed by respondents to the first public survey also helped guide development of the goals, which are:

- Provide an accessible route that contributes to a regional biking network by connecting the Minuteman Bikeway, Mystic River Paths, and Alewife Brook Greenway
- Strengthen the walking and biking network between Arlington, Medford, and Somerville by developing connections to perpendicular streets, sidewalks, and planned bike routes
- Increase safety and comfort for all users, particularly at intersections and rotaries
- Improve access to the banks of the Mystic River and Mystic Lakes to enhance people’s experience and draw them to these resources



Figure 3: Medford Street rotary in Arlington, one of the priority intersections for safety improvements



Figure 4: High Street rotary in Medford matches its Arlington counterpart in excess pavement, resulting in high vehicle speeds. This project proposes to establish safe walking and biking connections between the two rotaries and municipalities.

- Reduce emissions by increasing bicycle mode share, and incorporate planning and design concepts that contribute to climate resiliency
- Preserve and enhance wetlands, trees canopy, and animal and plant habitat

Project Process

The progression of this Feasibility Study followed a typical process for such projects. It started with gaining a full understanding of the study area through desktop review of existing documents, plans, previous studies and available data, as well as work done in the field to gather information first-hand. The team's understanding of the site was enriched through input from the public and stakeholder groups as part of a robust engagement process.

The team identified the applicable regulations, defined known safety strategies, and embraced guiding principles driven by community input for the development of path alternatives. Conceptual path options and potential complementary spaces were designed. These options were compared to identify the most feasible approach to the design.

The public engagement process was integral to the project's progression, and was critical to decision-making. This process resulted in the Recommended Conceptual Design and Implementation strategy that will guide future design development of the shared use path.

Desktop Review

This initial research addressed project area demographics and cultural context, crashes, pedestrian and cyclist activity, and land ownership. Existing regional and local plans that might affect the development of the Mystic to Minuteman path were also reviewed, and existing traffic operations were analyzed.

Cultural Context

The Mystic Valley Parkway is on the National Register of Historic Places. This corridor, along with parkland adjacent to the Mystic river, is defined by large trees on lawn and a roadway that curves with the river.

Environmental Justice Communities

Much of the project area is home to Massachusetts Environmental Justice (EJ) Minority populations. The EJ designation confers extra responsibility on agencies to ensure that public land in the project area is preserved, remains accessible and well-maintained, and helps support community climate resilience, all of which are principles this project supports.

Traffic Safety

Toole Design conducted a high-level review of available data on crashes occurring at project intersections between 2017 and 2020. A total of ninety-one (91) collisions occurred across the five intersections, with the greatest number of crashes, thirty-one (31), at the Medford Street/High Street rotary. Of all crashes, eight (8) or nine percent (9%) of all collisions involved pedestrians or cyclists with non-fatal injuries or no injury.

Bike and Pedestrian Activity

Toole Design used data from the Strava Global Heatmap to study existing pedestrian and bicycle use patterns in the project area. Walking and running activity are higher along Mystic River paths than on connecting streets. Biking activity is evenly distributed between the parkway and large connecting streets.

Land Ownership

Summer Street is Town of Arlington jurisdiction, with some abutting properties under the Arlington Housing Authority and Arlington Parks and Recreation Commission. The Mystic Valley Parkway and adjacent parkland are owned and managed by DCR. Bridges and the culvert at Mill Brook are owned and maintained by MassDOT. Several private residential properties and businesses abut the project corridor.

Field Observations

Toole Design staff walked the length of the corridor and observed and documented conditions in field with photographs and measurements to determine opportunities and constraints for incorporating a path. The corridor and key intersections were assessed for safety and accessibility, maintenance needs, utilities, topography, amenities, vegetation, and connections to adjacent neighborhoods. A summary of Existing Conditions observations is provided in the following pages, and the full Memorandum of Existing Conditions can be found in Appendix A.



Figure 5: Public land ownership within the project area

Existing Conditions

For the purpose of analysis and conceptual design, the study area is divided into three segments based on roadway character and cross section. Segment A includes Summer Street between Mill Street and Mystic Street, while Segments B and C include the Mystic Valley Parkway corridor.

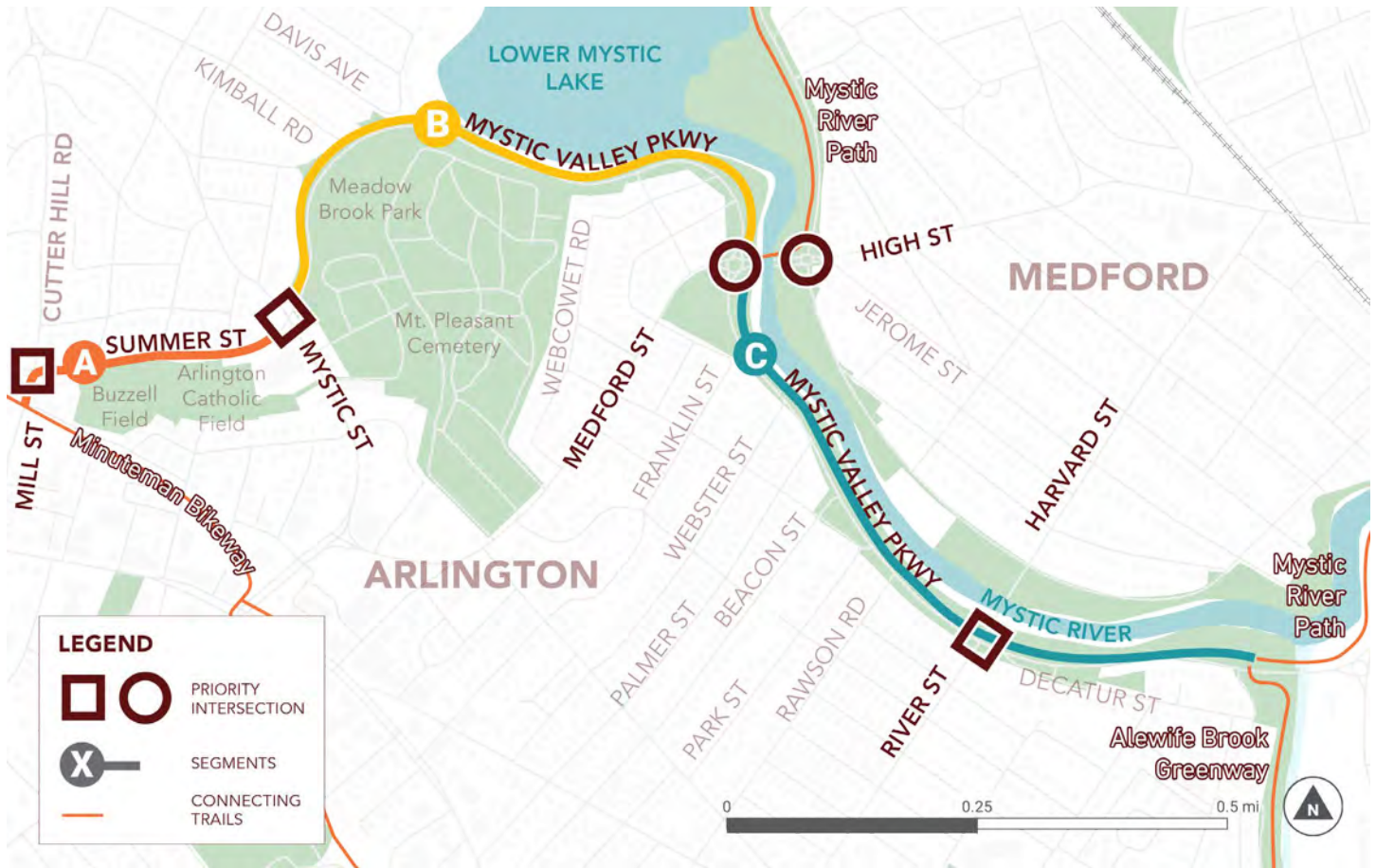


Figure 6: Segments and priority intersections in the project area

The project area encompasses approximately .25 miles of the south shore of Lower Mystic Lake, part of the Mystic Lakes State Park, which supports activities such as swimming, non-motorized boating and sailing, paddling, picnicking, and bird watching. The project area also includes approximately .95 miles of the Mystic River from the lake to the Alewife Brook. A narrow asphalt path runs south of the lake, while earth and stone dust paths run along the river. The lake, river, and adjacent parkland provide a scenic experience for people walking, biking, and driving.



Figure 7: View east on Summer Street across from Victoria Road

Segment A: Summer Street from Mill Street to Mystic Street

Roadway Character and Dimensions

The Summer Street segment is approximately a .25 miles long and runs between the intersection of Summer Street with Mill Street / Cutter Hill Road and the Summer Street / Mystic Street / Mystic Valley Parkway intersection. This segment lines the north side of Buzzell Field and the Arlington Catholic practice field. The curb-to-curb roadway width is 38', with two 13-14' lanes.

This segment also includes a 36' wide and approximately 85' long portion of Mill Street down to the Minuteman Bikeway.

Pedestrian Infrastructure

Sidewalks are present on both sides of Summer Street and Mill Street. Utility poles, signposts, and hydrants on the south side of Summer Street make the pedestrian clear space too narrow in some areas to meet ADA standards.

Bike Infrastructure

There are currently no bike facilities in this segment.

Intersections

Three streets (Edgehill Road, Victoria Road, and Brookdale Road) intersect with the north side of Summer Street. With the park and practice field forming a continuous recreation area on the south side, there are no cross streets, and a long stretch of uninterrupted sidewalk exists between the residential complex driveways at each end of the block.

One marked pedestrian crossing is located on the east side of Victoria Road. This crossing has poor sight lines for both pedestrians and drivers, due to the roadway curve and presence of parked cars next to the crosswalk. The combination of obstructed sight lines and frequent speeding on Summer Street makes this crossing risky and uncomfortable for pedestrians.

Parking

While there are no formally designated parking lanes, both sides of the street and particularly the southern shoulder are heavily used for parking by people attending events at the fields.

Landscape

From Mill Street to Buzzell Field, landscape south of the existing sidewalk is constrained by the property line and fence. Along Buzzell Field, a row of mature honeylocust trees lines the existing sidewalk and 4' high chain link fence. At Arlington Catholic practice field, the row of trees ends, and a tall chain link fence stands adjacent to the sidewalk. A grassy embankment about 10 to 15 feet wide runs the length of the park and practice field, sloping down from the sidewalk to the athletic facilities.

The Buzzell Field path, which connects south to the Minuteman Bikeway, meets the sidewalk across but offset from Victoria Road.

Segment B: Mystic Valley Parkway from Mystic Street to High Street Bridge

Roadway Character and Dimensions

Segment B is approximately .7 miles long, running north from the Summer Street / Mystic Street / Mystic Valley Parkway intersection along Mount Pleasant Cemetery before it turns east to run along the south side of Lower Mystic Lake to the Medford Street / High Street rotary. Its wooded parkway character provides the occasional opening for views of the lake. The curb-to-curb roadway width varies between 30' and 40' and is narrowest at the Mill Brook culvert at the southwest corner of the lake. Significant slopes along the east/south side of the parkway constrain curb movement in that direction.



Figure 8: View west of the narrow asphalt path and Mill Brook culvert on Mystic Valley Parkway

Pedestrian Infrastructure

A 7-8' wide asphalt path runs along the west/north side of the roadway, separated from the curb by a narrow lawn strip that shows evidence of heavy pedestrian use.

Bike Infrastructure

There are no existing bike facilities in this segment.

Intersections

Between Mystic Street and High Street, three intersections exist with neighborhood streets (Hayes Street, Mystic Lake Drive, and Maynard Street). There are no marked crossings.

Parking

Parking is not permitted on Mystic Valley Parkway.

Landscape

This segment marks the start of the parkway corridor. From Mystic Street to the lake, the corridor is wooded, with canopy extending over the roadway in some areas. On both sides of the roadway, the land slopes up from the road, with the embankment along Meadow Brook Park to the east, and a wooded slope up to residential areas to the west.

Along Lower Mystic Lake, the existing path runs along the top of the lake edge, with intermittent views north to the water between stands of trees and shrubs. Along the south side, residences line the parkway. Where the parkway turns south at the Mystic River, there is a large open area of lawn at the river's mouth, just north of the High Street bridge.

Segment C: Mystic Valley Parkway from High Street bridge to Alewife Greenway

Roadway Character and Dimensions

Segment C, running along the Mystic River from the Medford Street/High Street rotary to the Alewife Brook Greenway, is approximately .7 miles long with a curb-to-curb roadway width of 38-40'. Just south of the High Street rotary, the roadway is grade separated from the parkland along the river where an existing pedestrian trail is located. The park space widens near Palmer Street, and the roadway descends back to parkland grade.

Pedestrian Infrastructure

There is a soft-surface pedestrian trail along the river, approximately 7' wide, and closer to the river than to the roadway. This pedestrian facility does not meet national and local accessibility requirements.

Bike Infrastructure

There are no designated bike-only facilities. The soft-surface path is sometimes used by cyclists, but its narrow width and tree root-filled surface makes it uncomfortable (and unsafe) for most users in the stretch between High Street and River Street. East of River Street, the path is surfaced with stone dust and is more comfortable for people biking.

Intersections

Eight intersections exist between High Street and the Alewife Brook Greenway, including a signalized intersection at River Street / Harvard Avenue Bridge.

Parking

Parking is not permitted on Mystic Valley Parkway.

Landscape

This segment is characterized by the linear parkland along the Mystic River, with open lawn, earthen paths, and mature canopy trees. The riverbank is vegetated with shrubs and



Figure 9: View east on Mystic Valley Parkway toward the river and roadway heading uphill. Large trees line the parkway.

small trees, and there are no formal water access points. Near the mouth of Alewife Brook there is a known nesting site for swans.

Intersections

Several intersections exist within the study area, and most of them are connections to neighborhood streets. Victoria Road serves as an example of these intersections, which are identified in “Neighborhood Connections” on page 34.

Five Priority Intersections exist within the study area and make up a large part of the site analysis and recommendations. As shown in Figure 6 on page 6, they are:

1. Summer Street (Rte 2A) at Mill Street / Cutter Hill Road
2. Summer Street (Rte 2A)/Mystic Street (Rte 3)/Mystic Valley Parkway
3. Mystic Valley Parkway / Medford Street (Rte 60) rotary in Arlington
4. Mystic Valley Parkway / High Street (Rte 60) rotary in Medford
5. Mystic Valley Parkway at River Street / Harvard Avenue bridge (Arlington only)

In short, each intersection has serious safety and operational shortcomings for pedestrians and people on bikes. These include excess pavement and wide curb radii that encourages higher turning speeds plus a lack of designated crossings and facilities for cyclists, among other things. Roadway conditions and safety observations are detailed for each intersection in “Appendix A: Memorandum of Existing Conditions” on page 51.

Bridges

Arched bridges with natural stone masonry cross the Mystic River at Medford/High Street and Harvard Avenue/River Street and are a visual asset along the Mystic River. Both have excess pavement that can be reconfigured with paint and, potentially, lightweight delineators to increase connectivity for cyclists. Reconfiguring deck curbing is not a short-term option and will require structural analysis and design. The Project Team also ruled out running the path underneath the bridges due to expense and potential impacts to habitat and paddling activities. A culvert at Mill Brook (see location in Figure 5 on page 5) will likely require improvements as the path is installed in that area.

Concepts, Recommendations, and Implementation

Conceptual options were developed for segment cross sections and priority intersections and included designations of path facility types and dimensions. A high-level placemaking plan was also developed to recognize the

types of opportunities that will enhance user experience and connection with the project corridor’s unique natural resources.

A recommended concept was designated following stakeholder and public feedback. Chapters 2-4 describe the options, recommended concept, plus implementation information such as permitting, maintenance considerations, and cost opinions.

Engagement with Stakeholders & the Public

The project process has incorporated an extensive amount of engagement with stakeholders and the public, including four Project Team meetings, three public meetings, a Focus Group meeting, and a meeting with residents of Cusack Terrace. All public meetings were conducted virtually, and meeting recordings were made available on the Town of Arlington’s website for later viewing. The stakeholder Project Team was formed with representatives of the following agencies:

- Arlington Department of Planning and Community Development
- Mystic River Watershed Association (MyRWA)
- City of Medford
- MA Department of Transportation (MassDOT)
- MA Department of Conservation and Recreation (DCR)
- Metropolitan Area Planning Council (MAPC)
- Lawrence and Lillian Solomon Foundation

Through four meetings held over the course of the project, the Project Team informed a better understanding of road and intersection operations and function of adjacent park spaces. The team also guided the development of concepts and selection of a recommended option to meet safety and user experience goals.

The Focus Group included residents from Arlington and Medford who are also active transportation and/or open space advocates. The group provided valuable input on draft concepts before the second public meeting. Cusack Terrace residents lent their thoughts and concerns about the project related to Summer and Mystic Streets.

Public input on existing conditions and feedback on initial concept recommendations has also been sought between two surveys and two public meetings, with a third meeting held to present the recommendations of this report and next steps. The surveys and public meetings are briefly described on pages 10, 21, and 37, and in more detail in Appendix B.

Guiding Principles

How the First Public Meeting & Survey Drove Project Priorities

The first public meeting took place on January 26, 2022 following the initial desktop review and field observations. After the presentation, attendees broke into groups to discuss the project corridor. This meeting was followed by an online public survey to gauge community concerns and aspirations for the path. From these initial community touchpoints, common themes emerged to guide priorities for the development of design concepts.

Safety

Safety for people biking and walking was a primary concern for meeting and survey participants, with the High Street bridge and rotaries identified as the most dangerous and confusing part of the trail. The Multimodal Safety strategies listed on this and the next page highlight methods to enhance safety. These methods are incorporated throughout the conceptual design options and final recommendations.

Universal Accessibility

Community members recognized that the existing facilities are not accessible to everyone. Meeting and survey participants expressed the desire for fully accessible facilities to welcome the broadest possible range of ages and ability levels, including children, seniors, and people with varying types of bikes, strollers, and mobility devices. Chapter 3 of this study recommends high-level strategies to develop a fully accessible asphalt path in compliance with national and local standards, to make the path more universally welcoming to different types of users.

Nature Experience & Ecological Preservation

Many meeting attendees and survey respondents actively recreate along the river and lake and they provided suggestions for enhancing connections to these resources. The Placemaking and Ecological Preservation section on “Ecological Preservation” presents things to consider for enhancing user experience of the natural landscape, and strategies for minimizing ecological and water quality impacts, preserving trees, and restoring habitat. Three key types of placemaking strategies are recommended to enhance and preserve the trail corridor.

Multimodal Safety Strategies

The following are strategies for achieving safety for people across all modes, whether walking, biking, or driving. These strategies are common to all conceptual design options in Chapter 2 and the recommended design in Chapter 3.

Dedicated Facilities for Active Users

Sidewalks, separated bike lanes, and shared use paths all provide dedicated space separate from motor vehicles. Sidewalks are intended for use only by pedestrians. Separated bike lanes are only intended to be used by people biking and include at least a horizontal buffer from motor vehicles. Vertical separation, such as placement behind a curb, is preferred. Shared use paths offer family-friendly space to many types of users, including people walking and biking, and can be used in a constrained right-of-way, and/or in parallel to sidewalks or separated bike lanes.

Narrowed Travel Lanes

Research shows that a correlation exists between wider travel lanes and higher vehicle speeds.¹ Narrowing travel lanes to encourage slower speeds can reduce the severity of collisions, whether with other vehicles or active users. For pedestrians and cyclists, narrowed travel lanes reduce crossing distances and time exposed in the travel way.

Reduced Roadway Corner Radii

Intersections with large corner radii allow vehicles to make turns at high speeds. This can lead to high-severity crashes at conflict points. Reconstructing intersections with reduced radii can reduce speeds and shorten crossings for path users. Radii reduction can be achieved with quick-build treatments such as paint and vertical delineators, or through reconstruction that moves curb lines. Mountable truck aprons can be installed to reduce radii for passenger vehicles while still allowing larger trucks to execute turns.

Curb Extensions

Curb extensions extend sidewalk space and shorten crossings for active users while reducing roadway space. Curb extensions can help make pedestrians more visible to oncoming traffic, and shortened crossing time can mean more efficient timings at signalized intersections. Extensions at intersections result in a narrowed field of view for motorists, which can help reduce travel speeds. Curb extensions can be constructed with quick-build (paint and flexible delineators) or permanent materials.

¹ National Association of City Transportation Officials, Urban Street Design Guide, Lane Width, <https://nacto.org/publication/urban-street-design-guide/street-design-elements/lane-width/>



Figure 10: Example of a curb extension with plantings

Raised Crossings

Raised crossings reduce traffic speeds and encourage motorists to yield to crossings pedestrians and cyclists. Raised crossings are typically elevated to sidewalk level, making for a more comfortable, level crossing that indicates to drivers that they are entering a shared space. The shared environment can be emphasized further with pavement markings or supplemental warning signage or through different paving materials, such as concrete unit pavers.



Figure 11: Example of a raised crossing

Rectangular Rapid Flashing Beacons

Rectangular rapid flashing beacons (RRFBs) signal a crossing pedestrian or cyclist to motorists. Where RRFBs have been installed, the rates of cars yielding to pedestrians have been as high as 98% at marked crosswalks, and pedestrian crashes have been reduced by 47%.² RRFBs are often installed with advanced warning signage or markings to alert approaching motorists of the crossing.

² Federal Highway Administration, Rectangular Rapid Flashing Beacon (RRFB), Safe Transportation for Every Pedestrian Countermeasure Tech Sheet, https://safety.fhwa.dot.gov/ped_bike/step/docs/TechSheet_RRFB_508compliant.pdf



Figure 12: Example of a Rectangular Rapid Flashing Beacon (RRFB)

Modern Roundabouts

Modern roundabouts are circular intersections where drivers traverse counter-clockwise around a center island within the intersection. Some features of roundabouts are:

- Center islands with truck aprons that maintain narrow lanes for passenger vehicles but allow larger vehicles to pass.
- Splitter islands to deflect and slow vehicles on their approach and provide space for pedestrians and cyclists to pause while crossing.
- Non-tangential vehicle approaches so vehicles are not able to enter or exit the circular travel lane at high speeds.

Roundabouts foster slower speeds while reducing the number of motor vehicle conflicts compared to traditional intersections controlled by traffic signals or signs.



Figure 13: Example of a Modern Roundabout

Signal Timing and Phasing Adjustments

Signal timing and phasing can be programmed to provide frequent crossing opportunities for active users at an intersection. Options are discussed in “Appendix C: Notes from Project Team, Focus Group, & Cusack Terrace Meetings” on page 55.

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**CONCEPT DESIGN
OPTIONS**

02

Segment Concepts

Dimensional requirements, safety strategies, and the guiding principals were used to develop options for conceptual design of the path. These options were compared to identify the most feasible approach. In addition, complementary spaces were defined with potential locations to incorporate them along the path. Public engagement during this iterative process informed the Project Team’s comparisons of the design options and ultimate recommendations.

This section presents brief narratives and pros and cons for all the cross section concepts and major considerations explored for each segment. For the most part, the priority intersections did not have alternative design options, so the discussion on intersection designs is included in Chapter 3. Discussion of path design in each segment is followed by a description of proposed placemaking and ecological preservation strategies to enhance the path corridor.

Segment A: Summer Street (Mill Street to Mystic Street)

Some early concepts discussed with the Project Team were quickly routed out of further development:

- **One-way bike lanes or a two-way bikeway next to the existing sidewalk.** The Project Team expressed that a shared use path was preferred, as it would maximize comfortable space for all active users and maintain consistency with proposals in Segments B and C.
- **Reduction of berm width along Arlington Catholic Field to create more space for formal parking.** This was considered too complex and would require a rethinking of where people sit to watch games.
- **A connection through Buzzell Field to the Minuteman Bikeway.** An analysis of field space showed the high potential for conflict between path and field users in multiple areas. A master plan would be needed to reconfigure the field for a comfortable connection.

Having eliminated these options, two options (Concepts A and B) came to the fore and were focused largely on the feasibility of replacing street parking space with a wider path and landscaped buffer cross-section.

Both alternative Concepts A and B are intended to represent the design concept of maximizing the path width over the width of other elements in the cross-section. It is important to note that final cross section dimensions and features may change somewhat during design development.

Concept A: No Street Parking, Wider Landscaped Buffer

As shown in Figure 16, Concept A includes standard 11’ travel lanes and removes parking to provide a 6’ wide buffer and 12’ wide shared use path.

Benefits:

- Prioritizes active use as much as possible
- Landscaped buffer offers potential for additional plantings or green stormwater infrastructure

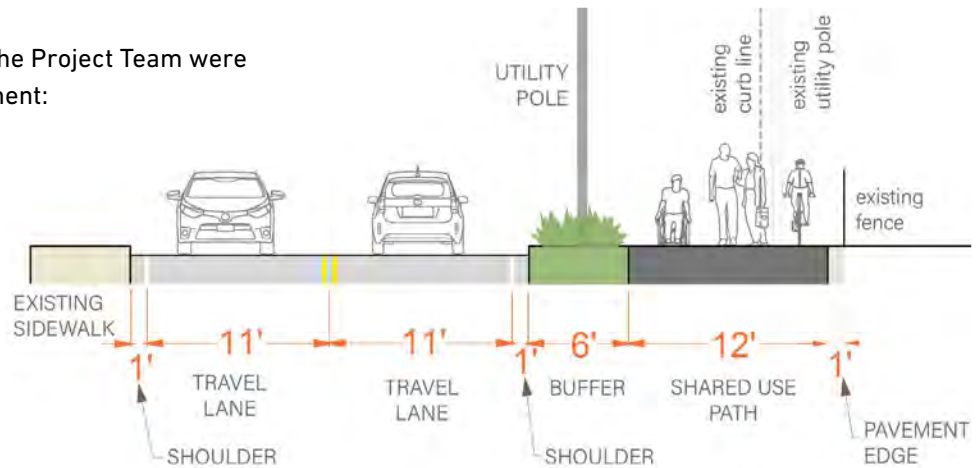


Figure 14: Concept A for Summer Street with no parking

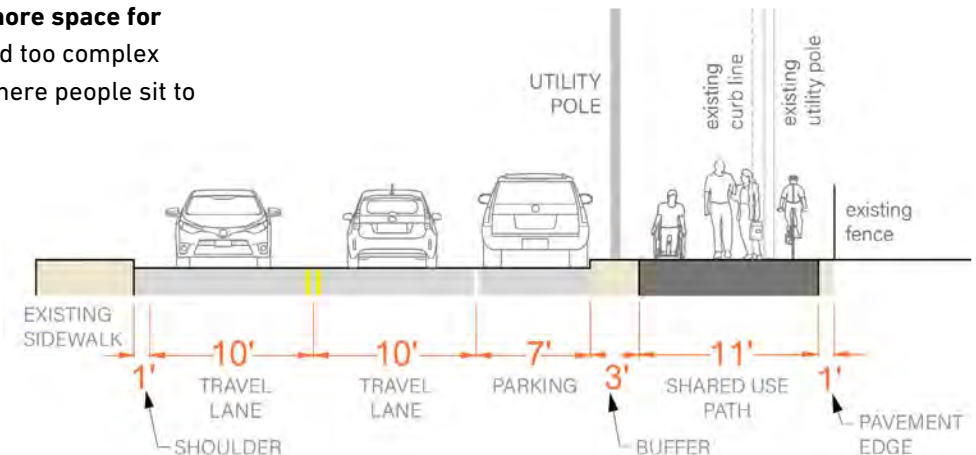


Figure 15: Concept B with narrow travel lanes and parking

- The majority, 75%, of survey respondents supported this option

Drawbacks:

- Street parking is heavily used for athletic events
- Parking prohibition on Summer Street could lead to even greater parking on neighborhood side streets, causing inconvenience to residents
- Six-foot landscape buffer may be too narrow to support healthy trees

Concept B: Retain Street Parking, Narrow Hardscape Buffer

Street parking is formalized on the south side of Summer Street along Buzzell Field and Arlington Catholic Field in Concept B, which requires narrower travel lanes and narrow parking.

Benefits:

- Retain almost half of existing street parking for athletic field events and daily usage, and prevent full inundation of cars onto neighborhood side streets
- Reduce potential for heated debate over parking

Drawbacks:

- Conflicts will need to be mitigated between people using the trail and people accessing cars parked at curb
- Path is one foot narrower than Concept A in a busy area, and the buffer is three feet narrower. Given curbside use for parking, the buffer cannot support extensive plantings.

Recommendation: Concept B & Further Study

The majority of survey respondents preferred to remove parking, and it is preferable to construct a wider path and buffer by removing parking as presented in Concept A. However, with input from the Arlington Parks and Recreation Commission, it is clear that the removal of all parking on Summer Street would present major operational challenges for the fields. This study recommends to retain parking on the south side unless an alternate parking solution can be achieved. A parking study would help provide a clearer picture of needs and help drive a conversation over alternate solutions.

Segment B: Mystic Valley Parkway from Mystic Street to High Street Rotaries

Segment B is constrained in comparison to Segment C due to the steep slope on the east/south side of the roadway and Lower Mystic Lake to the north. Some early concepts discussed with the Project Team were quickly routed out of further development.

On-Street Bike Lanes: On-street bike lanes were considered for this segment as members of the public had expressed some preference for separation between pedestrians and faster cyclists. This includes input from pedestrians, and from confident cyclists who prefer to have separation so they can move more quickly than when mixing with pedestrians on a path. However, both a pair of one-way bike lanes and a two-way bikeway were deemed infeasible due to roadway width constraints at the Mill Brook Culvert.

Concept: Shared Use Path

A shared use path was confirmed as the sole preferred option for this segment. Narrowing traffic lanes provides space for a 12-14' shared use path and 6-14' wide landscape buffer depending on the amount of roadway width reduced.

See Chapter 3 for representative cross sections as part of the recommended concept.

Buffer Considerations

Given the proximity of the existing and proposed path to the roadway, discussion with Project Team members and the public focused on the types of horizontal and vertical separation necessary for path users' safety and comfort. Currently a guardrail is located between the lake and the narrow pedestrian path. Discussion considered whether curb separation and a grassy buffer is enough, or if a guardrail should be located between pedestrians and the roadway to prevent a motor vehicle from veering into the pedestrian space. During future phases of design, the DCR will perform a formal analysis to determine whether a guardrail is necessary, and further community engagement will establish what is needed for path users' comfort.

Segment C: Mystic Valley Parkway from the Rotaries to Alewife Brook Greenway

While roadway width stays a consistent 38'-40' throughout Segment C, parkland width varies. Thus, multiple facility types and materials were considered for this segment.

A shared use path was proposed from the outset. However, several members of the public expressed concerns over a paved path and how it would affect the pedestrian experience, riverbank character, and ecological impacts. The following ideas from the public and Project Team impacted decision-making over materials for the path:

- Asphalt was viewed by several people as harsh, less comfortable, and not in keeping with the natural area. Asphalt will also reduce stormwater infiltration.
- Stabilized aggregate was proposed in place of asphalt for a stable but more “naturalized” path surface that would prevent cyclists from speeding through. Consider permeable asphalt to maintain infiltration.
- No path exists on the Medford side of the river in this segment, so the Arlington side must support higher use.
- An asphalt-paved path better supports mobility needs and family-friendly biking away from the roadway.
- An asphalt path is more durable and lower maintenance than stabilized aggregate on a yearly basis.

Concept: Shared Use Path

The Project Team ultimately settled on recommending an asphalt shared use path with reinforced shoulders. The path was originally proposed to be 12'-14' wide. The materials

considerations listed above resulted in a proposal for an asphalt path that was 10' wide to minimize impacts on stormwater infiltration. However, 10' does not adequately support side by side riding in two directions. Thus, the Project Team agreed on a path that is primarily 11' wide and which can widen to 12' where space allows or reduce where needed to 10' in constrained spaces.

Shoulders were originally discussed to be 2' wide and stabilized aggregate to support pedestrians seeking a softer surface. However, stabilized aggregate set against asphalt requires a high level of maintenance, so shoulders are proposed to be reinforced turf instead.

Concept: Pedestrian Path

While the primary path is proposed as asphalt, Project Team members agree that additional pedestrian-only paths with soft surfaces should be installed wherever the riverbank area is wide enough to accommodate them in addition to the paved path. The pedestrian paths will help provide more of a nature-trail experience that is valued by community members. Surfacing for this facility is recommended to be stabilized aggregate.

On-Street Bike Lanes

Given excess roadway width in Segment C, additional on-street bike lanes were proposed to respond to those who expressed a desire for as much user separation as possible.

Option A: Two-Way Bikeway

Beyond establishing the need for on-street bike lanes, the type of bike facility was discussed as well. When asked,

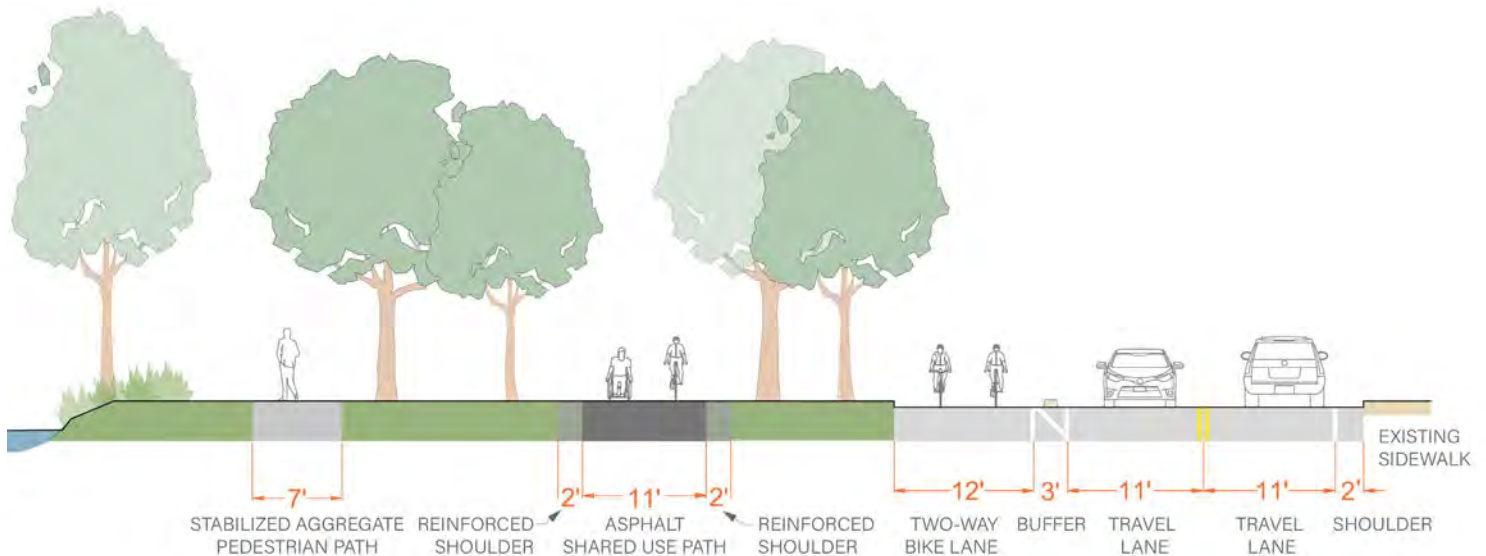


Figure 16: Segment C with a two-way bikeway option and additional pedestrian path in wide parkland area

the public confirmed, via survey, a preference for a two-way buffered bike lane on the river side of the parkway. This would support social riding and easier passing while keeping cyclists away from driveways and numerous intersection crossings.

Given existing roadway width, an 11'-wide two-way bike lane with 3' wide buffer could be matched with 11'-wide travel lanes and 2' shoulder on the south or sidewalk-side of the parkway.

One challenge to implementing the two-way facility, however, is the need to install a vertical buffer that provides more separation and more comfortable riding for cyclists headed counter to the direction of vehicular traffic. Many types of buffers exist, but DCR has not yet confirmed a low maintenance option for standard use on parkways. In the long-term a two-way bikeway might be incorporated with a raised curb buffer, whether achieved with poured-in-place concrete or precast concrete curb drilled into the pavement. In the short-term, a two-way facility may not be comfortable or safe.

Option B: One-Way Bike Lanes

For the short term, a pair of one-way buffered bike lanes is recommended to more quickly improve conditions for cyclists along Mystic Valley Parkway, though it is acknowledged that a lack of a vertical buffer is likely to result in more drivers parking or temporarily pulling over into the bike lanes.

Each bike lane is proposed at 6'-wide and matched with 2' buffers and 11' travel lanes.

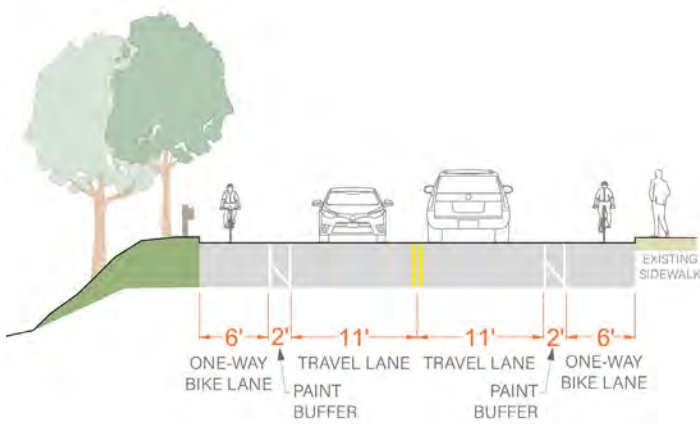


Figure 17: One-way bike lane pair option in Segment C

Placemaking and Ecological Preservation

Placemaking

Placemaking is a dynamic set of practices focused on reflecting and celebrating local culture and history in the design and programming of public spaces. Placemaking can take many forms, intersecting with public art, wayfinding, and preservation practices. While the term “placemaking” does not inherently recognize an existing sense of place and cultural and natural assets, it is recognized in this study that a strong sense of place already exists and should be protected.

The Mystic Valley Parkway parkland corridor is a beloved resource, offering valuable connections to the Mystic River and Lower Mystic Lake. Placemaking should focus on protecting and enhancing ecosystems and viewsheds, and adding opportunities for nature observation and immersion. While not limited to these, three types of placemaking spaces are proposed below that are intended to support enjoyment and understanding of the ecology of the river and lake.

Gateway

Gateways are small plaza areas located at key access points to the trail, and serve to welcome trail users with orientation and wayfinding information. Some may include amenities such as bike parking (see bike rack considerations on page 20), seating, and interpretive materials. Gateways can be placed near intersections or neighborhood connections to the trail.



Figure 18: Gateway example from Clinton River Spillway Bike Path, MI (photo credit: Peter Pahl)

Scenic Overlook

Overlooks offer opportunities to rest, relax, and take in views of Lower Mystic Lake and Mystic River. “Stepdowns,” stone steps or ramps that provide direct access to the river, may also be considered at certain locations. Overlooks and stepdowns can stand alone or be integrated with a nature opportunity area.



Figure 19: Overlook example from Charles River Greenway, MA (photo credit: Herb Nolan)



Figure 20: Stepdown example from Habirshaw Park, Yonkers, NY

Nature Opportunity Area

Nature opportunity areas are immersive natural areas that can be experienced along the shared use path. As noted above, they may include an overlook, or simple seating to allow people to linger and relax. Nature opportunity areas may encompass riparian restoration, native pollinator habitat plantings, and rain gardens for stormwater filtration. Interpretive materials and programming can help to foster stewardship for the ecosystems of Lower Mystic Lake and the banks of Mystic River.

Locations for Placemaking

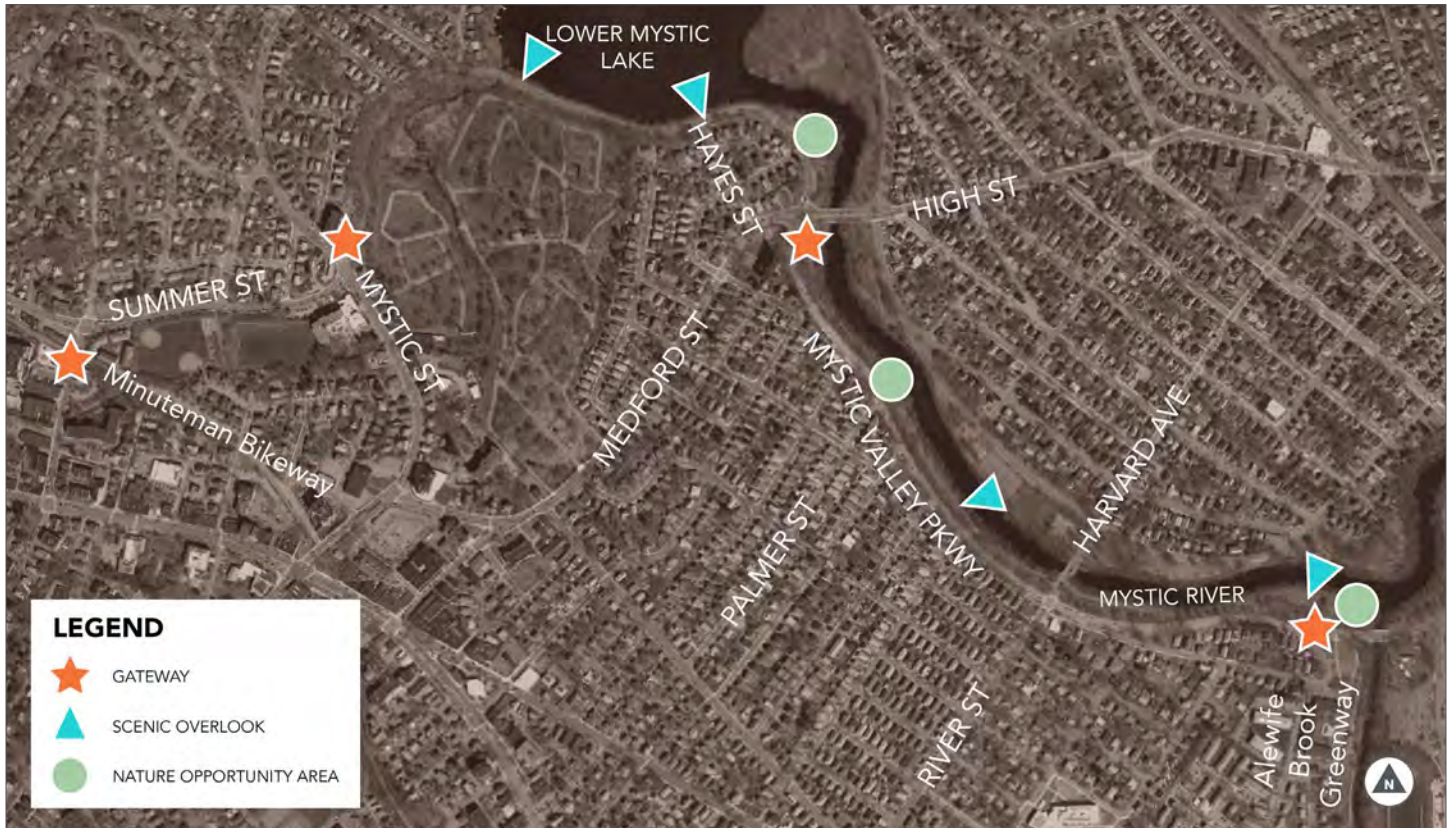


Figure 21: Placemaking types and proposed locations

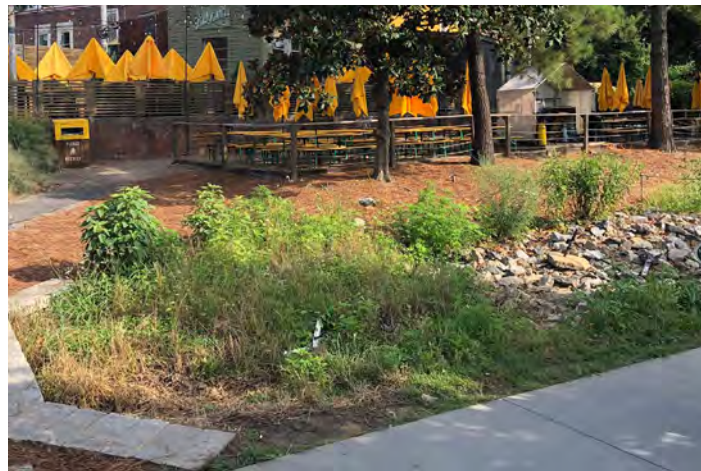


Figure 22: Rain garden with native plants along the Atlanta Beltline

The plan above proposes locations for gateways, overlooks, and nature opportunity areas based on available space, existing use, and site context. The final quantity, locations, and detailing of these spaces will be developed in future design phases.

Other Placemaking Considerations

Wayfinding

Community meeting attendees and survey respondents identified a need for wayfinding throughout the corridor. Wayfinding includes signage, pavement markings, and other features that make up a directional system. Wayfinding can help brand the corridor and establish spatial hierarchy so users are able to recognize entrances or intersections. Wayfinding can be designed to aid the aging, visually challenged, and others. Wayfinding might be integrated into a larger trail or bike network program that helps people navigate between the Minuteman Bikeway, Alewife Brook Greenway, and other paths and bike lanes in the area to local destinations.

Seating

Several benches are located along the riverside paths today. While bench locations are not shown in Figure 22, seating areas are recommended at regular intervals along the path to provide opportunities for respite. Benches, seatwalls or other types of seating are recommended. Barrier-free access to each seating area will be included as well as open paved space that can accommodate companion seating for those in wheelchairs, strollers, and the like.

Bike Racks

It is of the utmost importance that bike racks are provided throughout the corridor to allow people on bikes to fully enjoy unique spaces and adjacent uses. Bike racks should be located in areas where people are likely to rest, temporarily leave the path, or switch transportation modes. This includes gateways, bus stops, and viewsheds/overlooks, among others.

Provide sufficient parking space to support cargo bikes and wider bikes and tricycles often used by adaptive cyclists. Racks should be placed so they do not obstruct path activity. Rack styles should allow two points of contact, and tubing should be no greater than 2" in diameter for bike lock compatibility.

Ecological Preservation

It is important to protect existing healthy vegetation throughout the corridor. Several large canopy trees are located in the parkland area along Mystic Valley Parkway, and both canopy and understory species are located along the banks of the river and Lower Mystic Lake. As many trees as possible will be maintained and protected along with understory plants that provide a variety of wildlife habitats. Even dead tree snags and leaf litter perform important roles of supporting those habitats and should be allowed to remain. Preserving trees will help maintain shade, habitat, and carbon storage while additionally helping to prevent erosion.

Beyond trees, consider how to use Nature Opportunity Area plant selection to support habitat, infiltrate stormwater, and prevent erosion. Plantings can be incorporated into rain gardens or swales along the path to mitigate the impacts of constructing an impervious asphalt path in regulated Riverfront Area (see "Permitting" on page 40).

Unprompted, some public meeting and survey participants requested lighting for safety reasons and to support evening path use, while others opposed lighting for the aforementioned reasons. Since lighting contributes to light pollution and has significant affects on wildlife, we recommend carefully considering these environmental aspects as well as goals of the community, safety and sense of security, expected use (such as morning and evening commuting), and maintenance. If incorporating lighting, ensure fixtures adhere to [Dark Sky](#) principles.



Figure 23: Large canopy trees provide shade along Mystic Valley Parkway and in parkland between the parkway and Mystic River.



Figure 24: Leaf litter should be allowed to remain to provide habitat for pollinators and invertebrates and to replenish soil nutrients as leaves decay.

Second Public Meeting and Survey

The second public meeting was held virtually on March 30, 2022 to gather community feedback on proposed trail design and placemaking concepts. A presentation was followed by a question and answer period to help clarify concepts, and a general discussion period produced several comments related to concerns about materials, the need for vertical separation (a guardrail) from cars south of the lake, roundabout operations, and parking and path access along Summer Street.

A second public survey was released with the meeting and addressed facility types, materials, placemaking, and concerns at selected intersections. See key highlights on this page and a full survey report in Appendix B.

Summary of Survey Results by Project Segment Segment A: Summer Street (Mill Street to Mystic Street)

The majority, 75%, of respondents supported removing parking, narrowing vehicular travel lanes, and providing a landscaped buffer for the shared-use path. However, many respondents anticipated conflict over parking removal, and several suggested the Town seek other long-term parking solutions for events at the athletic fields.

Segment B: Mystic Valley Parkway from Mystic Street to Rotaries

Respondents requested improved trail connections from Kimball Road and Davis Avenue to the path.

Segment C: Mystic Valley Parkway from the Rotaries to Alewife Brook Greenway

The focus of voting and comments in this segment was on path materials as described under Shared Use Path: Materials and Width on the previous page. The majority, 88%, of respondents support an asphalt path.

Summary of Survey Results by Intersection Summer Street at Mill Street / Cutter Hill Road

Some respondents are concerned about the loss of turn lanes. One respondent suggested signaling the Minuteman Bikeway crossing on Mill Street.

Summer Street/Mystic Street/Mystic Valley Parkway

The majority, 86%, of respondents supported the diagonal bike/pedestrian crossing at this intersection. There were concerns about traffic backups on the Mystic Valley Parkway, and interest in measures that could be taken to

minimize additional congestion with the implementation of the crosswalk and signal.

High Street Rotaries and Bridge

Respondents supported the proposed multimodal safety measures but requested further information on bicycle movements around the rotaries. There was concern over driver behavior in both the existing and proposed conditions.

River Street / Harvard Avenue Bridge

Respondents recommended an automatic bike/pedestrian phase with each signal cycle.

Summary of Responses to Placemaking

Respondents broadly want placemaking efforts to uphold and enhance natural character along Lower Mystic Lake and the Mystic River. The following are comments on questions that asked about overlooks and nature opportunity areas:

Scenic Overlooks

- An overlook at the southeast side of Lower Mystic Lake, at Hayes Street, is the preferred of four options provided.
- Integrate overlooks with nature opportunity areas, or find other ways to locate them at some distance from the roadway to provide trail users with a relaxing experience.
- Avoid constructing overlooks in sensitive habitat areas, such as a swan-nesting site at the mouth of Alewife Brook.

Nature Opportunity Areas

- Native plantings for stormwater filtration and wildlife habitat were the most favored features proposed for nature opportunity areas.
- Respondents suggested ways to minimize ecological impacts of new trails in the floodplain, including permeable materials or boardwalk.

Additionally, respondents recommended adding interpretive materials on local culture and history along the trail.

Requested amenities included benches, picnic tables, bike parking, restrooms, drinking fountains, interpretive and wayfinding signage, river access, a dog park or off-leash area, public art, and a parking area north of High Street bridge. (The Project Team eliminated this as an option for parking for safety reasons.)

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**RECOMMENDED
CONCEPTUAL DESIGN**

03

Design Recommendations by Segment

The content of Chapter 3. Concept Design Options, outlined the many details considered for the path. Discussions with the Project Team, focus group, and the public resulted in a recommended concept for a 10'-14' wide asphalt shared use path as the unifying element throughout the project corridor. The asphalt path is supplemented by existing sidewalks along Summer Street and south of the Medford Street/High Street roundabout along the Mystic Valley Parkway. Also south of the roundabout, pedestrian-only soft-surface paths within parkland and on-road bike lanes are proposed where feasible.

This chapter details widths, materials, safety and accessibility considerations, and placemaking recommendations for the path as it responds to the distinct character of the three corridor segments. Safety, placemaking, and operational improvements for priority intersections are also addressed in detail, as are recommendations for neighborhood connections. Chapter 4 includes implementation recommendations to guide the next stage of development for the connector.

Long-Term vs Short-Term

The recommended shared use and pedestrian path concepts are proposed for the long-term. One-way buffered bike lanes in Segment C are a quick build solution given they will be painted. It is recommended to consider options for vertical separation, as painted buffers do not prevent cars from entering and parking in bike lanes. Consider whether either one-way bike lanes or one 12' wide two-way bike lane with a 3' buffer can be constructed with durable materials into the parkway over a longer timeline.

Intersection improvements detailed in this chapter are also proposed for the long-term. However, some spot improvements are identified where they will provide major benefits for little cost in the short-term.



Figure 25: The recommended concept includes a continuous shared use path plus on-street bike lanes and pedestrian paths as feasible

Segment A: Summer Street from Mill Street to Mystic Street

Multimodal Safety & Accessibility

While a cross section without parking is preferable so that path and buffer width can be maximized, removing all the parking next to Buzzell Field and Arlington Catholic Field will require a parking study and plan for parking redistribution. For this reason, the near-term recommended design for Segment A maintains parking on the south side, so widths of each portion of the corridor are minimized to support the widest path possible while parking is present.

The corridor includes an 11' wide shared use path, the minimum width needed to support side-by-side riding. The path is buffered 1' from the chain link fence along Buzzell Field to provide shy space for path users while providing a hard edge to support the asphalt.

On the roadway side, the path is separated from parked vehicles by a 3' wide buffer that is recommended to be paved for use by those accessing vehicles. This buffer is the minimum width necessary to prevent vehicle passengers from opening doors into the path and to support signage. It is recommended that overhead utility lines be buried if feasible. Alternatively, they will need to be relocated to the new buffer, allowing for a safe, unimpeded path for people walking, rolling, and biking. Seating cannot be located in the buffer.

New striping is proposed to formalize parallel parking along the south curb with a 7' wide parking lane. Vehicular travel lanes are narrowed to 10' wide. The existing sidewalk on the north side of Summer Street is maintained.

All cross sections between pages 25 and 27 face east. Cross sections are preliminary concepts only and not for construction.

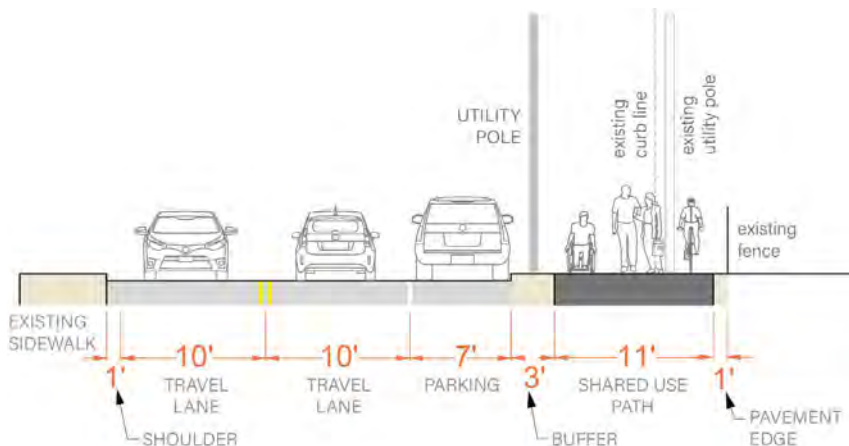


Figure 26: Segment A - Summer Street next to Buzzell Field and Arlington Catholic Field



Figure 27: Looking west on Summer Street along the narrow sidewalk with utility poles adjacent to a chain link fence and Buzzell Field. Recommendations in this chapter detail the path as it responds to the changing character of the corridor.

The small portion of the path on Mill Street connecting to the Minuteman Bikeway is addressed within the “1. Summer Street at Mill Street” on page 30.

Placemaking/ Ecological Preservation

Planting and bike rack opportunities are limited in this segment to intersections and crossings as the narrow buffer will provide access to vehicles. However, pedestrian scale lighting, wayfinding, and buffer materials that enhance the look of the trail can be considered for use in the Design Development phase.

Segment B: Mystic Valley Parkway from Mystic Street to High Street Rotaries

Multimodal Safety & Accessibility

For Segment B, a 12'-14' wide shared use path is located along the west to north side of the parkway as it curves. The path width can change according to available space as the roadway is narrowed.

Closer to the Mystic Valley Parkway/Mystic Street/Summer Street intersection, a 6'-10' wide buffer is proposed to be located between the path and roadway. As the curve rounds

to the east, the buffer is proposed between 6' and 14' wide depending upon available space.

Vehicular travel lanes are narrowed to 11' with 2' shoulders, though shoulders may be required to narrow briefly at the Mill Brook culvert to maintain adequate path width.

Where feasible, it is recommended to pull the path away from the lake to increase space for stormwater management and to help prevent erosion by allowing for more vegetation to stabilize the bank. More narrow travel lanes are proposed that will help reduce vehicular speeds.

While speeds will be reduced with narrowed roadways and the buffer between the roadway and path will be widened in

some locations, guardrails are recommended to be analyzed for use in the buffer along the full length of this segment. Guardrails may particularly be necessary along Lower Mystic Lake given the bank steeply drops off. The public had also called for guardrails to increase a sense of safety and comfort.

Placemaking/ Ecological Preservation

Tree planting can be considered where the buffer is at least 10' wide. However, also analyze whether the path might be pulled away from edge of the lake to allow for an expansion of the riparian edge.

A scenic overlook is proposed along the lakeshore for path users to enjoy expansive views of Lower Mystic Lake. The overlook(s) can be located either near the Mill Brook culvert or across from Hayes Street.

The open lawn area just north of the High Street bridge is envisioned as a Nature

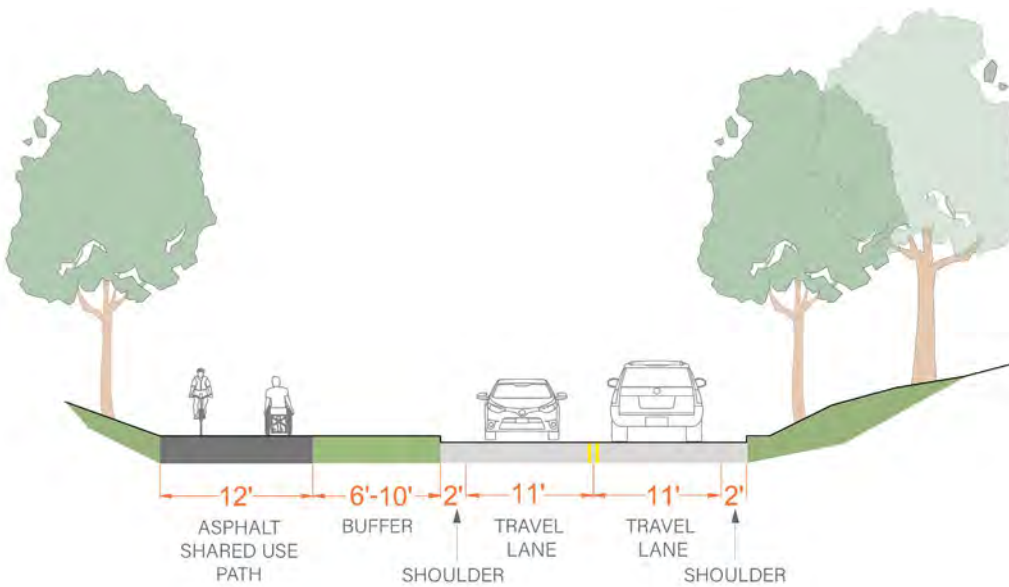


Figure 28: Segment B - Mystic Valley Parkway just east of Mystic Street/Summer Street/ Mystic Valley Parkway intersection

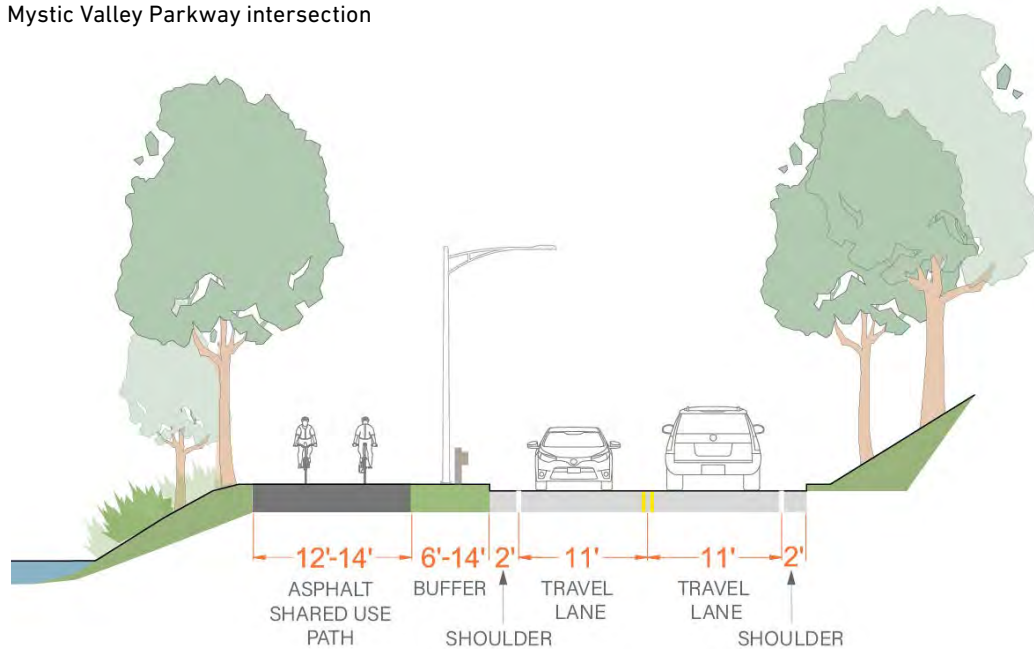


Figure 29: Segment B - Mystic Valley Parkway along Lower Mystic Lake

Opportunity Area, with native plantings that support habitat and rain gardens as well as space for passive recreation.

Segment C: Mystic Valley Parkway from the Rotaries to Alewife Brook Greenway

Multimodal Safety & Accessibility

Segment C includes many opportunities for active recreation. Along the river, the primary facility is an asphalt shared use path, primarily 11' in width. This width can be adjusted up or down by 1' to respond to wider or more constrained conditions. The path is lined by 2' reinforced turf shoulders to each side for users who prefer a soft-surface for running or walking.

With vehicular travel lanes on Mystic Valley Parkway narrowed to 11', a pair of 6' wide bike lanes with 1' wide buffers is proposed in the roadway. It is recommended to provide vertical delineation in these buffers for added safety and to prevent vehicles from parking in the bike lanes.

Where parkland width allows, an additional 6'-7' wide pedestrian-only stabilized aggregate path is proposed between the shared use path and Mystic River.

Placemaking/ Ecological Preservation

Nature Opportunity Areas are proposed to be incorporated in locations with the highest anticipated use and appropriate settings for riparian restoration, habitat protection, and environmental education purposes. Another scenic overlook is proposed at the river's edge, and stepdowns are recommended for use in limited locations so people can more easily access the water. Path Gateways with wayfinding and information will be located at key access points to the path, such as major intersections or neighborhood connections.

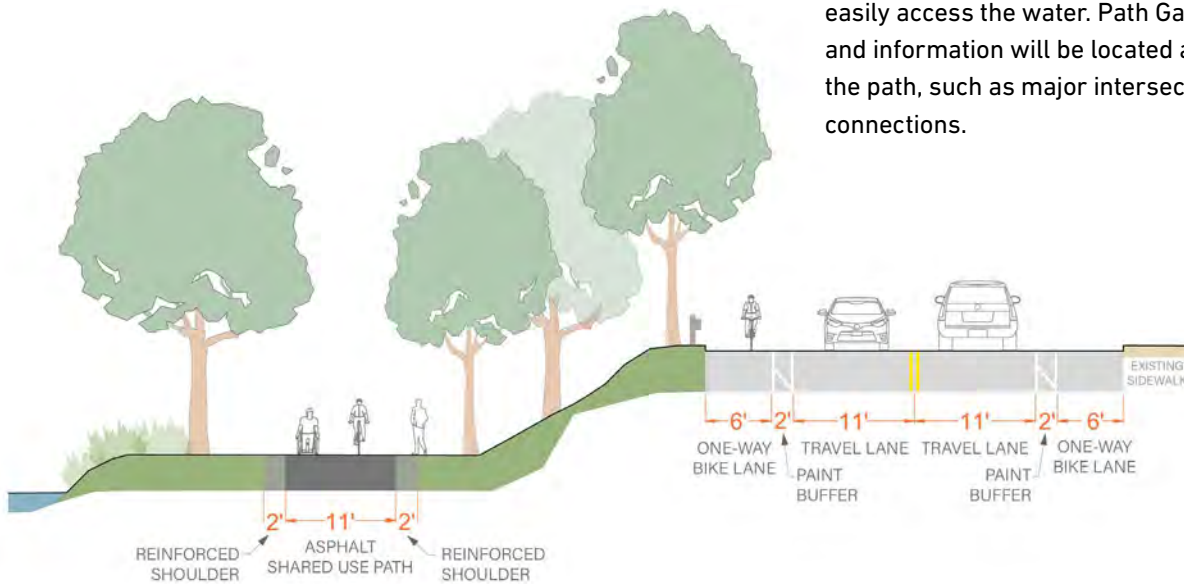


Figure 30: Segment C - Mystic Valley Parkway along Mystic River just south of Medford Street rotary

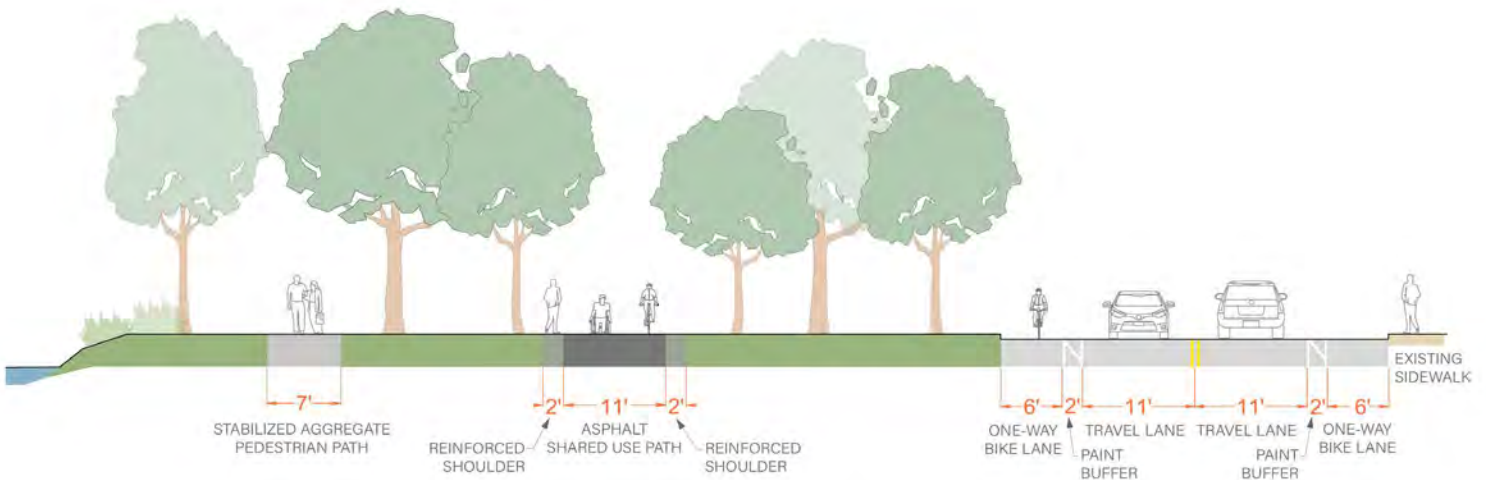


Figure 31: Segment C - Mystic Valley Parkway along Mystic River where space for a pedestrian path is available

Path Perspectives

The perspective graphics on this and the following page offer conceptual visions for how the Mystic path connector will look and feel once installed. These graphics reflect the cross section and placemaking recommendations provided in this chapter.

Lower Mystic Lake: The perspective below illustrates how a narrowed roadway along Lower Mystic Lake can provide space for a wide shared use path. A small overlook opens views of the lake and provides a resting area for path users. Existing roadway lighting must move with the buffer and can be designed to provide pedestrian scale path lighting, though limit fixtures to prevent light pollution.



BEFORE: The existing path along the Mystic Valley Parkway is too narrow to support shared use, and only confident cyclists bike in the roadway.



Figure 32: (above) the existing condition and (below) proposed path corridor and overlook along Lower Mystic Lake



BEFORE: A crosswalk at Palmer Street leads to green space but no path. The soft surface path near the river is inaccessible for many users.

Mystic River at Palmer Street Crossing: The perspective illustrates how the asphalt shared use path and stabilized aggregate pedestrian path can be incorporated together into this wide space, with an accessible connection made to both paths from the Palmer Street crossing. The shared use path has stabilized shoulders for runners. Native plantings can be incorporated in limited masses or a more extensive nature opportunity treatment.



Figure 33: (above) the existing condition and (below) proposed path and parallel pedestrian path across from Palmer Street on the river

Priority Intersections

1. Summer Street at Mill Street

Summer Street at Mill Street/Cutter Hill Road intersection is envisioned as a gateway to the Minuteman Bikeway or the Mystic trail connector for active users headed eastbound on Summer Street and for those connecting between paths. Changes to the Minuteman Bikeway crossing would be made in coordination with the Minuteman Bikeway Planning Project. Multimodal safety and operations recommendations are keyed to the plan below.

Multimodal Safety & Accessibility

- ① Install a shared use path on the east side of Mill Street from the Minuteman Bikeway north to the intersection and continuing on the south side of Summer Street to better support travel adjacent to athletic fields while reducing potential crossing conflicts at intersections.
- ② Add bike lanes west of the intersection while maintaining the existing bus stop on the northwest corner.

- ③ Narrow travel lanes, and remove existing medians to create space for bike lanes and path.
- ④ Remove the eastbound and northbound right turn lanes to provide space for the path and buffer.
- ⑤ Provide high visibility pedestrian and bike crossing markings on all legs. Where feasible, consider providing protected queuing space for cyclists on corners.
- ⑥ Provide ADA compliant, directional curb ramps and pedestrian signals.
- ⑦ Shorten the Minuteman Bikeway crossing with a curb extension. See the Minuteman Bikeway Planning Project for other recommendations for the crossing.

Operations

Intersection operations will change with the removal of the eastbound and northbound right turn lanes. Overall intersection delay increases during the peak hours, but all movements will be operating within capacity and with acceptable delay for the urban context.

Short-Term: Reduce corner radii with painted curb extensions and flexposts, separator curb, or planters.

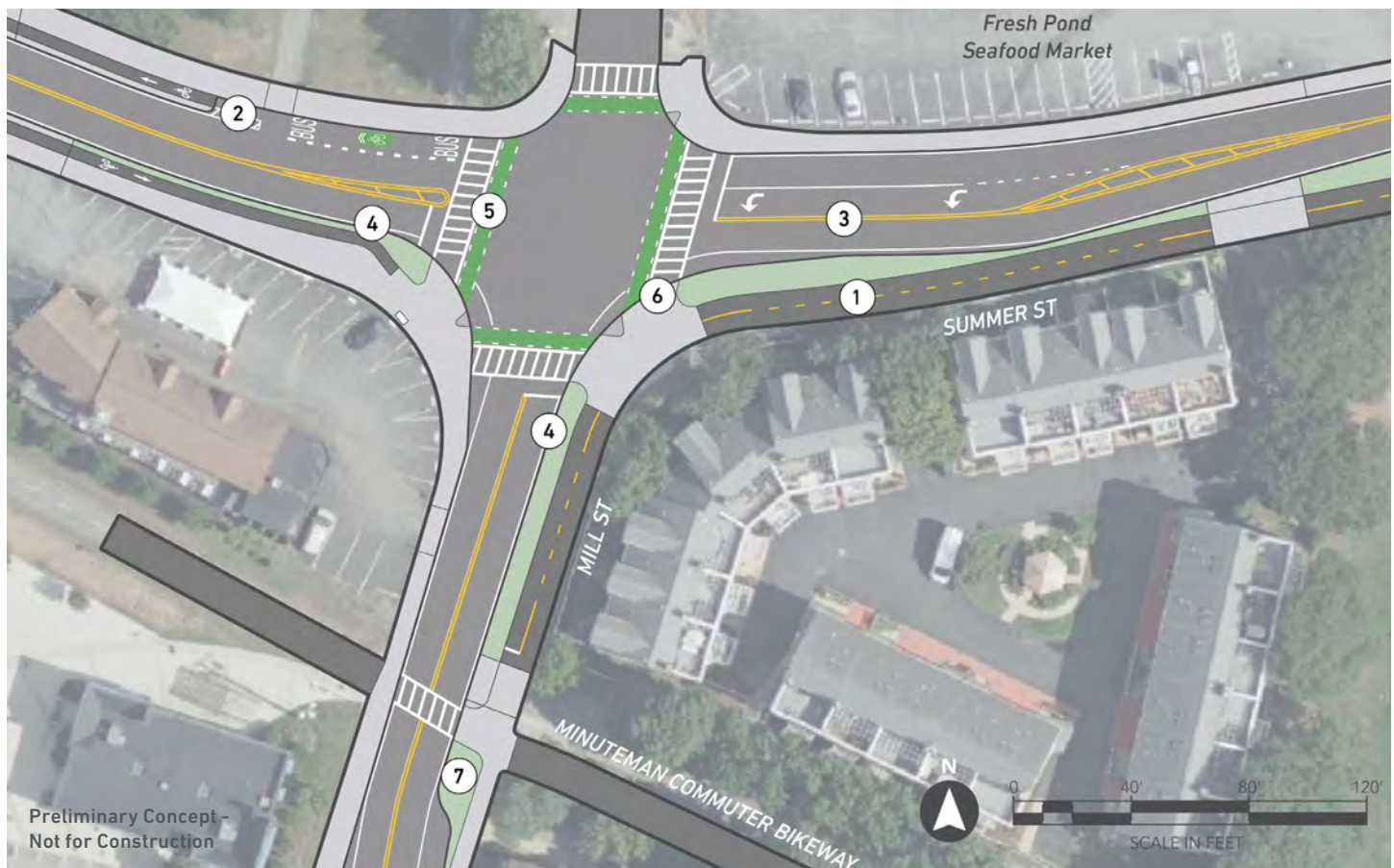


Figure 34: Proposal for Summer Street at Mill Street intersection south to the Minuteman Commuter Bikeway.

2. Mystic Valley Parkway at Summer Street / Mystic Street

This oblong, offset intersection is envisioned with a diagonal crossing for path continuity and conflict-free crossing for path users.

Multimodal Safety & Accessibility

- ① Provide a direct, one-phase (exclusive phase) crossing for people biking and walking on the path.
- ② Realign the right turn slip lane, and add a large curb extension to reduce intersection size and shorten crossings.
- ③ Provide bike lane connections through the intersection with transitions from the path where space allows.
- ④ Consider providing truck aprons where painted lines are shown on corners to reduce turning radii.
- ⑤ Add a high visibility crosswalk across the southern leg of Mystic Street to create a more direct connection for pedestrians headed down to Mount Pleasant Cemetery. Provide directional crossings with ADA compliant ramps and pedestrian signals throughout.

- ⑥ As the parkway moves downslope, grade the path with curves as needed to ensure ADA accessibility.
- ⑦ Consider closing the gas station driveway in the long-term. The one-way entry driveway can also be narrowed. Reduce turning radii as much as feasible.

Placemaking

- ⑧ Consider options for stormwater planting and other placemaking features on the southwest corner.
- ⑨ Establish a gateway onto the path with wayfinding, plantings and other features on the northeast corner.

Operations

- Provide an exclusive diagonal crossing phase every cycle to give path users frequent crossings and to maintain similar average pedestrian delay to existing conditions.
- Motor vehicle operations are anticipated to remain operating at or under capacity during peak hours.

Short-Term: Reduce corner radii with paint and delineators. Evaluate signal timing adjustments and potential for shorter cycle lengths that reduce pedestrian/cyclist delay.

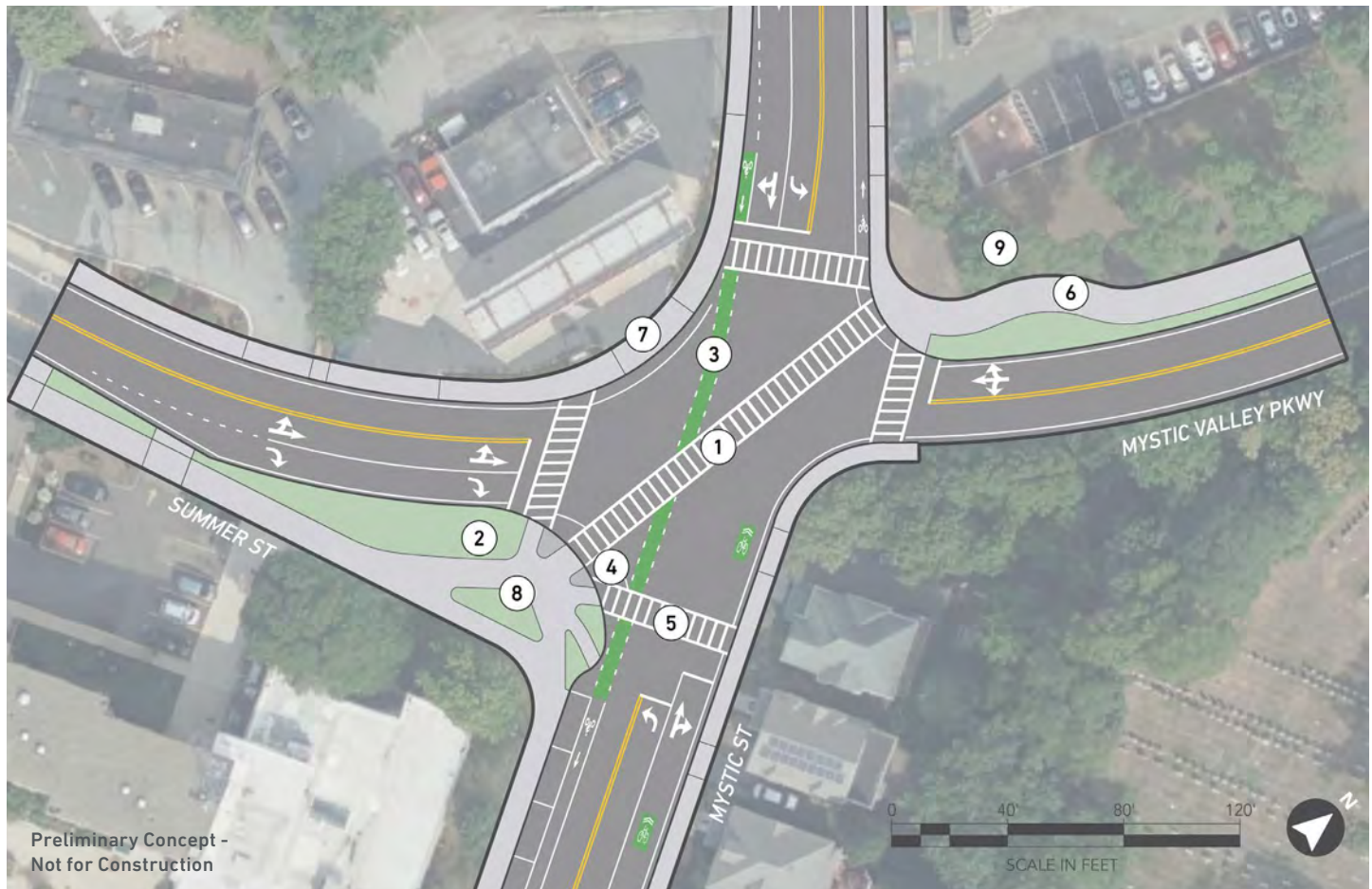


Figure 35: Proposal for diagonal crossing at Mystic Valley Parkway / Mystic Street / Summer Street intersection

3 & 4. Medford Street / High Street Rotaries & High Street Bridge

The rotaries in Arlington and Medford are proposed to be substantially redesigned to create modern roundabouts with safe facilities and crossings for walking and biking.

Multimodal Safety & Accessibility

- ① Tighten and formalize traffic lanes, particularly within both rotaries to create a single travel lane.
- ② Provide wide, high visibility crossings on all legs, including both ends of High Street bridge, for use by pedestrians and cyclists. Set crossings at least one car length away from the roundabout yield lines so drivers do not block crossings as they wait to enter the roundabout.
- ③ Consider RRFBs at the primary path crossing.
- ④ Provide at least 6' of refuge width within splitter islands on all roundabout legs.
- ⑤ Configure roundabouts with mountable truck aprons around the center islands and perhaps on outside corners to keep the travelway narrow for passenger vehicles but traversable for trucks and buses on Medford Street/High Street (Route 60).
- ⑥ Add bike lanes across the bridge. Due to excess roadway size, two-way bike lanes can be provided on both the north and south side of the bridge. Whenever the bridge is

slated for major modifications, consider providing generous shared use paths on both sides.

- ⑦ Provide seamless transitions to paths on both sides of the Mystic River. Parkland slopes will require attention to grading to ensure accessibility.
- ⑧ Consider the transition to one-way bike lanes to the south on Mystic Valley Parkway. Add bike lanes to connecting streets (Medford St, High Street, Arlington St).
- ⑨ Provide signage at the driveway to encourage path users to look for incoming vehicles.

Placemaking and Ecological Preservation

- ⑩ Configure path to avoid tree removal.
- ⑪ Consider providing a small gateway area with seating and signage as a midpoint along this trail and for those connecting in from other streets.
- ⑫ Provide accessible seating, and consider areas to maintain open views to river.

Operations

Motor vehicles see reduced delay in the morning peak hour and no changes to operations in the evening and Saturday midday peak hours.

Short-Term: Tighten geometry with quick-build materials. Install crosswalks and curb ramps across legs that do not have them already.

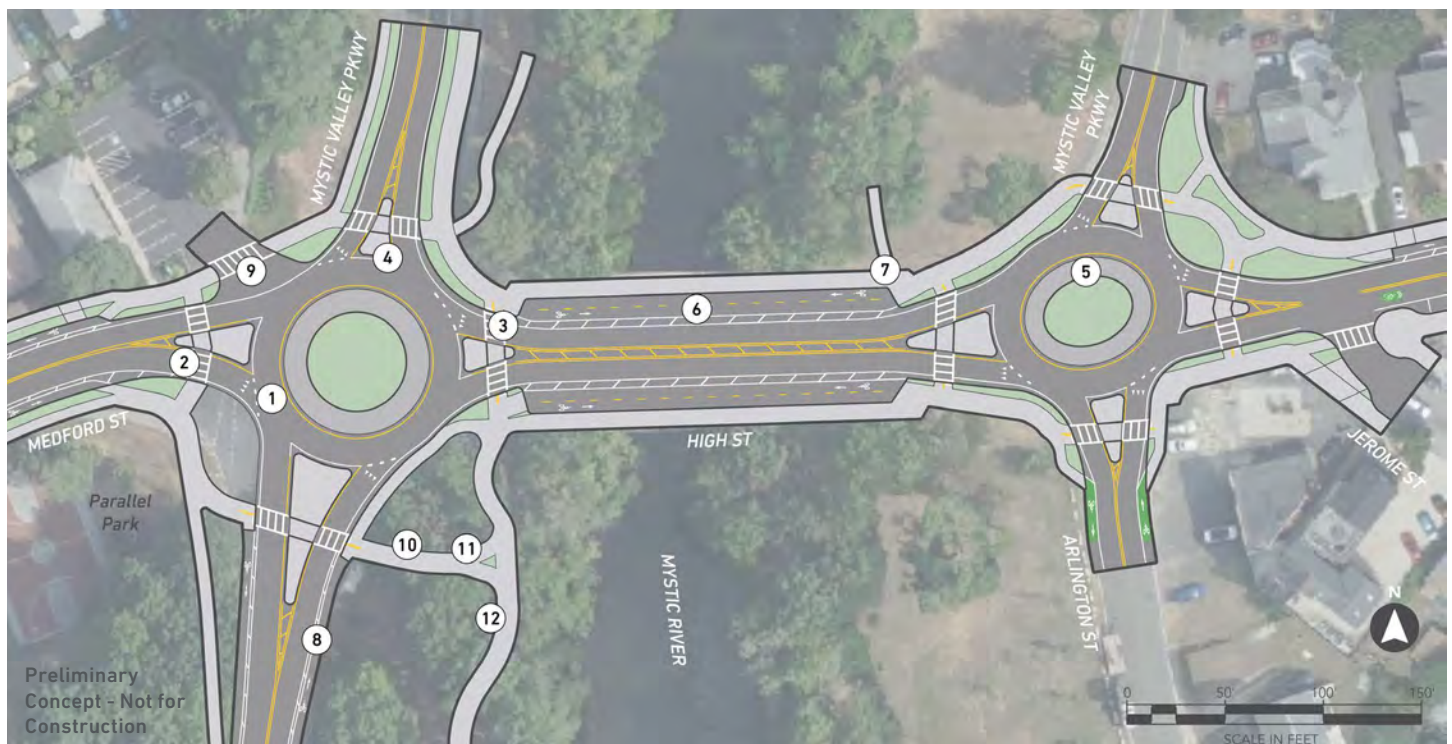


Figure 36: Proposal for Medford Street / High Street rotaries to modern roundabouts between Arlington and Medford

5. Mystic Valley Parkway at River Street / Harvard Avenue Bridge

Toward the eastern end of the study area, the Mystic Valley Parkway at River Street and Harvard Avenue Bridge is envisioned to consolidate crossings north of the intersection.

Multimodal Safety & Accessibility

- ① Provide a wide crosswalk on the north side of the intersection for path users plus pedestrians on existing sidewalks.
- ② Construct the trail so it curves in toward the crossing and discourages people from crossing midblock to the north. Ensure that curb ramps meet ADA, and consider push button location for path and intersection use.
- ③ Provide two-stage bicycle turn boxes to support bike connections in all directions in the intersection. Two-stage turn boxes require Interim Approval for use under FHWA.
- ④ Add bike lanes across Harvard Avenue Bridge to strengthen connections between Arlington and Medford.
- ⑤ Connect the proposed one-way bike lanes on Mystic Valley Parkway through the intersection.

- ⑥ Close the gas station entrance on the southeast corner to provide queuing space for cyclists and pedestrians.
- ⑦ Narrow other gas station driveways and mark bike crossings.

Placemaking and Ecological Preservation

- ⑧ Configure path to avoid tree removal.
- ⑨ Provide accessible seating, and consider areas to maintain open views to the river.

Operations

- Active users will have frequent crossing opportunities with the exclusive pedestrian phase placed on recall. Users will experience less delay with shortened cycle lengths in the evening and Saturday midday peak hours.
- Motor vehicles continue to see intersections operate similar to existing conditions in all peak hours.

Short-Term: Reconstruct curb ramps to be ADA compliant. Evaluate signal timing adjustments to reduce pedestrian/cyclist delay.



Figure 37: Proposal for River Street / Harvard Avenue Bridge intersection

Neighborhood Connections

While major intersections must be prioritized for safety and operational improvements, some minor intersections and neighborhood access paths also require modifications. These locations provide walking and biking connections to/from neighborhood streets and help increase path function and comfort for both recreational cyclists and commuters.

In the study area, neighborhood connections are proposed at Buzzell Field, Lower Mystic Lake, and along Mystic River. Specific locations include the following intersections as listed below and shown in Figure 38:

- Summer Street at Victoria Road,
- Mystic Valley Parkway at Hayes Street, and
- Mystic Valley Parkway at Palmer Street.

Existing neighborhood connections for pedestrians and cyclists are desired to be improved at Mystic Valley Parkway at Kimball Road and Mystic Valley Parkway at Davis Avenue. New automobile access or parking near these paths is not recommended. These are access paths with different issues to address versus the road crossings. See "Neighborhood Access Paths" on page 36 for more detail.

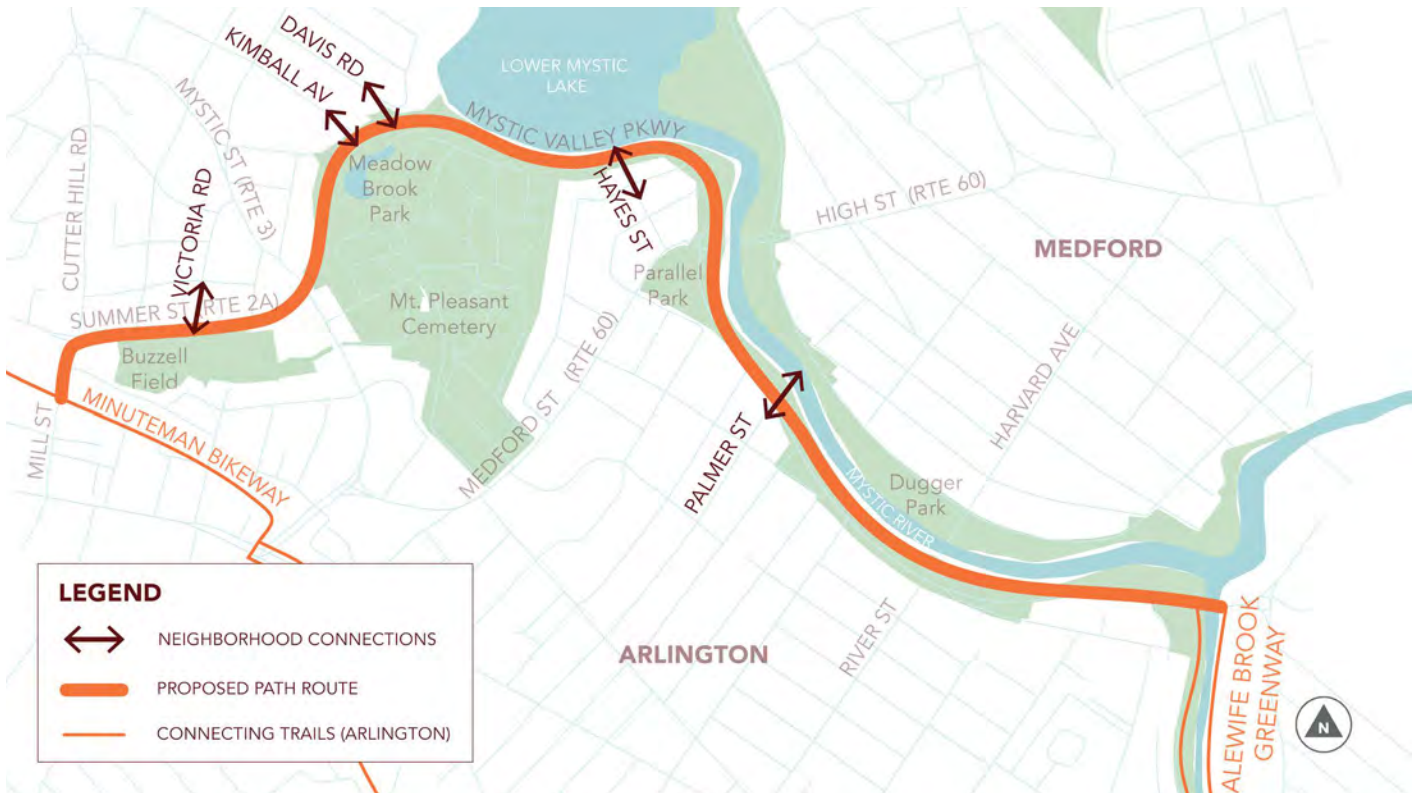


Figure 38: Map of proposed neighborhood connection locations, including existing connections that are recommended to be modified

Recommendations for Minor Intersections

Where path users must cross either Summer Street or Mystic Valley Parkway in a mid-block crossing, enhanced crosswalk treatments can be used to reduce crossing lengths and increase visibility. Possible countermeasures include the following:

- Narrower travel lanes (recommended throughout this project)
- High visibility marked crosswalks (recommended at all marked crosswalks)
- Raised crosswalks
- In-street pedestrian crossing signs (R1-6)
- Curb extensions
- RRFBs



Figure 39: R1-6

Neighborhood Connection Example: Summer Street at Victoria Road

Summer Street at Victoria Road is detailed in Figure 41 on page 35 as an example of a neighborhood intersection connection. This intersection is important as it incorporates the entry to Buzzell Field.

The example shows parking retained on the south side, and the existing crosswalk on Summer Street is moved to the west side of Victoria Road to align the crossing with the entry to Buzzell Field. By placing the crosswalk on the west side, those crossing from north to south will gain improved sightlines. However, those crossing south-to-north will still need to look over parked cars.

Install a curb extension on the south side of Summer Street if retaining parking to shorten the crossing and to prevent parked vehicles from blocking sightlines directly next to the crosswalk. Consider installing raised crosswalks to slow vehicles. Provide yield markings and signage to make drivers aware of expected yielding behavior.

If parking is retained, and sight distance is restricted by parked cars for northbound crossings, consider an RRFB to increase visibility of people crossing.

Mystic Valley Parkway At Hayes Street

Mystic Valley Parkway at Hayes Street currently does not include a marked crossing, but neighbors use this location to cross to Lower Mystic Lake. Vehicles currently move fast along this stretch of road, so crosswalk enhancements are essential. At a minimum, pair a high-visibility marked crosswalk with

advanced warning signage for drivers and in-street pedestrian signage (R1-6 sign).

Placing the crossing on the west side of the intersection will maximize visibility for westbound drivers as they exit the large curve. This placement also distances vulnerable users from abutter fences that block visibility on the eastern side of the intersection. Due to the potential for high speeds and restricted visibility, an RRFB should be considered at this location.



Figure 40: Mystic Valley Parkway at Hayes Street lacks a crossing

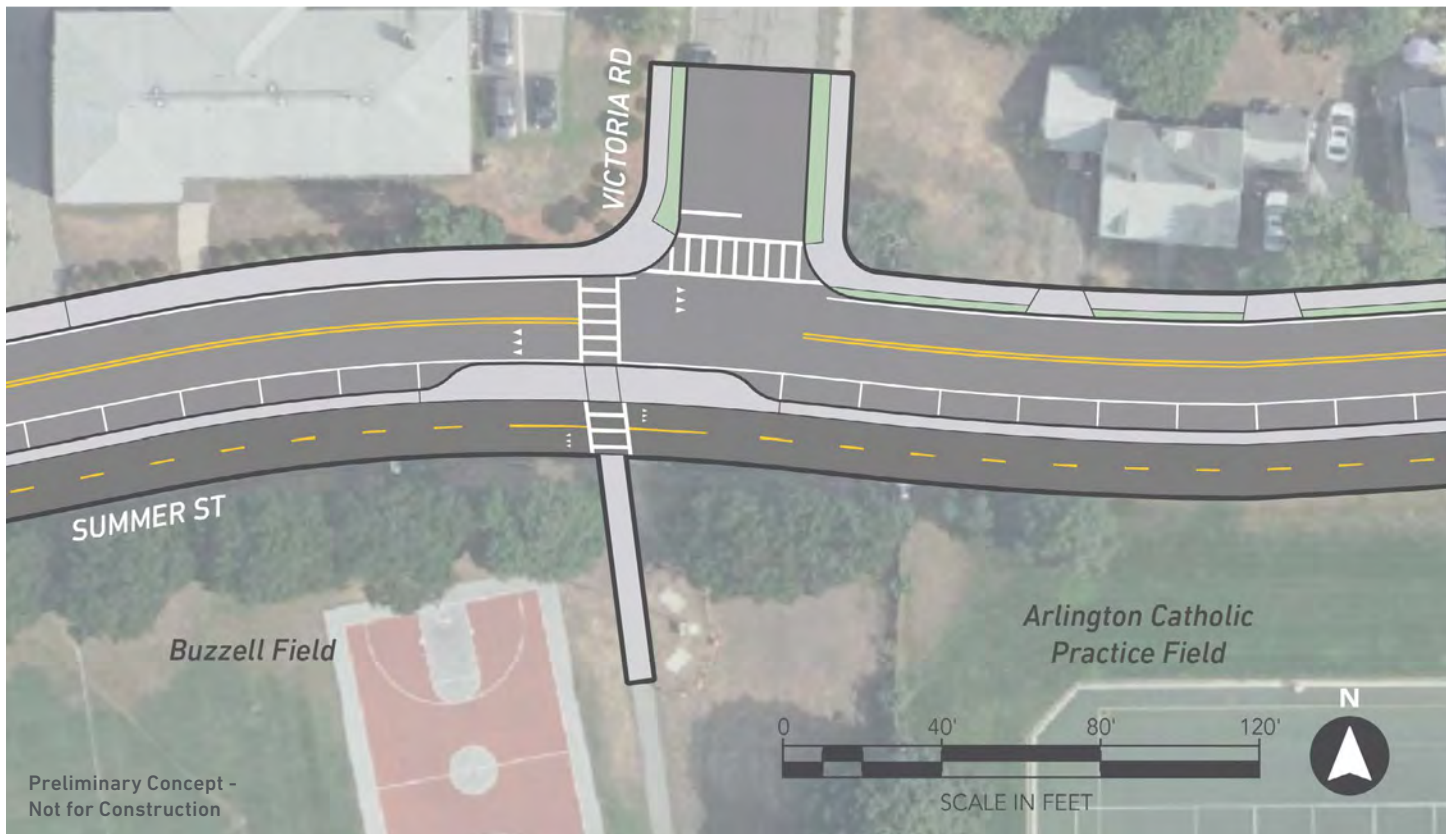


Figure 41: Proposal for realignment of crosswalk and other safety improvements and formalized parking at Victoria Road neighborhood connection across from Buzzell Field

Mystic Valley Parkway At Palmer Street

Mystic Valley Parkway at Palmer Street includes an existing crosswalk across Palmer Street and across the parkway to the north of the intersection. Install bike conflict markings given the addition of on-road bike lanes.

Replace existing pedestrian warning signage on the park side with pedestrian/bike warning signage or in-street pedestrian signage (R1-6 sign). Consider installing advanced warning signage and a raised crosswalk or RRFB to increase visibility and suggest priority for vulnerable users. Curb extensions to reduce corner radii should be considered to slow vehicles turning to and from Palmer Street. Finally, update curb ramps to meet ADA.



Figure 42: Mystic Valley Parkway at Palmer Street

Neighborhood Access Paths

The existing access paths at Kimball Road and Davis Avenue currently collect leaf litter from overhead trees and will require maintenance as formal neighborhood connections.

Mystic Valley Parkway At Kimball Road

The access path from Kimball Road to the existing path along Mystic Valley Parkway includes cracked asphalt and metal bollards. An accessible connection is possible through the removal of tree saplings and a diagonal or switchback path alignment. A curb or low retaining wall will protect the path edge from wearing away. Large granite markers (see Figure 44) or boulders on either side of the path will identify the access point and keep a clear width for pedestrian use but not for vehicular use. Special signage and pavement will be incorporated in certain locations to highlight these gateways.

Mystic Valley Parkway At Davis Avenue

The Davis Avenue access path is also asphalt-paved. Determine the condition and use of drainage structures within the path. Repave and provide an edge treatment. Also consider installing granite markers that signal path entry. Due to greater steepness and surrounding trees, this connection might not achieve ADA accessibility.



Figure 43: Mystic Valley Parkway at Davis Avenue



Figure 44: Granite marker signaling the entry to the Alewife Brook Greenway. The same type of marker can be used for neighborhood access paths.

Third Public Meeting

The third and final public meeting was held virtually on June 22, 2022. The meeting presentation included an overview of the feasibility study report, results from the 2nd public meeting and survey, and discussion of recommended concepts for path cross sections and priority intersections. Highlights from the question and comment period are summarized here. Full notes on public feedback, including Project Team responses to comments, and a record of the Zoom chat is located in “Appendix B: Public Meeting Notes & Automated Survey Reports” on page 53.

Comments on Path Material and Project Process

As with the previous meetings and surveys, at least a few meeting attendees expressed concern over path material and chosen widths. There is concern that the path is really for people on bikes, and that fast cyclists will make the space uncomfortable for other users. One commenter pointed out that the path along Summer Street will have too much conflict with people biking past those dropping kids off to the field. Others stated that the path needs to be asphalt to be bikeable, but designers should be cautious about creating straight shots that turn the path into a bike highway.

Stemming from the discussion about path materials and width, a few community members expressed concern about the project process. They questioned whether the project had been advertised to equal bases of interest in case there was a particular messaging boost in the cycling community. The commenters feel that the voices of people on bikes were outweighing those of pedestrians and other potential path users. The Project Team response included a listing of all the ways the project meetings and surveys have been advertised, but the Team acknowledges that some voices may have gotten lost. The Team also stated that wrestling with path width and material has been a big component of the project.

Intersection Operations

- When asked about intersection operation impacts, the Project Team responded that, based on traffic modelling analysis, all intersections will operate similar to existing conditions and/or the incoming volumes will be under capacity (the amount of vehicle traffic is able to be accommodated without oversaturating the signal).
- Commenters expressed concern about impacts to the Mill/Summer intersection with changes to access at Arlington High School.

Bike Lanes

- Those who would use the on-street bike lanes asked about the possibility for vertical separation. The Project Team stated that there are options, including flexposts and planters. However, in the short-term, vertical separators are not planned along Mystic Valley Parkway due to maintenance concerns.
- Responding to a question about bike signals, the Project Team stated that while those are not currently in the design, they will be considered in the next stage of design.

Rotaries

- One commenter requested that the Town collaborate with the project team for Parallel Park reconstruction, which is planned to happen within the next two years.
- A couple individuals expressed concern about pinch points for those trying to travel from Arlington east and north up Mystic Valley Parkway on the Medford side toward Winchester.
- Finally, one attendee expressed a preference for a style of roundabout design with more separation between pedestrians and cyclists. This may be considered in the next stage of design, but the current concept shows multiuse mixing zones.

Hayes Street Crossing

An attendee asked whether pedestrian signals would be installed at Hayes Street, noting that several cars have crashed into a fence there and that the curve is dangerous. The Project Team acknowledges the need for advanced warning signage and very likely an RRFB in addition to narrowed travel lanes slowing vehicles.

Flooding

Some people asked about plans to mitigate flooding both on the path and in the roadway. The Project Team addressed big-picture pieces of the design, and the Town stated that they are looking into funding opportunities to address flooding more widely around Arlington. It was noted in the chat that Segment B from the Mystic/Summer/MVP intersection to the Medford Street rotary closes due to flooding.

Other Considerations

- Rules, etiquette, and routing expectations should be made clear with signage and signals, particularly at the roundabouts and for cyclists using pedestrian signals.
- Trees are critical infrastructure and need to be preserved.

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IMPLEMENTATION

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This chapter covers implementation considerations to help advance pieces of the trail and connections with other bike infrastructure. Considerations include phasing, permitting, cost opinions, and maintenance.

Phasing

Phase I

The short-term improvements recommended under intersection concepts are proposed as Phase I, to be completed in the next 1-2 years. These are not accounted for in costs.

Phase II

It is recommended that the Town of Arlington modify Segment A - Summer Street, Priority Intersection 1 - Mill Street/Summer Street intersection, and Priority Intersection 2 -Mystic Valley Parkway/Mystic Street/Summer Street as part of a single phase to ensure continuity in construction and path operations.

Phase III

Along the Mystic Valley Parkway, DCR might choose either to install the entire trail and two intersections in one project. Or, consider splitting Phase III into two projects:

- **Phase IIIa**, Priority Intersections 3 and 4 - Medford Street/High Street Rotaries & High Street Bridge. The rotaries will be a significant undertaking to reconstruct into roundabouts. It is recommended to install the roundabouts before the path, if not installing both simultaneously, given the path will be much easier to adjust than the roundabouts.
- **Phase IIIb**, Segments B and C plus Priority Intersection 5 - Mystic Valley Parkway at River Street/Harvard Avenue Bridge. Intersection 4 is proposed for inclusion with the segments given the lack of geometric changes required.

Permitting

The environmentally and culturally sensitive areas within the path corridor are described in this section and in “Appendix A: Memorandum of Existing Conditions” on page 51. The next steps of design should include a complete site survey showing the exact extents of these regulated areas. Only when they are mapped and the design progresses through 75% Construction Documents will the full potential impacts be clarified and quantified.

Because of the historic significance of this parkway and ecological importance of the corridor, the permitting and review process may be extensive. The following section provides an overview of likely permits required.

During the further development of the plan, the design should take measured to avoid impacts to sensitive areas. If it is unavoidable, mitigation measures will be necessary.

Wetland Resource Areas

Along the trail corridor the following Wetland Resources Areas have been identified, for which their protection is legislated by the Massachusetts Wetlands Protection Act (WPA, MGL c.131 § 40) and its implementing regulations at 310 CMR 10.00. The Massachusetts Department of Environmental Protection (DEP) implements 310 CMR on the state level. The Town of Arlington Conservation Commission implements 310 CMR through their Article 8 Wetlands Protection Bylaw and Regulations for Wetlands Protection. As previously noted, the exact impacts on these areas will be determined in future design phases.

Freshwater Wetland Bordering on Lake/Pond (Great Pond)

Lower Mystic Lake is classified as a Great Pond, a lake or pond with a water surface area of 10 acres or more. The Lake and Mystic River fall under Chapter 91 jurisdiction and may require review if structures, such as an overlook, or fill are located inside the high water line of the pond.

Land Subject to Flooding (Bordering and Isolated)

The boundary of bordering land subject to flooding is the maximum lateral extent of floodwater which will theoretically result from a 1% annual chance (or 100-year) storm. The boundary is determined by reference to the most recently available flood profile data prepared for the Town with work as proposed through the National Flood Insurance Program (NFIP) under the Federal Emergency Management Agency (FEMA). FEMA Flood Insurance Rate Maps are reflected in the FEMA Q3 Flood Zone layer in Figure 45. The Q3 Flood layers identify 1% annual chance floodways (layer AE) and regulatory floodway (layer X).

Per the Arlington Regulations for Wetlands Protection, compensatory flood storage shall be at a 2:1 ratio, minimum, for each unit volume of flood storage lost at each elevation.

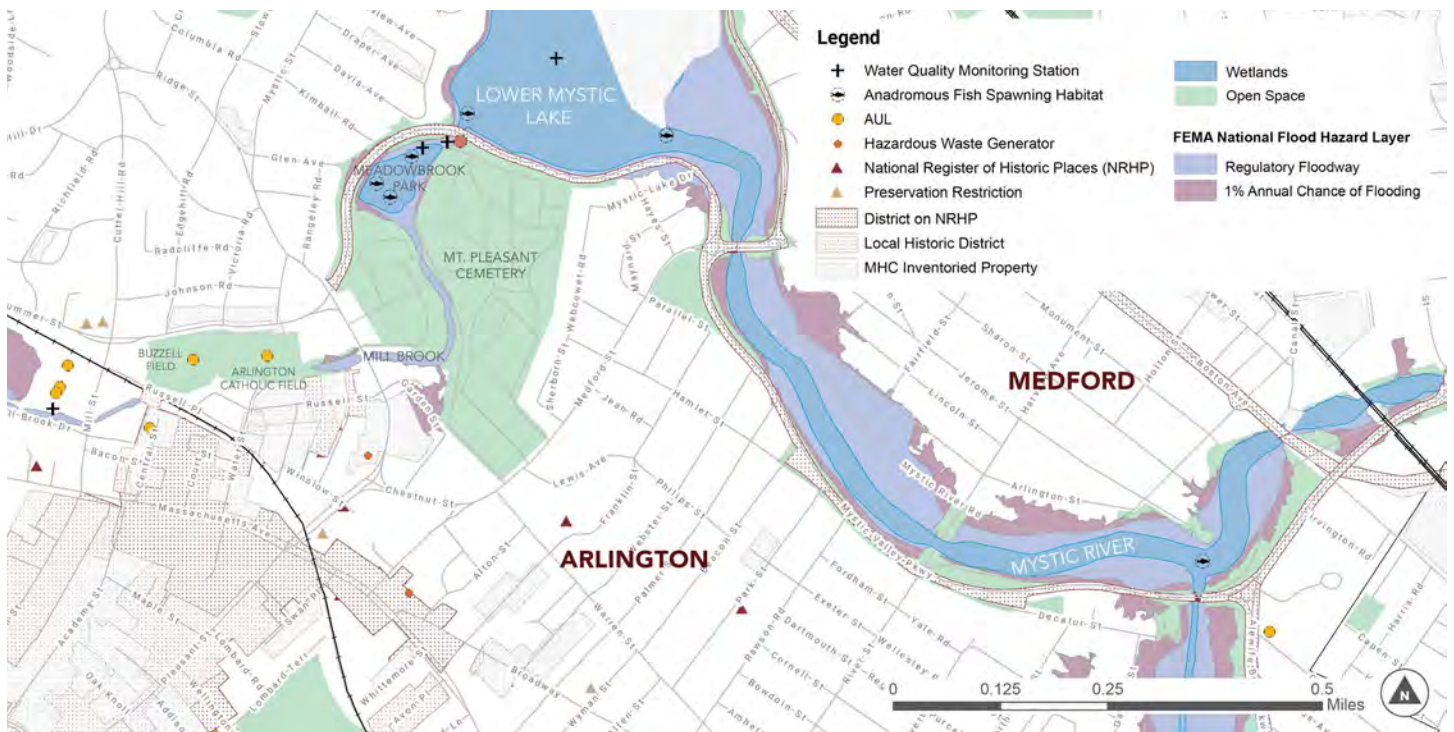


Figure 45: Map of floodways, wetlands, open space, and hazardous waste sites

Riverfront

Land within 200’ of Mystic River and Mill Brook is considered regulated Riverfront Area. Landscape/habitat restoration may be necessary. A determination about mitigation will partly be based on whether any development exists closer to the rivers than the work proposed. If closer development exists, no mitigation would be required. Regardless, along the river and Lower Mystic Lake, it is recommended to try and increase the buffer width between the path and banks.

Habitat

It was determined in the site analysis that no NHESP Natural Communities of Conservation Interest or Estimated or Priority Habitats of rare wildlife are located within the study area. Similarly, no Areas of Critical Environmental Concern (ACECs) as designated by the Secretary of Energy and Environmental Affairs (EEA) are located in the project area. These determinations were made with data from the MassMapper GIS portal; additional field assessment of habitat must be made by a qualified environmental scientist.

Anadromous fish spawning habitat and water quality monitoring stations are located around the mouth of Mill Brook into Lower Mystic Lake.

Hazardous Material Sites

Buzzell Field and Arlington Catholic playing field are identified as MassDEP regulated hazardous material site

with Activity and Use Limitations (AULs) as these properties were once a solid waste disposal area according to the 2010 Comprehensive Site Assessment & Remedial Action Plan.

MEPA

It is not anticipated that this project will require an Environmental Impact Report under the Massachusetts Environmental Protection Act (MEPA, 301 CMR 11.00). However, an Environmental Notification Form or other MEPA review may be needed depending on the amount of fill and design of overlook facilities in the floodway, or removal of five (5) or more trees of 14” diameter at breast height or larger.

Historic and Cultural Resources

Major project area components are designated historic or cultural resources. The Mystic Valley Parkway is listed on the National Register of Historic Places. The High Street bridge, Medford Street Rotary, Nelson Circle (rotary on the Medford side of the High Street bridge), and Meadow Brook culvert are all documented historic structures by the Massachusetts Historical Commission (MHC). Notably, the Mystic Valley Parkway tree canopy is also an MHC designated historic resource. With this concentration of cultural resources in the study area and as parkway land is owned by DCR, changes to the parkway corridor will require MHC review, in compliance with both federal and state regulations.

Table 2: Regulated elements, permit review and agencies, and application requirements

Regulated Resources	Permit or Review Required	Permitting Agency	Project Area or Component	Application Requirements
Floodplain and Floodway	No Rise Certification	FEMA	All areas within 100' of Mystic River or Lower Mystic Lake	75% CDs <ul style="list-style-type: none"> Hydraulic impacts evaluation by PE State Engineer review and approval
Floodplain and Floodway (bordering land subject to flooding)	Mass DEP review (per 310 CMR 10.57)	Mass. DEP	Mystic River floodplain	75% CDs
Floodplain/Floodway, Riparian Habitat, Wetlands, Waterbodies	Conservation Commission Review	Town of Arlington	<ul style="list-style-type: none"> All areas within 200' of Mystic River Areas within 100' of Lower Mystic Lake Meadow Brook wetlands 	75% CDs NOI Administrative Filing Documents (4)
Wildlife Habitat	Mass DEP review (per 310 CMR 10.59-10.60)	Mass. DEP	TBD: riparian and aquatic habitat areas along Mystic River and Lower Mystic Lake	75% CDs Site evaluation by ecologist or wildlife biologist
Public Waterfront	Public Waterfront Act review (Chapter 91)	Mass. DEP	Mystic River and Lower Mystic Lake frontage	75% CDs
Historic Landscapes and Structures	Mass. Historical Commission Review	Mass. Historical Commission (MHC)	<ul style="list-style-type: none"> Mystic Valley Pkwy Mystic Valley Pkwy tree canopy High Street bridge Rotaries at either end of High Street bridge Meadow Brook culvert 	75% CDs
Impervious area, Wetlands, Historic structures, Mature trees	Mass. Environmental Protection Act (MEPA)	Mass. Executive Office of Energy and Environmental Affairs (EEA)	<ul style="list-style-type: none"> Mystic River floodplain Meadow Brook wetlands Historic Meadow Brook Culvert Historic Mystic Valley Parkway tree canopy Other trees and forested areas 	Environmental Notification Form (ENF)

Summary of Planning-Level Cost Opinion

As reflected in Table 3, and in “Appendix D: Traffic Analysis for Proposed Concepts”, planning-level cost opinions have been created for each segment and Priority Intersection 3. Medford Street / High Street Rotaries & High Street Bridge as a separate project. These cost opinions give a preliminary sense of potential expense for construction, mobilization, temporary traffic control, plus escalation to 2026, an assumed construction year.

Cost opinions do not include easement and right-of-way acquisition, design services or construction engineering, permitting, inspection, or construction management, or the cost for ongoing maintenance. Cost opinions include a 30% contingency because at the conceptual level of design and without a topographic survey, there are many unknowns.

Cost opinions reflect the split between the Town of Arlington and DCR jurisdictions and potential phasing. Generally, cost items were identified for each cross section and applied on mileage basis, and the various features of each intersection were added into the appropriate segment.

Cost opinions for Summer Street include two versions, the primary where utility lines are undergrounded, and an alternate opinion with only relocation of existing utility poles. Undergrounding utilities adds significantly to the expense of building the path but also provides significant benefits to the feel and functionality of the path corridor.

The Priority Intersection 3 and 4 rotaries to roundabouts conversion is pulled out as its own project given potential complexities to redesign both sides of the bridge in this area. However, the rotaries could be included in either DCR segment or one large project as desired.

Table 3: Segment and planning-level cost opinion summary. Values are rounded up.

Segment/Intersection	Planning-Level Cost Opinion
Town of Arlington	
Phase II: Segment A & Priority Intersections 1 and 2 - Minuteman Bikeway to Mystic Street via Mill Street and Summer Street. Includes Mill Street and Mystic Street/Mystic Valley Parkway Intersections	\$5,170,000 (Underground Power & Telecoms)
	\$2,800,000 (Utility Poles Relocated)
DCR	
Phase IIIa: Priority Intersections 3 & 4 - Medford Street/High Street Rotaries and High Street Bridge (MassDOT)	\$2,405,000
Phase IIIb: Segments B & C + Priority Intersection 5 - Mystic Valley Parkway from Mystic Street to Alewife Brook Greenway (no rotaries) + River Street/Harvard Avenue Bridge Intersection	\$7,830,000

Maintenance Recommendations

Maintenance is essential to guaranteeing that the path is an asset to the Town of Arlington and to the regional trail network for years to come. An organized maintenance program will ensure that path infrastructure is usable, safe, and accessible. Maintenance should not only address path infrastructure but also protect site vegetation and habitat and prevent erosion or water quality impacts to Lower Mystic Lake and the Mystic River. Maintenance should be regularly scheduled plus planned to address long-term needs as the upkeep of the path affects whether users enjoy their experience and the perception of the path as safe and inviting.

This section provides information on maintenance items for the Town of Arlington and DCR. Information is provided on routine maintenance, maintenance schedule considerations, and monthly and seasonal maintenance items. Annual and long-term remedial maintenance are addressed as well.

Design for Maintenance

As this feasibility study was developed in coordination with landowners, design decisions were made in part to reduce maintenance burdens. Path and shoulder materials, the configuration of bike lanes, and potential types of Nature Opportunity Areas were all discussed in terms of maintenance. It is recommended that design continue to recognize maintenance needs and limitations in balance with the goals of the project.

Maintenance Responsibilities

Responsibility for maintenance of the Mystic River Path is that of the Town of Arlington and DCR in their respectively owned Segments.

The Town of Arlington will maintain the path from the Minuteman Bikeway crossing at Mill Street to the start of the Mystic Valley Parkway at Mystic Street. This segment includes Priority Intersection 1 - Summer Street/Mill Street and the north, south, and western legs of Priority Intersection 2 - Mystic Valley Parkway/Mystic Street/Summer Street.

Maintenance for the DCR-owned portions of the trail includes Segments B and C, the east side of Priority Intersection 2 - Mystic Valley Parkway/Mystic Street/

Summer Street, and Priority Intersections 3, 4, and 5 (the rotaries and River Street/Harvard Avenue bridge).

MassDOT is responsible for the inspection and maintenance of High Street Bridge, Harvard Avenue Bridge, and the Mill Brook Culvert.

Path Elements to Be Maintained

The following are basic path elements to be maintained by both the Town or Arlington and DCR in their respective segments. In addition to the path itself, maintenance should also include all support spaces along the corridor - Gateways, Scenic Overlooks, and Nature Opportunity Areas. Management of these spaces can be coordinated with other agencies or local environmental preservation groups.

Path and Intersection Pavements

- Pavement markings
- Debris removal
- Pavement sweeping
- Seal cracks / patch pavement
- Infill, level, re-stabilize 'soft-surface' paths
- Snow removal

Vegetation

- Mow lawns
- Clear sight-lines
- Control overgrowth
- Re-plant dying or displaced vegetation

Signage

Site Amenities (Seating, Bike Racks, etc.)

- Maintain components
- Remove graffiti

Structures, such as Overlooks

A Coordinated Approach

Both the Town and DCR are experienced trail operators and managers. For this path, it is recommended to develop a coordinated management and maintenance approach that ensures the path is constructed and maintained to the same standards. Trail managers should:

- Ensure that protocols for inspection, maintenance, and reporting exist and are followed

- Document all issues and crashes, and review this documentation regularly to determine whether changes to the trail should be made to reduce risk
- Seek funding plus partnerships to assist with maintenance
- Establish and communicate means for community members to report maintenance issues

Routine Maintenance

Routine maintenance is regularly scheduled, addresses minor maintenance, and reduces long-term costs by preventing major issues. This includes weekly, monthly, and annual maintenance in addition to regular trail inspections.

Trail Inspections

It is recommended to conduct regular trail inspections as part of routine maintenance to document issues and provide a baseline for determining future maintenance costs. Inspections can also help track maintenance response rates, which when analyzed and addressed, can lead to a more efficient maintenance system. Documented inspections and responses are important to risk management and addressing potential liability.

The best trail maintenance programs inspect and respond to maintenance issues at the same time. This requires planning and equipment, such as paint, saws, graffiti removal supplies and trash bags, to always be carried with maintenance staff.

Weekly Maintenance

Weekly routine maintenance addresses safety issues and maintains the natural beauty of the trail. Issues such as encroaching vegetation can impede trail users, reduce visibility, and damage trail surfaces. The best trail maintenance programs inspect and respond to maintenance issues at the same time. See Table 4 for weekly maintenance items.

Monthly and Seasonal Maintenance

Seasonal maintenance is performed at standard times throughout the year. Concerns include the repair or replacement of facilities and the management of vegetation. Vegetation management may include replacing plant material and controlling invasive species. Seasonal maintenance also prepares facilities for expected weather conditions. See Table 5 for seasonal maintenance items.

Issue	Description of Activity
Trash	Pick up trash/recycling along the trail
Trash Cans	Empty trash/recycling cans
Glass and/or Debris	Sweep up glass/debris gathered on the trail
Graffiti	Paint over or clean graffiti via spot chemical wash
Landscaping	Trim shrubs and trees that encroach on the trail
Inspection	Perform inspection focused on issues that can be easily addressed and issues affecting trail user safety

Table 4: Sample Weekly Maintenance Schedule

Frequency				Issue	Description of Activity
Spring	Summer	Fall	Winter		
X	X	X		Mowing	Mow and edge grass
X		X		Landscaping	Perform major pruning of trees and shrubs to ensure limbs do not encroach on clear zones
X	X	X		Weed Control	Trim or remove weeds encroaching on or growing through the trail
X	X	X	X	Drainage / Erosion	Stabilize eroded areas
X	X	X	X	Inspection	Perform detailed inspection of all trail features

Table 5: Sample Routine Monthly Maintenance Schedule by Season

Annual Maintenance

Annual maintenance remedies specific issues, as well as repairs, replaces, or restores major components that have been damaged during the trail's lifetime. Table 6 below provides a glimpse of annual maintenance items.

Issue	Description of Activity
Signage	Replace signage
Amenities	Repair/repaint benches, trash cans, and other trail amenities
Lighting	Inspect lighting system and upgrade where necessary
Revegetation	Fill in locations in landscape where plants and trees have died. Consider a climate-smart native planting requirement
On-Street Bike Facilities	Inspect 2x per year and identify needed repairs
	Sweep at least 2x per year or according to street sweep schedule

Table 6: Sample Annual Maintenance Schedule

Annual maintenance should address the natural assets of the trail corridor. To manage vegetation, replace any diseased or dead plant material and control invasive species. Maintaining vegetation also helps to control erosion and facilitate natural drainage. Extreme erosion damage can cause hydroplaning, washouts, or trail blockages. Clear debris from all drainage devices to keep drainage features functioning as intended, thus minimizing trail erosion and resulting environmental damage. Inspect and repair any damage to trails due to drainage issues.

Remedial Maintenance

Remedial maintenance occurs in longer time intervals, from 5 years to 10-20 year cycles, for maintenance issues that do not need to be addressed annually. Remedial maintenance issues may require more advanced planning, such as bridge repair, restriping, and path resurfacing or replacement.

Issue	Description of Activity
Pavement Markings	Restripe pavement markings (at crosswalks, along bike lanes, etc.)
Trail Surface	Seal-coat asphalt trail surface (in the spring)

Table 7: Five Year Maintenance Schedule

Prioritizing Projects

Major maintenance needs will need to go through a prioritization process to determine which needs are addressed first and to help coordinate staff and allocate maintenance funds. Consider establishing a process that classifies priorities according to:

- **Priority Issues**, such as wash-outs, that affect user safety, risk management, and environmental degradation
- **Priority Needs**, as expressed by the public or through political requests, that affect safety, user experience, or partnerships
- **Projects for Construction**. These are projects to move forward based on funding and the combination of issues they address or needs they meet.
- **Locations**. Consider areas likely or known to develop maintenance issues that affect safety and accessibility.

Where Do We Go From Here?

Following this feasibility study report, the next step is to complete a topographical survey and initiate schematic design. It is also recommended to incorporate an arborist to assess tree health while survey work is ongoing. The arborist will help determine which trees can be preserved and which are poor condition, which will inform design decision-making in regard to path alignment, grading, and detailing. Following the completion of a survey(s), the project should move through the following typical phases of development:

- **Schematic Design** Confirm the concepts against the survey, making necessary adjustments to the plan approach and preliminary estimated costs.
- **Design Development** The beginning of the technical work, such as detailed grading and utility coordination, is developed, and estimated construction costs are refined to the point of understanding the level of funding necessary for construction of the project.
- **Construction Documents** (the production of technical plans and specifications for public bidding),
- **Bidding and then Construction** Funding will need to be secured for the survey and each consecutive phase of design and for construction.

Public engagement should continue through schematic and design development to afford the community opportunities to provide input on design details and materials selection. This process will ensure the public is up to date on plan development and that the design continues to meet the needs of the community and maintain community support.

Coordination Between Jurisdictions

The Town of Arlington and DCR should be coordinating throughout next design phases to ensure consistency in path design and a cohesive gateway and intersection crossing design where their jurisdictions meet at the Mystic Valley Parkway / Mystic Street / Summer Street intersection. It is equally important for DCR and the City of Medford to collaborate as well given the desired connections from Medford streets through the High Street rotary, over High Street Bridge, and over Harvard Avenue Bridge. MassDOT will need to be involved in regard to bridges and the culvert at Mill Brook.

Resolve Parking on Summer Street

Parking along Summer Street is an important issue to the community that is continuing to evolve before final decisions will be made. Several steps are needed to fully inform the design and the community including, but not necessarily limited to: a topographic survey of the actual conditions in the area, schematic design to confirm the design approach based on the survey, and conducting a parking utilization study to better understand use patterns and needs. These pieces of information then need to be shared and discussed with the community, Arlington Parks and Recreation, the Arlington Housing Authority and other departments and local business so everyone can provide informed input and determine the best way to move forward.

This feasibility study report is the result of close collaboration between the Town of Arlington, Mystic River Watershed Association, other stakeholders, residents, and advocates. A continued devotion to public and stakeholder engagement will ensure the Mystic path connection is as safe and comfortable as possible, serves the needs of a wide variety of users, and draws people to the important natural resources that are the Lower Mystic Lake and Mystic River.

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APPENDICES

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Appendix A: Memorandum of Existing Conditions



MEMORANDUM OF EXISTING CONDITIONS

Mystic River Path Connection to the
Minuteman Bikeway Feasibility Study

March 15, 2022



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Purpose of the Study

The purpose of this feasibility study is to establish a preferred alignment, facility types, and intersection safety improvements for a multiuse path to run along the Mystic Valley Parkway. The path will run approximately 1.7 miles in the Town of Arlington and will connect the Minuteman Bikeway and Summer Street on the western end to the Alewife Brook Greenway near Decatur Street on the eastern end. This connector has been envisioned in several previous studies and plans as a key piece in an expanding regional trail network, as a way to increase access to the Mystic River and Mystic Lakes, and as a means to strengthen walking and biking connectivity between the Town of Arlington and City of Medford. Major intersections and rotaries within the project area are also prioritized by the Town for safety improvements.

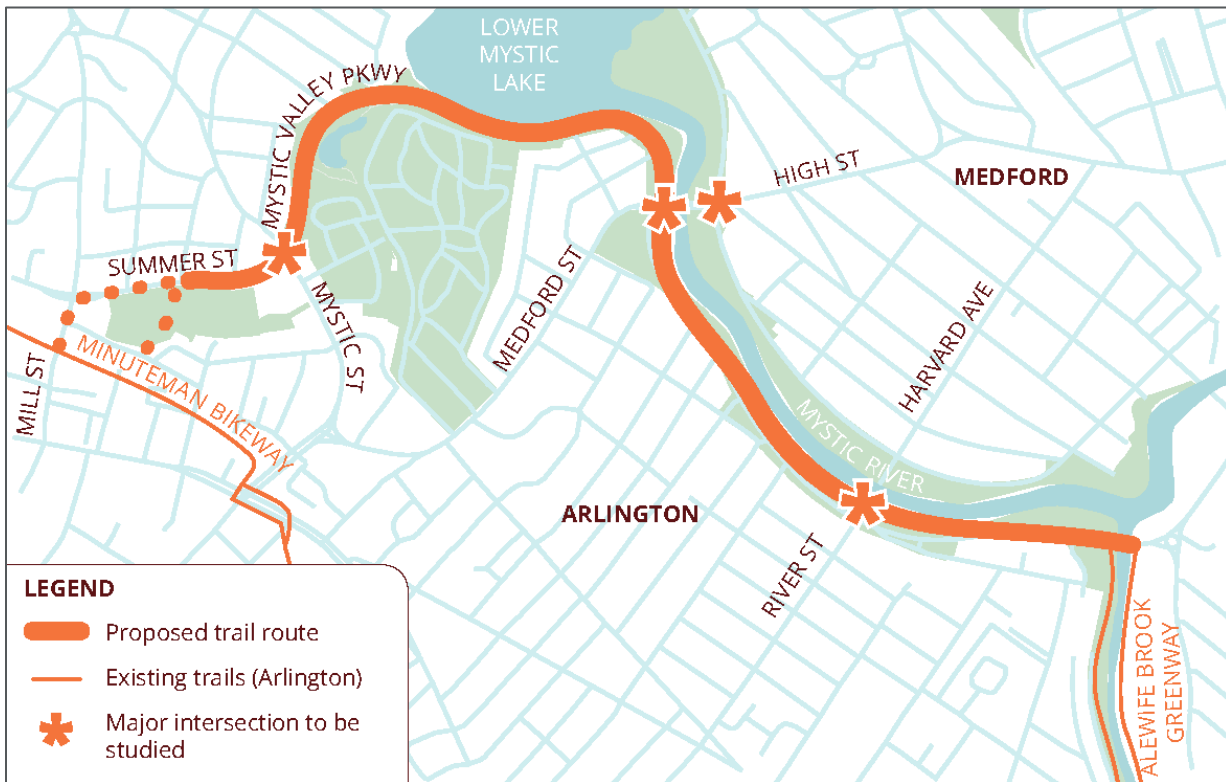


Figure 1 The study area includes Summer Street and the Mystic Valley Parkway connecting the Minuteman Bikeway to the Alewife Brook Greenway. The route will take path users south of Lower Mystic Lake and the Mystic River.

PLEASE NOTE: This page has been edited from the original existing conditions memorandum to reflect Appendices location updates for the Final Report.

Existing Conditions Overview

This memorandum records existing conditions in the project area, including desktop review of previous plans and environmental and cultural context followed by assessments of infrastructure, safety, and intersection traffic operations. For the infrastructure and safety assessments the route is broken into character segments, and intersections are described individually. Site context and current functionality is communicated with cross sections, photos, and observations from field review. Finally, members of the public have shared their experience of the area via a public meeting and online survey. This information is summarized in Appendix B.

Goals for the Connection

Goals for the path connection have been established in meetings with stakeholders who form a Project Team and the public. See the Public Meeting 1 & Summary of Survey Results in Appendix B and Project Team meeting notes in Appendix C for more information on these groups. The goals for the connection are to:

- Provide an accessible route that contributes to a regional biking network by connecting the Minuteman Bikeway, Mystic River Paths, and Alewife Brook Greenway
- Strengthen the walking and biking network between Arlington, Medford, and Somerville by developing connections to perpendicular streets, sidewalks, and planned bike routes
- Increase safety and comfort for all users, particularly at intersections and rotaries
- Improve access to and views of the Mystic River and Mystic Lakes to enhance people's experience and draw them to these resources
- Reduce emissions by increasing bicycle mode share, and incorporate planning and design concepts that contribute to climate resiliency
- Preserve and enhance wetlands, trees canopy, and animal and plant habitat

Regional Context & Related Planning Initiatives

The proposed connector will increase regional biking connectivity by filling a gap between the Minuteman Bikeway, Mystic River paths, and Alewife Brook Greenway. The connector will also expand access to treasured open spaces – the Mystic River and Mystic Lakes State Park, Mystic River Reservation, and Alewife Brook Reservation. Given the number of environmental and cultural resources involved, several prior plans exist from which to draw project priorities and conceptual ideas. This section includes information collected from a review of the existing plans and studies.

Regional Greenway Initiatives

This project has been envisioned through several initiatives and greenway network plans that propose large, connected biking and walking networks to support public and environmental health and bolster the Boston area's economic growth. These plans include the:

- Metropolitan Area Planning Council (MAPC) LandLine Network Plan, which proposes to connect 1,400 miles of trails and greenways in the Boston metropolitan area.
- Mystic River Watershed Association Mystic Greenways Initiative, which seeks to connect 25 miles of paths, improve parklands, and engage thousands of community members along the Mystic Lakes and Mystic River to Boston Harbor.
- Livable Streets Alliance Emerald Network, which envisions 200+ miles of seamlessly connected greenways in the Boston area.

This project additionally helps meet connectivity, access, safety, and sustainability goals of the Boston Metropolitan Planning Organization's (MPO) Long-Range Transportation Plan, Destination 2040, and the MAPC MetroCommon x 2050 long-range regional plan.

Department of Conservation and Recreation Plans

The state Department of Conservation and Recreation (DCR) released the Mystic River Master Plan in 2009, which envisions a continuous river corridor trail system within the Mystic River Reservation running east from the confluence of the Mystic River with Alewife Brook. The master plan identifies a primary paved trail for family use to be located 25 feet from the river and secondary paths paved with stabilized stone dust or soil surfacing closer to the river. Within the Mystic-Alewife confluence area, the location relevant to this feasibility study, the master plan recommends:

- on-road bike lanes to accommodate commuters along the Mystic Valley Parkway and across the Harvard Avenue/River Street Bridge, connecting to Dugger Park
- interpretive signage near the Harvard Avenue/River Street bridge in both Arlington and Medford
- an overlook at the bend of the Mystic River directly north of Alewife Brook and a cleared view on the Medford side of the river
- an improved crossing at Decatur Street

The master plan also makes recommendations for improvements along the Mystic Valley Parkway, including pruning trees for deadwood and views to the river, planting trees to fill canopy gaps, and replacing metal guardrails with steel backed wood post/timber guardrail.

DCR released its Parkways Master Plan in 2020, which makes short- and long-term recommendations throughout the length of the Mystic Valley Parkway from Mystic Street to Alewife Brook Greenway. In the short-term, the plan recommends installing bike lanes or buffered bike lanes, depending on location, along the parkway and to channelize vehicle movements at the rotaries with pavement markings. In the long-term the plan recommends:

- narrowing travel lanes
- crosswalk/curb ramp additions and access upgrades at the rotaries, Mystic Street intersection, and River Street intersections
- reconstruction of the rotaries and signalized intersections to close driveways, provide bicycle facilities, and address signal operations for pedestrian and cyclist use
- building a shared use path from Mystic Street intersection to Medford Street/High Street rotary
- considering reconstruction of sidewalks to create shared use paths on the High Street bridge
- creating a pedestrian crossing at Park Street and to other intersecting side streets

From Medford Street/High Street rotary to Alewife Brook Parkway, the plan recommends these alternatives for a low-stress bicycle facility:

1. "Raised one-way separated bike lanes within the existing curb-to-curb width.
2. A raised two-way separated bike lane along the riverside edge within the existing curb-to-curb width.
3. A paved shared use path within the parkland along the river edge."

Local Context & Plans

The project area is part of a unique environmental and recreational network. The Mystic Valley Parkway is on the National Register of Historic Places, and according to its [registration form](#), it was conceptualized by landscape architect, Charles Eliot, and the Olmsted Brothers firm as one of the earliest river parkways in the region.

Today, the project area encompasses approximately .25 miles of the southern shore of Lower Mystic Lake, part of the Mystic Lakes State Park, which supports activities such as swimming, non-motorized boating and sailing, paddling, picnicking, and bird-watching. The project area also includes approximately .95 miles of the Mystic River from Lower Mystic Lake to the Alewife Brook, and asphalt, earth, and stonedust paths run along this length of river. The lake, river, and adjacent parkland provide a scenic experience for people walking, biking, and driving.

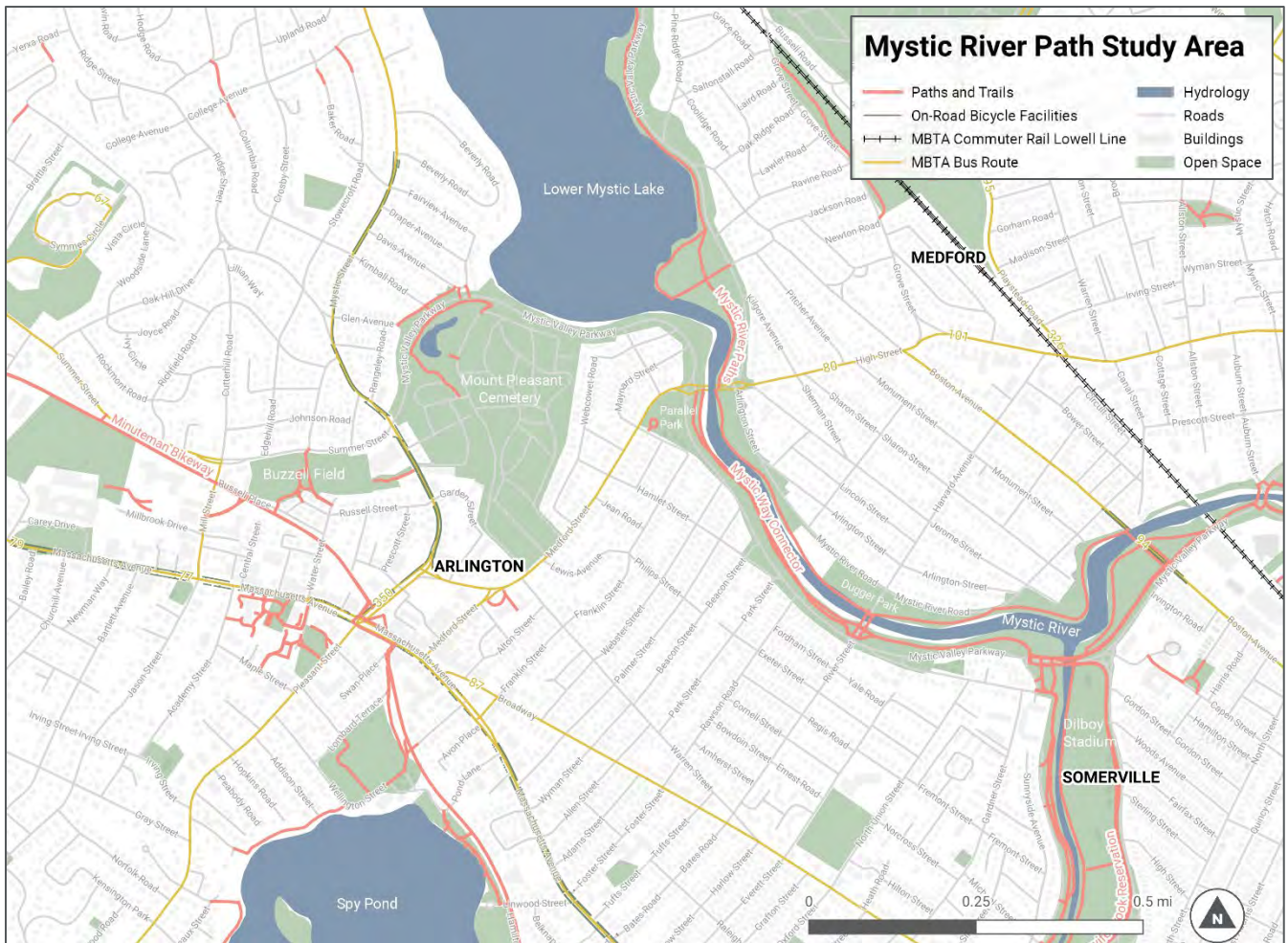


Figure 2 The study area includes existing paths and trails, transit routes, and immediate connections to open space and recreation opportunities.

Along both the parkway and west on Summer Street, the proposed connector has the potential to strengthen walking and biking connections to perpendicular neighborhood streets, as discussed in the Infrastructure & Safety Assessment, and to local open spaces such as Buzzell Field, Mt. Pleasant Cemetery, and Parallel Park. The connector will also strengthen connections between Arlington and Medford, including to Dugger Park on the Medford side of the Mystic River and to the Dilboy Stadium area in Somerville as well.

Existing bike facilities include shared lane markings and a north and south-running bike lane on Mystic Street between the intersection and Chestnut Street. Transit connections to the route include MBTA bus routes 80 and 95, which run east-west over the High Street bridge along Medford Street / High Street / Route 60. Bus route 350 runs north-south through the Summer Street / Mystic Street / Mystic Valley Parkway intersection.

Town of Arlington Plans

To better understand local context and priorities, Toole Design reviewed several documents from the Town of Arlington, including the 2015 Arlington Master Plan: Your Town, Your Future, 2015-2022 Open Space and Recreation Plan, and 2019 Mill Brook Corridor Report. Some overlapping issues in these documents relevant to the study project area are flood control, habitat corridor, and increasing public access to Lower Mystic Lake and the Mystic River. The Mill Brook report calls for increasing walking and biking access through Buzzell Field.

The Connect Arlington Sustainable Transportation Plan published in 2021 identifies community visions and goals of an “effectively, efficiently, and equitably” operating transportation network in Arlington. The plan emphasizes a pedestrian-first vision that aims to shift commuters away from driving alone to other modes like bicycling and taking public transit. Mode shift is intended to be achieved through implementation of enhanced active-user options and connections proposed by the sidewalk improvements program and recommended bicycle network, as shown in Figure 3. Building a multiuse path from the Minuteman Bikeway along Summer Street and Mystic Valley Parkway is one of the projects Connect Arlington proposes as a step towards developing a low-stress bicycling environment. Safe, accessible, climate-conscious, and economy-stimulating projects are highlighted as being essential for Arlington to reach their plan goals.

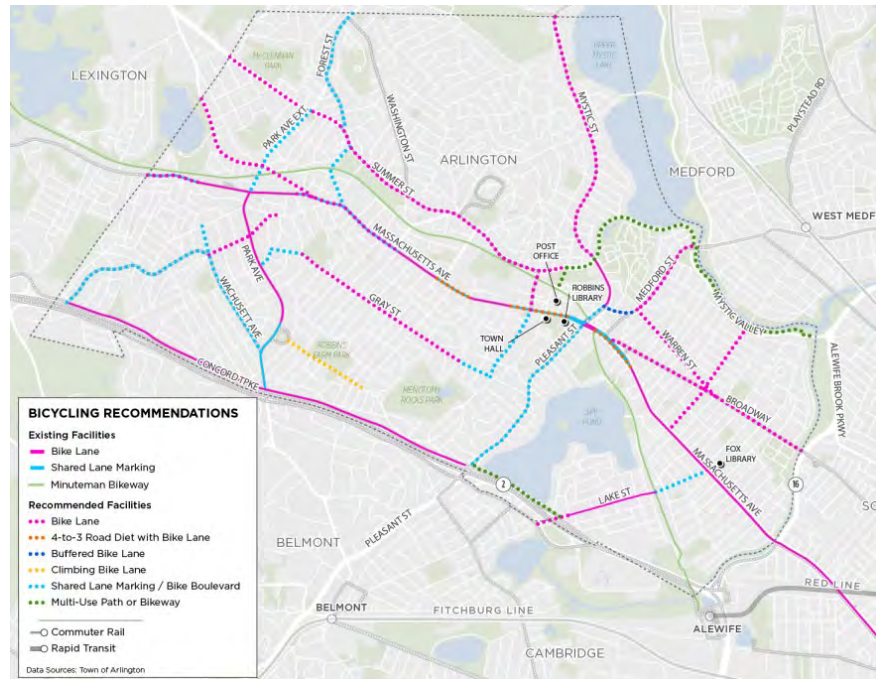


Figure 3 Recommended Bicycle Network Proposed in Connect Arlington Sustainable Transportation Plan

Arlington’s 2021 Net Zero Action Plan identifies helping people drive less as a key part of its roadmap to reducing greenhouse gas emissions. It supports the recommendations and strategies of Connect Arlington.

The 2017 Arlington Arts & Culture Action Plan identifies that Arlington residents want art integrated into public space improvements, into bike racks and street furniture, and as part of improvements to the Minuteman Bikeway.

Toole Design reviewed Town of Arlington Bylaws (updated to 2020) and 2018 Zoning Bylaws. The zoning bylaws designate the project area along the Mystic Valley Parkway as part of an overlay Floodplain District and Inland Wetland District, as identified through Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs). In short, district lands are regulated by Wetlands Protection Regulations of Town Bylaws and state wetlands regulations. The designation seeks to control development to prevent the reduction of water-carrying capacity of water bodies, to protect the public from hazards and loss, and to protect water quality. Town Bylaws also establish regulations for stormwater management and tree preservation.

City of Medford Bicycle Infrastructure Master Plan

Finally, Toole Design reviewed the City of Medford 2016 Bicycle Infrastructure Master Plan, which recommends that High Street be redesigned as a Complete Street and the High Street rotary to incorporate bike shared lane markings and signage. Harvard Avenue to the Harvard Avenue/River Street bridge is recommended for shared lane markings and signage. City of Medford staff are incorporated into the stakeholder Project Team.

Cultural and Demographic Context

The map in Figure 4 illustrates the cultural, civic, and demographic context of the project area. Massachusetts Historical Commission points show National Register of Historic Places homes adjacent to the project area. The nationally registered Mystic Valley Parkway and adjacent river land are owned by DCR so fall under Massachusetts Historical Commission review. Generally, libraries and schools are not located directly adjacent to

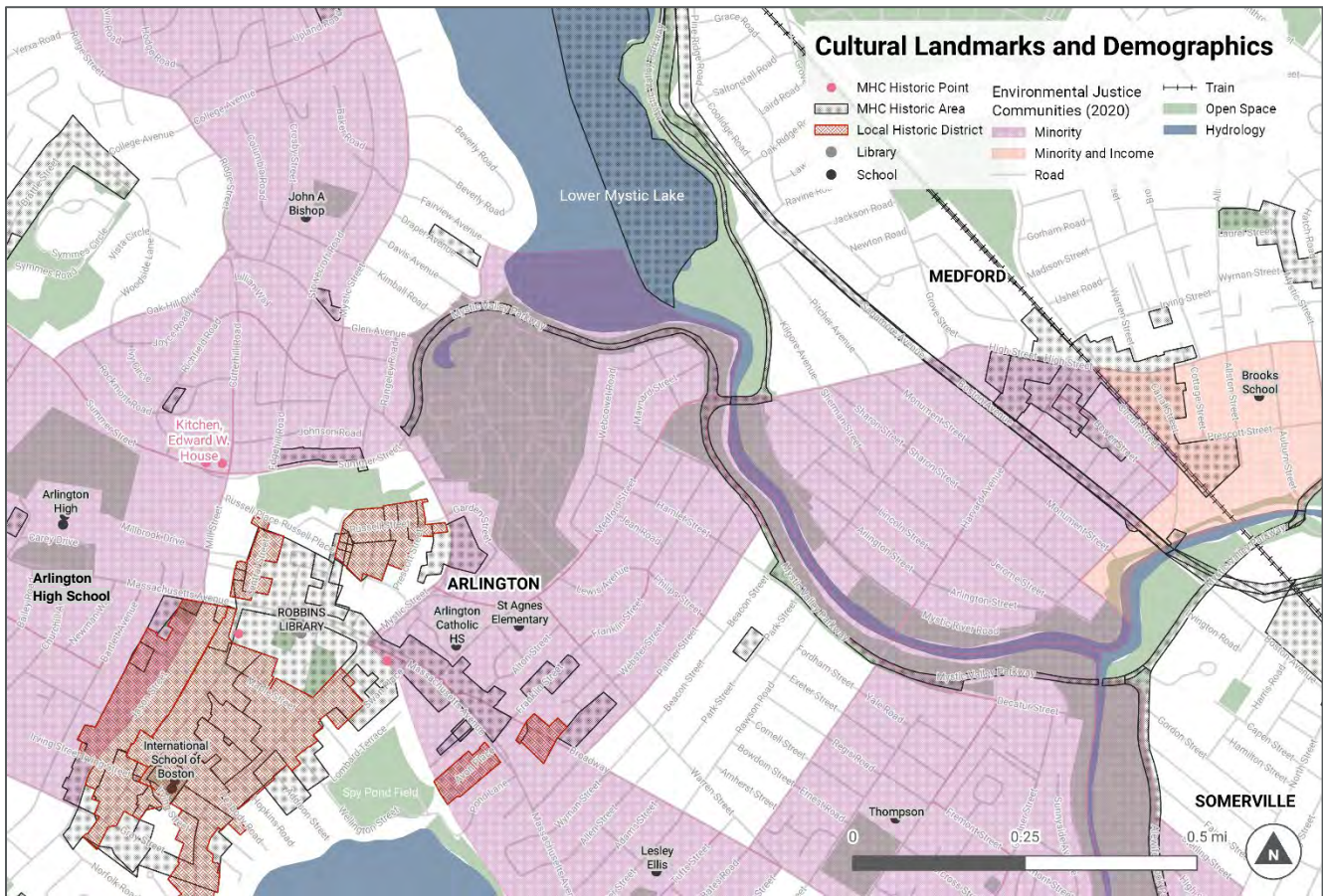


Figure 4 Historic places, libraries, schools, and Environmental Justice communities

the potential route, but Arlington High School lies off the Minuteman Bikeway, so the proposed route may help strengthen biking connections to the school.

The map also shows 2020 Environmental Justice populations as designated by 2021 Environmental Justice Policy from the Massachusetts Executive Office of Energy and Environmental Affairs (EEA). The data includes 2019 Census block groups. Several block groups within the study area are designated as Minority populations, with either 39.5% or more minority population within the block group or with a minority population between 24.5% and 39.5% and a median household income (MHHI) less than 150.5% of the state MHHI. The Environmental Justice designation confers extra responsibility on DCR and partner agencies to ensure that project area public land is preserved, remains accessible, maintained, and helps communities be climate resilient.

Crashes

Toole Design conducted a high-level review of collisions occurring at the study area intersection to identify and evaluate possible safety issues that may exist. Further discussion of those potentially contributing roadway features is included in the Infrastructure & Safety Assessment section. None of the intersections are within the Highway Safety Improvement Program crash cluster locations which typically indicate that an intersection or corridor falls within the top 5% of high crash locations in Massachusetts (Figure 5).

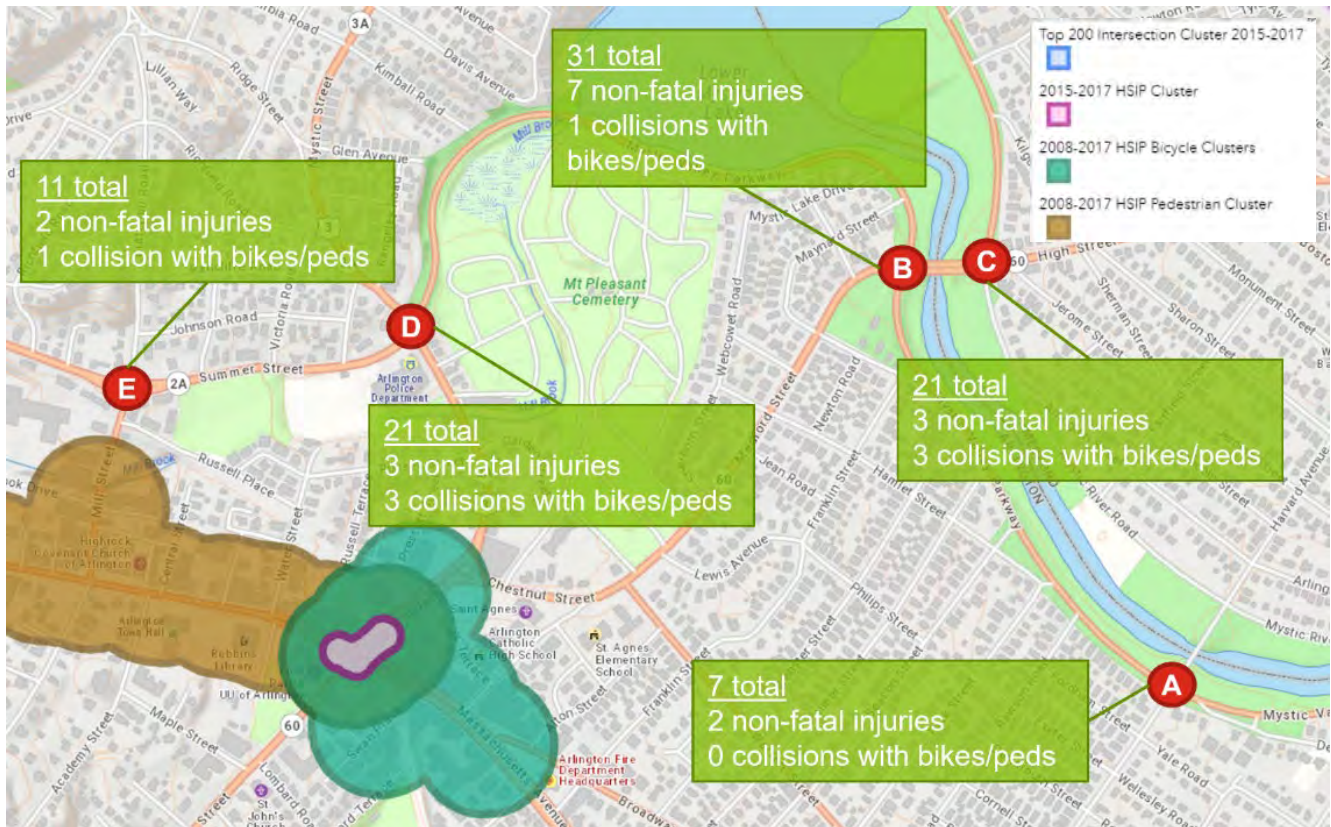


Figure 5 Summary of intersection crashes. No study area intersection falls within a HSIP Crash Cluster.

Toole Design reviewed crash data from MassDOT's Impact crash portal for January 2017 through December 2020. Crash data reviewed may not encompass all collisions occurring at the intersections. Review of crash reports from the Arlington Police Department were not included in the scope of this study but could provide insight to roadway and intersection features that may be attributed to recorded collisions.

A total of 91 collisions occurred at the five study area intersections, with the most occurring at Mystic Valley Parkway at Medford Street/High Street. A majority of the collisions at the intersections resulted in property damage only (70 crashes, 77% of all crashes) and the most commonly occurring crash were angle collisions (43 crashes, 47% of all crashes).

Of all the collisions occurring, 8 crashes (9% of all collisions) involved pedestrians or cyclists. Most collisions involving pedestrians or cyclists occurred at Mystic Valley Parkway/Arlington Street at High Street and at Mystic Valley Parkway/Summer Street at Mystic Street. Table 1 summarizes the crash years, types, and severities at each of the study area intersections as well as the number of collisions involving pedestrians or cyclists at the respective intersections (Figure 5).

Table 1. Crash Summary at Study Area Intersections (January 2017 to December 2020)

	Mystic Valley Pkwy at River St	Mystic Valley Pkwy at Medford St/High St	Mystic Valley Pkwy/ Arlington St at High St	Mystic Valley Pkwy/Summer St at Mystic St	Summer St at Cutter Hill Rd/Mills St	Total	Percent of Total
Year							
2017	3	8	5	6	3	25	27%
2018	3	6	7	7	2	25	27%
2019	1	11	4	5	4	25	27%
2020	0	6	5	3	2	16	18%
Severity							
Property Damage Only	5	23	17	17	8	70	77%
Non-fatal Injury	2	7	3	3	2	17	19%
Fatality	0	0	0	0	0	0	0%
Not reported/Unknown	0	1	1	1	1	4	4%
Type							
Single Vehicle	0	4	1	3	2	10	11%
Rear-end	2	3	4	1	1	11	12%
Angle	3	17	12	7	4	43	47%
Sideswipe, Same Direction	1	5	2	5	3	16	18%
Sideswipe, Opposite Dir.	0	1	1	2	0	4	4%
Head-on	1	0	0	1	0	2	2%
Unknown	0	1	1	2	1	5	5%
Collisions involving pedestrians or cyclists	0	1 (non-fatal injury)	3 (non-fatal injuries)	3 (1 no injury, 2 non-fatal injuries)	1 (non-fatal injury)	8	9%
Total	7	31	21	21	11	91	-

Pedestrian & Bicycle Activity

The following is a summary of pedestrian and bicycle activity in the project area. Motor vehicle activity is discussed within the Traffic Assessment section of this memorandum.

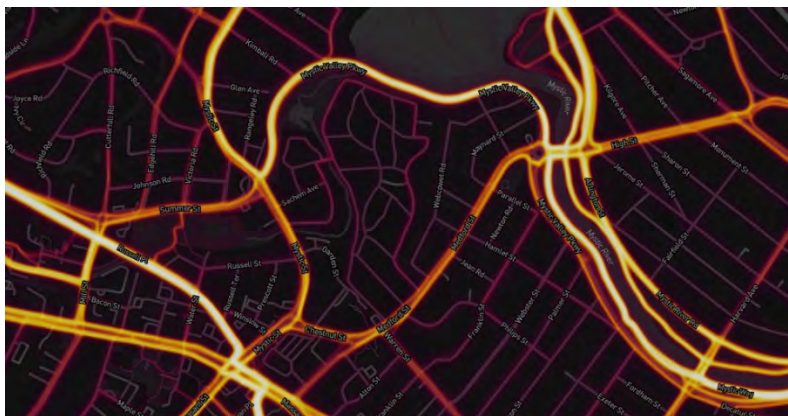


Figure 6 Strava recorded walking and running activity

Strava allows people to track their exercises by foot, bike, snow or water sport. While the mobile app is typically used by highly active people, heat maps from the app provide insight on where people walk and bike within the study area.

Walking/running activity, represented in Figure 6, is most heavily shown with thick bright whites along the paths near the Mystic River versus thinner oranges and reds on connecting streets.



Figure 7 Strava recorded biking activity

In contrast, bicycling activity (Figure 7) appears more evenly distributed between the parkway and large connecting streets, while less activity is seen on neighborhood streets than in the pedestrian map, except for the streets connecting to Summer Street. Between Medford Street rotary and Harvard Avenue/River Street bridge, cyclists are typically using the roadway rather than the earth and stonedust path near the river that is popularly used by pedestrians. In both figures, Summer Street between Mystic Street and Mill Street sees less walking and biking activity than along



Figure 8 Walking/running (left) and biking (right) activity near Summer Street/Mill Street and Buzzell Field

between Medford Street rotary and Harvard Avenue/River Street bridge, cyclists are typically using the roadway rather than the earth and stonedust path near the river that is popularly used by pedestrians. In both figures, Summer Street between Mystic Street and Mill Street sees less walking and biking activity than along Mystic Valley Parkway and the Minuteman Bikeway.

As represented in Figure 8, cyclists and pedestrians similarly use the Buzzell Field path less than Mill Street between Summer Street and the Minuteman Bikeway.

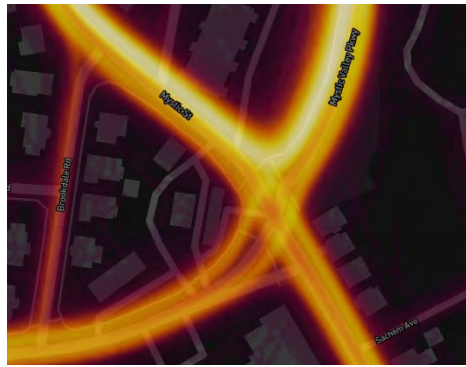
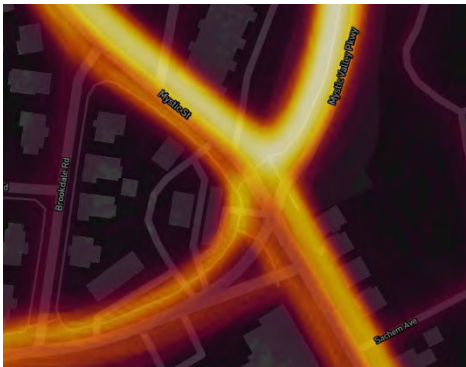


Figure 9 Pedestrian (left) and bicycle (right) activity at Summer/Mystic intersection

At the Summer Street / Mystic Street / Mystic Valley Parkway intersection, bicycle and pedestrian paths are concentrated on along the northern corner of the intersection (Figure 9). Pedestrian activity suggests a greater concentration of use of the northern crosswalk compared to more diffuse crossing patterns for people biking through the intersection.

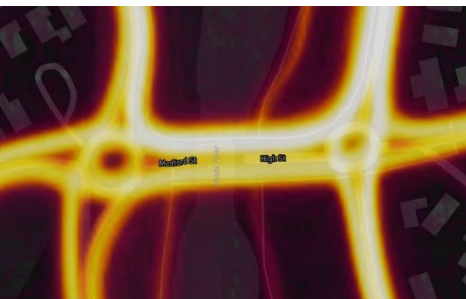


Figure 10 Pedestrian (left) and bicycle (right) activity at the study area rotaries

The rotaries see high pedestrian activity along the river paths both south and north of High Street bridge, while cyclists appear to be more heavily making a loop on the north side of the bridge (Figure 10).

Land Ownership

The map in Figure 11 highlights Town owned properties, including Arlington Parks and Recreation Commission's Buzzzell Field and parcels along the western end of Mystic Valley Parkway. The Arlington Police Department is located on the southwest corner of the Summer Street/Mystic Street/Mystic Valley Parkway intersection, and the Arlington Housing Authority owns Cusack Terrace just to the west, shown in purple on the map. The Arlington Conservation Commission does not own land within the project area, but the Conservation Commission has review and permitting jurisdiction over land within 100 feet of wetlands, lakes, or ponds (Regulated Wetland Area) and within 200 feet of rivers and streams (Riverfront Area). These regulated areas include Lower Mystic Lake and the Mystic River.

The parkway and land between the parkway and Mystic River is owned by DCR, while the land on the opposite side of the parkway is largely privately-owned.

The Massachusetts Department of Transportation (MassDOT) owns the High Street and Harvard Avenue/River Street bridges and the culvert over the Mill Brook and Mystic Valley Parkway at the western end of Lower Mystic Lake. All other roads are owned and maintained by the Town of Arlington, including Summer Street (State Route 2A), Mystic Street (State Route 3/3A/2A), and Medford Street/High Street (State Route 60).

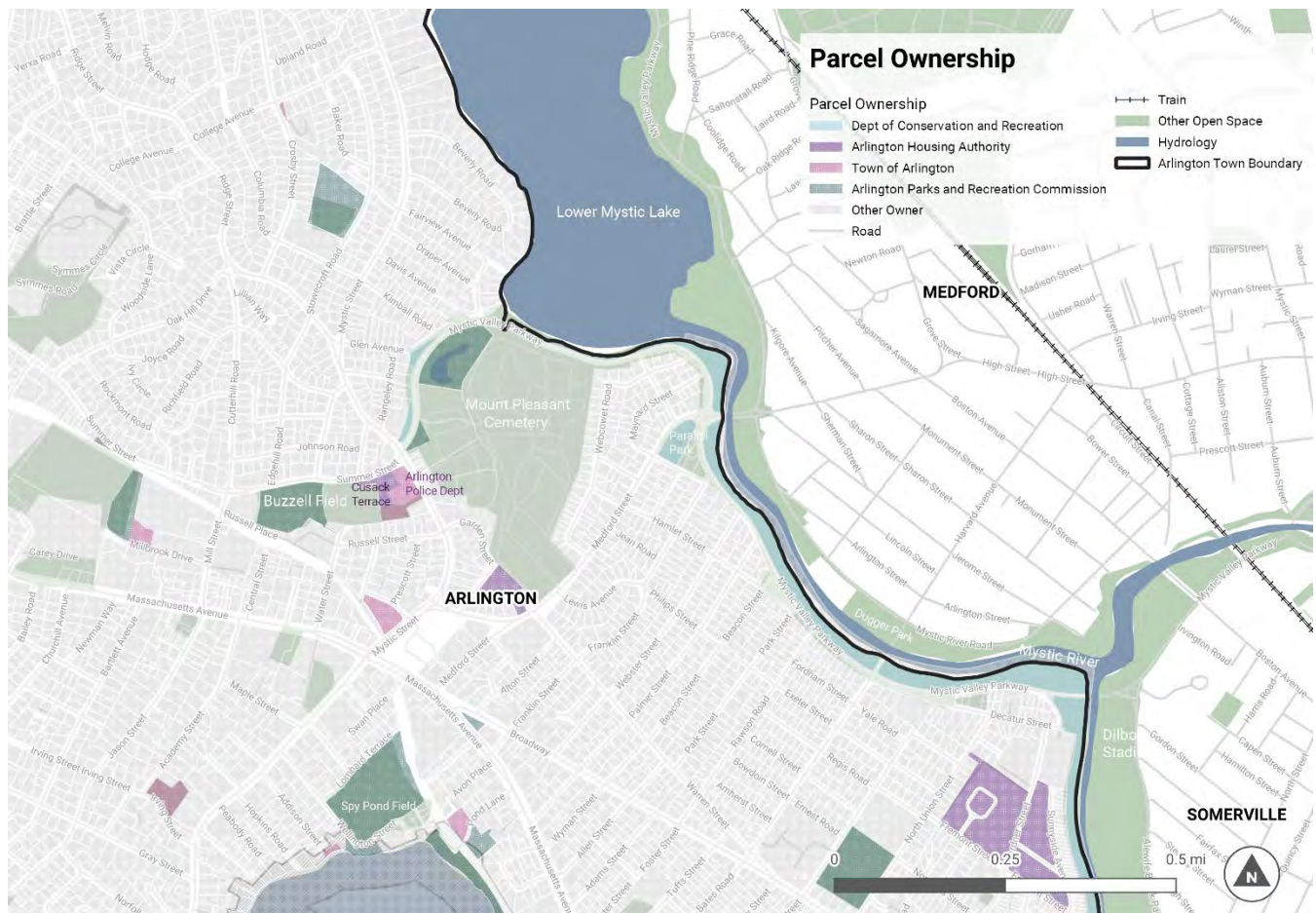


Figure 11 Public land ownership within the project area

Infrastructure & Safety Assessment

The following pages provide an assessment of existing infrastructure, site context, and safety observations in the study area as broken down by character segments and intersections. The assessment includes cross section dimensions and observations on Americans with Disabilities Act (ADA) needs, utilities, topography, amenities, vegetation, and perpendicular streets. Traffic operations and signalization are described in the Traffic Assessment section of this memorandum.

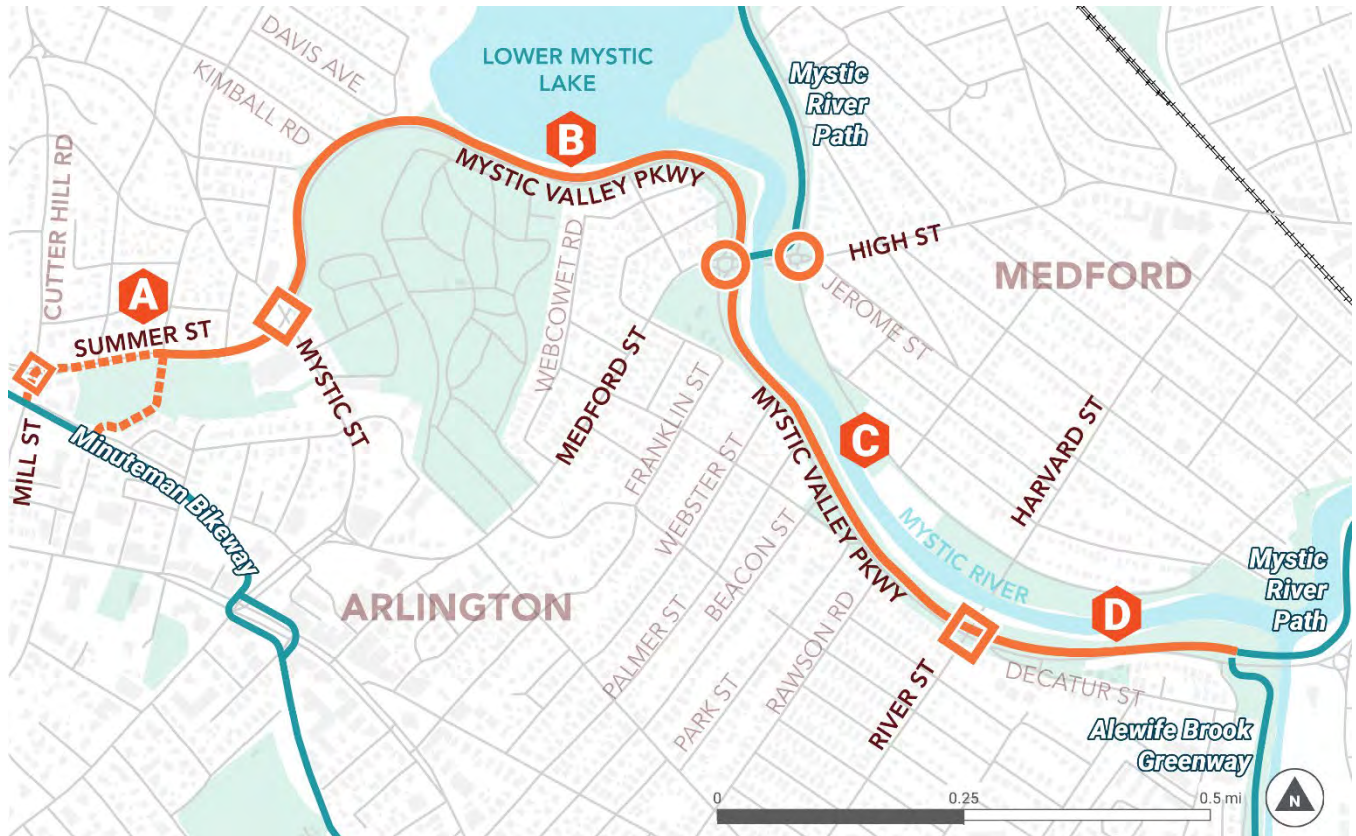


Figure 12 Segments and intersections

It is important to note that, beyond the Minuteman Bikeway and Alewife Brook Greenway as the outer bounds of the study area, bike infrastructure is generally nonexistent in the study area. Some bike facilities are described at the Summer Street / Mystic Street / Mystic Valley Parkway intersection. Evaluating infrastructure for the safety and comfort of people on bikes is a key component of the alternatives development stage of this project.

Summer Street and Mill Street / Cutter Hill Road Intersection

The western limit of the study area is formed by the intersection of Summer Street and Mill Street / Cutter Hill Road and the Minuteman Bikeway as it crosses Mill Street just south of the intersection. The intersection is one of two potential locations through which the study route can turn south and connect to the Minuteman. The other location is Buzzell Field just to the east of the intersection and a housing complex and south of Summer Street.

See the Traffic Assessment section for a description of lane configuration and signal phasing at this intersection.

Infrastructure Observations

- Medians exist on all sides of the intersection. The medians on the west and eastbound approaches cut into crosswalks. The median on the south side is too small to provide any functionality but sign holding, and the median on the north has a pedestrian refuge island that is too narrow for use by more than one person at a time
- Curb ramps appear to be ADA compliant. However, two are apex ramps and only a ramp on the northeast corner appears to adequately direct people across the street. Curb ramps and crosswalks at this intersection were replaced in about 2019 via an MBTA PATI project
- Only one drainage inlet appears to exist near the intersection on the eastbound approach on Summer Street. Drainage mostly appears to be directionalized down Mill Street
- Signal equipment interrupts the southwest corner sidewalk and partially interrupts the northwest sidewalk
- Sidewalk pavement is in fair to good condition, but roadway pavement is cracking across crosswalks and elsewhere

Safety Observations

- Intersection appears lit on only the southwest corner, so it is assumed that all crossings are not well lit and that additional lighting must be added if the trail is brought through the intersection
- Sightlines of those headed northbound from Mill Street are limited due to the fence on the southeast corner of the intersection
- Turning radii appear wide, particularly on the south side of the intersection, which may encourage cars to speed around turns
- The medians typically do not provide a safety benefit for pedestrians.



Figure 13 (Left) view looking north at cracked pavement within the crosswalk from the southeast corner of the Summer and Mill/Cutter Hill intersection. (Right) Looking west from wide turning radius and apex ramp to a small median.

Mill Street to the Minuteman Bikeway

The connector path may connect through the Summer Street / Mill Street / Cutter Hill Road intersection down Mill Street to the Minuteman Bikeway.

Cross Section

- 36' wide roadway with a right turn lane northbound
- 5' wide sidewalks both sides, with utility poles in the eastern sidewalk
- Minuteman Bikeway is 85' from where the curb begins to widen into the Mill/Summer intersection

Infrastructure & Safety Observations

- Hydrants, utility poles, and signage narrow the sidewalk
- The Minuteman Bikeway, while visible from the intersection, is not well identified at the Mill Street crossing
- Drainage inlets are located just north of the Minuteman Bikeway on both sides of the road and would interrupt a potential connector route
- Russell Place, a private way that connects to Water Street, is present on the east side of Mill Street north of the Minuteman Bikeway. It is used frequently by cut-through traffic, so vehicles may be expected to turn here across the potential connector if it is located on the east side of the road.

Segment A. Summer Street & Buzzell Field

Summer Street

From its intersection with Mill Street to the intersection with Mystic Street and Mystic Valley Parkway, Summer Street is just over .25 miles long. There are no bus routes through this portion of Summer St.

Cross Section

- The right-of-way (ROW) is between 43' and 53' wide as measured via MassMapper property tax parcel data from the Town of Arlington Assessor. This data may be inaccurate. ROW measurements across all segments may not reflect useable width given topography, drainage, and other features.
- 38' curb-to-curb roadway width with two 13-14' wide lanes
- 4-6' shoulder on the south side, 2-6' shoulder north side. Parking is restricted at the Buzzell Field entry as well as at the crosswalk at Victoria Road. Parking is heavy on both north and south sides of Summer Street and side streets during games at the ballfields at Buzzell Park and when there are Arlington Catholic games at their field.
- 5.5' sidewalk south side, extra 2.5' of lawn to chain-link fence that lines Buzzell Field; sidewalk narrows slightly and has no lawn buffer in front of Arlington Catholic field
- 7' sidewalk north side though narrows to as little as 4' between Victoria and Brookdale Roads with an adjacent narrow lawn strip toward the road

Infrastructure Observations

- One crosswalk with high visibility signage is located across Summer Street at Victoria Road intersection. The crosswalk is close to but not directly aligned with the entry to Buzzell Field. The southern curb ramp does not include a detectable warning panel.
- Utility poles and hydrants are located south of Summer Street within the narrow sidewalk
- Multiple parking-related signs are located within sidewalk
- Driveway cutout is located east of Edgehill Road into Buzzell Field with a gate in the fence that is likely used for Department of Public Works (DPW) access
- Southern shoulder adjacent to Buzzell Field is filled with cars on game days, which narrows roadway
- Pavement conditions on edges of roadway are in fair condition, with cracking or patches in some locations
- At least three (3) stormwater inlets on south side of roadway, with one on the north side halfway between Edgehill and Victoria Roads; manholes observed within the roadway and on the sidewalk at various points on the north side of Summer Street
- Cobra head lights are located on the utility poles

Safety Observations

- Vehicles were observed moving fast through Summer Street at a time when few vehicles were parked along the road.
- There is very poor sight distance for pedestrians at the crosswalk at Victoria Road, especially for crossing from the park to Victoria Road. There is also poor sight distance for eastbound drivers to the park side of the crosswalk. The horizontal curve and parked cars near the crosswalk contribute to this issue.
- Residences, multiple driveways, and three (3) cross streets – Edgehill Road, Victoria Road, and Brookdale Road – present on north side so may present more potential for conflict with a bike path
- Edgehill Road and Brookdale Road meet Summer Street at slightly skewed angles, which may affect sightlines for drivers to see cyclists coming

Buzzell Field

Buzzell Field contains a basketball court, playground, and two baseball diamonds, plus a monument to Lieutenant Richard H. Buzzell with benches and a flagpole. A 6' wide entry path near Summer Street travels between the court and monument and then splits in two around the play area. The eastern segment connects to a multi-family housing complex, and the land slopes downhill to the east from this path into a vegetated area. The western path travels to the east side of a ball field and exits out the southern side of the field to a parking lot and the Minuteman Bikeway. The field is heavily used and crowded with people on game days, so the proposed connector may conflict with this use.

Infrastructure Observations

- The perimeter of Buzzell Field is lined with trees, including south of the fence at Summer Street
- The path between the basketball court and playground is narrow and turns at 90-degree angles
- The western baseball diamond is approximately 20' from a line of trees with a slope down from the road
- Where the path exits via the south side of Buzzell Field and runs perpendicular into the Minuteman, this entry is barely legible from the Minuteman and requires a sharp turn between trees

Safety Observations

- The area between the eastern baseball diamond and vegetation in front of residences is approximately 18' feet wide, which is very narrow when people fill up the path during game days; the path itself is 8-10' wide at this point. This may cause conflict between ball field users and path users
- There is no lighting in the park except for ball fields. Ball fields are only lit during evening games. The path may not be well lit through the field on non-game days. The path as it meets the Minuteman may also be under lit.

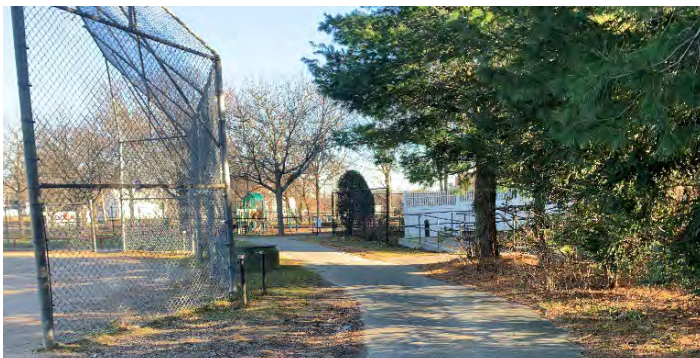


Figure 14 (Clockwise from top left) Summer St looking east from the entry to Buzzell Field, with a signed pedestrian crossing further east that is unaligned with the entry to the field; the narrow Buzzell Field path between the basketball court and play area; a view from the Minuteman Bikeway of the barely legible connection to Buzzell Field between trees; a slightly wider Buzzell Field path is constrained between the baseball field and vegetated area near homes

Summer St / Mystic St / Mystic Valley Parkway Intersection

This intersection is a safety priority for the Town. It is approximately 195' long north to south, and Summer Street and the Mystic Valley Parkway are offset. Shared lane markings are present on Mystic Street north of the intersection. Standard bike lanes are painted south of the intersection to Chestnut Street, with shared lane markings for the northbound lane directly at the intersection. Bike lanes should be connected to the path. See the Traffic Assessment for a description of lane configuration and signal phasing for this intersection.

Infrastructure Observations

- Several lanes around the intersection are between 16' and 24' wide, with the southbound lane from the parkway allowing right turning drivers to slip around through vehicles.
- No crosswalk exists across Mystic Street on the south side of the intersection.
- While curb ramps include detectable warning panels, the northern most corner includes an apex rather than preferred directional ramps. Vegetation partially covers the northeast ramp landing. The ramp south of the gas station driveway is positioned so people are directed toward the intersection rather than slip lane island. The narrow island path next to the slip lane does not include warning panels.
- The northern median on the Summer Street leg cuts into crosswalk width.
- The parkway travels down an approximately 5-7% grade east of the intersection. DCR owns the property on the northeast corner of the intersection, so opportunity exists to mellow the grade with a curved path.
- Drainage inlets appear on the Summer Street leg and on the northern leg of Mystic Street.
- Pavement is cracked on the Summer Street leg in the crossings.

Safety Observations

- The slip lane may encourage vehicles to move at higher speeds as they turn right onto Mystic Street. Also, there is no sign prohibiting right turns on red from the right turn slip lane from Summer to Mystic.
- West of the intersection, the Dunkin' and gas station on the north side of Summer Street have high use driveways that could pose danger to path users if the path is located to the north. The south side includes driveways for Cusack Terrace, which are assumed to be lower volume. It is also important to note that on the north side of the street, once a week a tractor-trailer delivery truck parks in front of Dunkin' to make a delivery. This significantly impacts and narrows the roadway and produces a sight distance problem for people exiting Brookdale Road.
- The steep grade down the parkway may affect sightlines from and to the intersection.
- A Gulf gas station entry-only driveway faces directly into the intersection on a wide turning radius that may encourage high vehicular turning speeds. Vehicles were observed moving quickly into this driveway.
- Lighting exists on all but the northwest corner of the intersection where the path would come up. Lighting at the curb ramp south of the gas station may be inadequate given the size of the intersection, though gas station lighting may increase visibility. The light on the northeast side does not face the crossing.

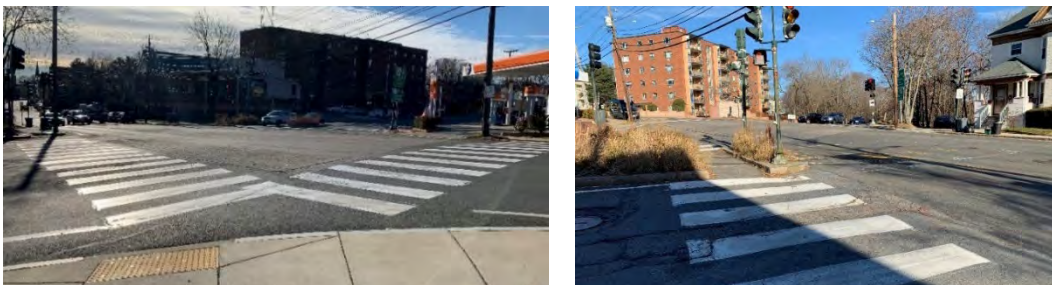


Figure 15 (Left) View of the apex ramp from the northwest side of the intersection where the path is likely to come up grade; (Right) View west across the slip lane and cracked pavement to the refuge island with no detectable warning panels and narrow maneuvering space.

Segment B. Mystic Valley Parkway & Lower Mystic Lake

This segment is approximately .7 miles long and, as a western leg of the Mystic Valley Parkway, has a wooded parkway character with a roadway that heads north from the Mystic / Summer intersection before curving east. The segment journeys south of Lower Mystic Lake for approximately a quarter mile. The entire segment is a no-parking zone.

Cross Section

- The ROW is a minimum of 45' wide and varies much higher in this segment.
- Roadway varies between 30 and 40' wide with two lanes each 11-15' wide and 4-5' wide shoulders
- An existing asphalt sidewalk is 7-8' wide and separated from the roadway by a narrow lawn strip
- A short sidewalk also exists on the west side of the road between Medford Street and Maynard Street
- From a guard rail behind the sidewalk to the curb face the width is 10-12'
- Woodland or lake and vegetated bank on northern side of roadway
- Woodland and steep hill up to cemetery and residences on south side of roadway

Infrastructure Observations

- Cut-throughs from neighborhood streets exists at Emerson Road / Kimball Road and at Davis Avenue in the western portion of the segment. Cut-throughs are steep and not ADA-compliant. They are partially paved.
- Opportunity for selective vegetation clearing and overlook at lake
- Concrete culvert described in Bridges & Culvert section
- The asphalt is in fair to poor condition, with numerous cracks across the pavement that make it inaccessible.
- The grass strip is mostly worn down to earth, likely by runners seeking a softer surface
- A large open lawn area sits east of the parkway across from Mystic Lake Drive and Maynard Street. The sidewalk in this portion stays near the roadway.
- Historic-style cobra head light poles are located in the grass buffer between the sidewalk and roadway
- Few drainage inlets are present in this segment, though there are inlets on both sides of the roadway. Inlets are located on all corners of the parkway intersection with Hayes Street and at Maynard Street on the west side of the parkway.
- Residents noted in the public meeting that stormwater runoff from Kimball Street and Davis Avenue drives a lot of debris downhill onto the existing path

Safety Observations

- Potential crossing to Hayes Street but vehicular speeds were observed to be fast and sightlines somewhat limited due to the roadway curving on either side of this intersection and a fence running along the southern side of the roadway next to residences
- Mystic Lake Drive and Maynard Street also intersect with the parkway in this segment as the parkway curves southward. The sightlines from these intersections are more limited than at Hayes Street due to the curving roadway in addition to vegetation and residential fencing



Figure 16 (Clockwise from top left) Patched pavement and temporary cover on the culvert on the southwest end of Lower Mystic Lake; intersection with Hayes Street; potential area for overlook of lake across from Hayes Street; wide grassy area on the southern end of the segment

Medford Street and High Street Rotaries

The rotaries are characterized by large corner radii, wide travel lanes, and a lack of crossings for active users. The Mystic Valley Parkway/Medford Street/High Street rotary is approximately 275' to the west of the Mystic Valley Parkway/Arlington Street/High Street rotary with the Mystic River running between them. An accessible crosswalk across High Street along the river is a connection to strengthen with a redesign of the rotaries.

See the Traffic Assessment for a description of lane configuration and existing operations at these intersections.

Infrastructure Observations

- The circling lane of the western rotary varies between 30' and 35' wide and between 20' and 50' wide at the eastern rotary.
- The curb-to-curb width of High Street between the rotaries is approximately 60' with one approximately 26' travel lane in each direction and 8' asphalt sidewalks on either side.
- Crosswalks are primarily provided across the north-south running roadways, except the northern leg of Mystic Valley Parkway at the eastern rotary where the second crosswalk is across High Street at Jerome Street. No crosswalk is provided between the rotaries across High Street at the path crossing.
- Where provided, curb ramps at crosswalks appear to be ADA-compliant with tactile warning panels at the western rotary. Curb ramps typically lack warning panels at the eastern rotary crosswalks.
- MBTA Bus Route 80 and 95 run eastbound/westbound along Medford Street and High Street with stops in both directions at Jerome Street and Hayes Street.
- Jerome Street intersects High Street east of Mystic Valley Parkway/Arlington Street at a skewed angle.
- The earth-surface Mystic River Path runs along the east side of the river north of High Street.

Safety Observations

- No crosswalk or curb ramps are provided across High Street along the Mystic River where there may be a desire line for path users.
- The large corner radii and wide approaching and receiving travel lanes at the rotaries allow for high-speed turning movements.
- Lack of horizontal deflection for through movements in most directions allow vehicles to traverse the rotaries at high speeds with minimal slowing.
- Driveways to businesses along the northwest corner of the west rotary and the southeast corner of the east rotary introduce additional conflict points for users to navigate.



Figure 17 (Left) Excess pavement and lack of horizontal deflection at the High Street rotary; (right) no crossing on the path side of the Medford Street rotary

Segment C. Mystic Valley Parkway from the Rotaries to Harvard Avenue/River Street Bridge

The earth-surface Mystic River path continues south of the Medford Street rotary in Arlington between the Mystic River and vegetative conditions that vary from trees on lawn to narrow woodland next to the north side of the Mystic Valley Parkway. The parkway, meanwhile, continues over a small hill and passes by residences and five intersecting neighborhood streets on its south side. No parking is allowed along the parkway here.

Cross Section

- 47'-50' ROW along the parkway
- 38-40' wide roadway with 13-15' wide travel lanes
- 5' shoulder on the south side and 7' shoulder on the north side
- Green space approximately a minimum of 60' wide at its narrowest point and up to 110' wide near the Medford Street rotary and across from Palmer Street
- The earth to stonedust path is approximately 7' wide in this segment and close to the river rather than the parkway. This path has many roots along it and is not accessible for most bikes.
- 5' wide sidewalk separated from roadway by lawn strip of varying width with trees on south/southwest side of parkway throughout this segment

Infrastructure Observations

- The parkway and earth path are grade separated south of the rotary. Alternatives will consider whether on-road bike lanes in addition to the path make sense in this section
- Trees on lawn condition exists further east, and views to the path open up.
- A few historic-style benches are located along the path in this area. They are located on concrete pads that are not immediately accessible to the path and do not have space for a wheelchair to pull alongside the benches.
- A couple residential driveways access the parkway north of Beacon Street, and multiple driveways access the parkway south of Park Street.
- Consider whether an overlook or selective tree pruning may open views in this area.
- Cross street curb ramps are typically not ADA compliant. A crosswalk across the parkway exists only at the intersection with Palmer Street and is not signed or ADA compliant. Consider whether other crossings are needed based on desire lines.
- The earth to stonedust path next to the river is not lit. Roadway lighting is present along the parkway, including at the Palmer Street crossing.
- Drainage inlets are located downhill at the intersection with Palmer Street and at other cross street intersections further east.

Safety Observations

- The woodland nature of this area mixed with the steep slope from the roadway down to the path combine to make this portion feel more secluded, which may affect people's feeling of personal safety.
- The hill may limit visibility of cyclists in the roadway while encouraging faster vehicular speeds downhill. The hill is also a difficult climb for people on bikes.



Figure 18 (clockwise from top left) opportunity exists to open year around river views with ADA accessible seating; the earth path is eroded in this narrow area, with the parkway on the hill to the right; the parkway hill may limit sightlines and encourage higher speeds downhill; the crossing at Palmer Street requires signage and ADA ramp upgrades at a minimum

Mystic Valley Parkway and River Street Intersection

The southeastern-most signalized intersection in the study area is the intersection of Mystic Valley Parkway with River Street. The Mystic River Path crosses River Street just north of the intersection and Dugger Park is located on the other side of the Mystic River at the corner of Harvard Avenue at Mystic River Road in Medford.

See the Traffic Assessment section for a description of lane configurations and signal phasing and operations at the intersection.

Infrastructure Observations

- While crosswalks are provided across all legs of the intersection, curb ramps are not ADA compliant and require significant reconfiguration on all sides of the intersection. No curb ramps are present where the Mystic River Path is located midblock at the bridge.
- Branches of the Mystic River Path approach River Street north of its intersection with the parkway.
- Drainage inlets are located south of the intersection on both sides of River Street and southeast on Mystic Valley Parkway
- One roadway light faces the parkway crosswalk on the northwest side of the intersection but is partly hidden on the east side by a tree. Another light faces the southern crosswalk from the southeast gas station corner. The northeast corner from parkway land is presumed to be inadequately lit given this configuration. Lights are present at the midblock path crossing on the Harvard Avenue/River Street bridge away from the intersection.
- Pavement conditions in this intersection are fair to good.

Safety Observations

- The gas station driveway facing north into the intersection on Mystic Valley Parkway introduces more conflict points within the intersection and needs to be reconfigured.
- The gas station side/east side of River Street has two driveways, including one driveway that is very close to the intersection
- Crosswalks are provided across all legs of the intersection, but the north River Street crossing is approximately 90' south of where the Mystic River Path is located on the bridge, leaving anyone who crosses in that area less visible to drivers.
- The approach and receiving lane of the northern leg of River Street are approximately 20' wide, encouraging higher speeds.



Figure 19 (left) south of Harvard Avenue/River Street bridge, the stonedust path splits to head toward the River St / Mystic Valley Parkway intersection and straight across the bridge; (right) curb ramps require reconfiguration, particularly at the Gulf gas station where a crosswalk runs into the curb without a ramp (image:

Segment D. Mystic Valley Parkway from Harvard Avenue/River Street Bridge to Alewife Brook Greenway

South of the Harvard Avenue/River Street Bridge, the Mystic River path is more visible from the parkway in this segment as the planting condition between the path and parkway is trees on lawn throughout. Decatur Street is the only cross street to touch the Mystic Valley Parkway in this segment, but at three different points described under Observations. The parkway side is signed for no parking, while the south/Decatur Street side is not signed to restrict parking though it may be regulated as no parking.

Cross Section

- ROW is between 36' and 47' wide
- 37'-40' wide roadway with 13-14' wide travel lanes
- 5' shoulders both sides
- Stonedust path near river 9-10' wide
- Asphalt sidewalks on both sides of parkway: on north side a 6' wide sidewalk is directly next to parkway, on south side the 5-6' wide sidewalk is separated from the roadway by a tree lawn strip of varying width
- Green space is approximately 50' wide at narrowest point and up to 190' wide near Alewife Brook

Infrastructure Observations

- Trees appear somewhat regularly spaced along the parkway edge, though there appear to be some potential canopy gaps that could be filled; many of the trees are also just a few feet from the sidewalk, so the sidewalk appears to have been a later addition. Consider planting further from the sidewalk.
- At the narrowest open space area the stonedust path is just 15' from the sidewalk lining the parkway, so motor vehicles feel closer in this segment than north of Harvard Avenue/River Street bridge
- The signal near Decatur St for the Alewife Brook Greenway is not aligned with the Mystic River Path
- A few historic-style benches are located along the path in this area. They are located on concrete pads that are not immediately accessible to the path and do not have space for an adjacent wheelchair.
- Cobra head roadway lighting appears on the north side of the parkway often in the middle of the sidewalk
- Drainage inlets appear at one non-intersection point and near the exit of the east end of Decatur Street.
- The pedestrian island at Decatur Street's eastern end does not include detectable warning panels.
- The Mystic River Path is approximately 95' west of the crosswalk to Alewife Brook Greenway entry. A large tree is located directly north of the crosswalk to the Alewife Brook Greenway, and signal equipment that narrows the sidewalk is located adjacent just feet away.

Safety Observations

- The angle of Decatur Street's western intersection allows eastbound vehicles to make turns onto Decatur Street without slowing. Though not observed in traffic counts or in field observations, westbound left turns to Decatur Street from Mystic Valley Parkway must essentially be executed like a U-turn which may be difficult to make against opposing traffic. However, drivers could make a more perpendicular left turn onto Decatur Street from the middle intersection through the large lawn and tree buffer.
- Decatur Street's eastern intersection geometry allows eastbound vehicles to make turns onto Decatur Street at high speed without slowing due to the large southwest corner radius. The Decatur Street receiving lane is also approximately 55' wide, leaving pedestrians exposed for a long period of time.
- The western terminus of the crosswalk across Decatur Street's eastern intersection does not provide pedestrians with a curb ramp or dedicated landing space, and it leads straight into a residential driveway.



Figure 20 (clockwise from top left) view from River St bridge south to split pedestrian paths and trees on lawn; looking southeast at the Alewife Brook Greenway signalized crossing, to which the Mystic River Path does not align; view west toward Decatur Street with wide receiving and exiting lanes; looking south on parkway, with trees on lawn near the river and trees in small plots next to homes

Bridges & Culvert



Figure 21 High Street bridge



Figure 22 Concrete culvert over Mill Brook

The masonry-on-concrete arch bridges at Medford/High Street and Harvard Avenue/River Street are a visual asset to the experience along the Mystic River when seen from the side. On top, the Medford/High Street bridge roadway is 60' wide with 8' wide sidewalks, while the Harvard Avenue/River Street bridge roadway is 40' wide with 7' sidewalks, so the bridges have excessive pavement and may encourage higher vehicular speeds. Ample room exists to incorporate bike facilities and crossings for vulnerable users.

A concrete culvert is located on the southwestern end of Lower Mystic Lake. The culvert extends the width of the roadway and sidewalk over Mill Brook.

Conditions

Toole Design sought and received conditions inspections reports from MassDOT dated 2020/2021. Construction plans were also sought but not received by the time of writing. The superstructure – the main part of each bridge that bears load weight, supports the deck, and connects substructure elements – is in satisfactory condition for both bridges, with minor deterioration only. The substructure of each bridge supports the

superstructure and distributes the load below-ground. The substructure of the Harvard Avenue/River Street bridge is in satisfactory condition while the substructure for the Medford/High Street bridge is in good condition.

Deck components (wearing surface, curbs, sidewalk) are in satisfactory to good condition for both bridges, though the sidewalk on the Medford/High Street bridge is rated as in fair condition. Field observations reveal that pavement conditions within the sidewalk are cracked enough in locations for travel to be uncomfortable for many users. Some signage and light poles narrow the pedestrian paths as well, and transitions to the Mystic River paths generally include a rough pavement edge that drops abruptly to the earth or stonedust path. Harvard Avenue/River Street bridge sidewalks also include, to a smaller degree, wide pavement cracks.

According to the inspection report, the culvert at Mill Brook is in fair condition only, with cracking in many locations and a scour condition that is recommended for underwater inspection to determine whether the culvert structure is undermined. The report identifies a few items for immediate addressing by MassDOT, and it appears from field observations that culvert conditions have been inspected more recently.

Use for Path

Project Team members were asked whether consideration should be given to running path connections underneath either or both the High Street and Harvard Avenue/River Street bridges. The response was negative due to expense, construction complexity, and the lack of space for both a path and paddlers/kayakers. It is also likely not feasible to construct a path under the bridges given the observed lack of clearance. The high-water line would need to be established and the path constructed a couple feet above that.

Traffic Assessment

The following section describes the lane assignments, turning movement counts, signal phasing, and operations for motor vehicles and active users in existing conditions at the study area signalized intersections and rotaries.

Lane Assignment and Signal Phasing

Summer Street and Mill Street / Cutter Hill Road Intersection

Summer Street at Mill Street/Cutter Street is a four-leg, signalized intersection where Summer Street eastbound left turns are restricted. The Mill Street northbound approach consists of a shared left-turn/through lane and a right-turn lane. The Cutter Hill Road southbound approaches consists of general-purpose travel lanes. The Summer Street westbound approach consists of a left-turn lane and a shared through/right-turn lane, and the Summer Street eastbound approach of a through lane and a right-turn lane. Phasing begins with the Summer St westbound left, westbound through, and Mill Street northbound right running simultaneously before the Summer Street westbound through and eastbound through run concurrently. Pedestrians are provided an exclusive phase, and then the northbound and southbound approaches operate simultaneously. Right turns on red are restricted for all approaches, though signage for the Cutter Hill Road approach appears to be damaged/missing.

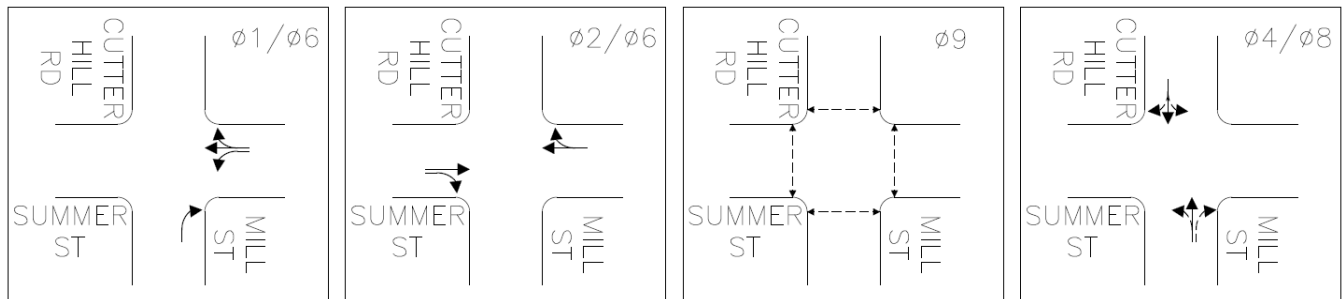


Figure 23 Existing Signal Phasing at Summer Street at Mill Street/Cutter Hill Road

Summer St / Mystic St / Mystic Valley Pkwy Intersection

At the Mystic Valley Parkway/Summer Street at Mystic Street intersection, the Mystic Valley Parkway westbound approach consists of a general-purpose travel lane though the wide travel lane typically allows drivers to treat the approach as two lanes. The Summer Street eastbound approach consists of a left-turn/through lane and a signalized, channelized right-turn lane. The northbound and southbound Mystic Street approaches both consist of a left-turn lane and a shared through/right-turn lane. Signal phasing at the intersection begins with the northbound approach receiving a lead before the northbound and southbound approaches run concurrently with both left turn phases running as permissive phases (Figure 24). Pedestrians are provided an exclusive phase. Finally, the Mystic Valley Parkway westbound approach and the Summer Street eastbound approach run simultaneously. Right turns on red are restricted for all approaches except the Summer Street eastbound right turn onto Mystic Street.

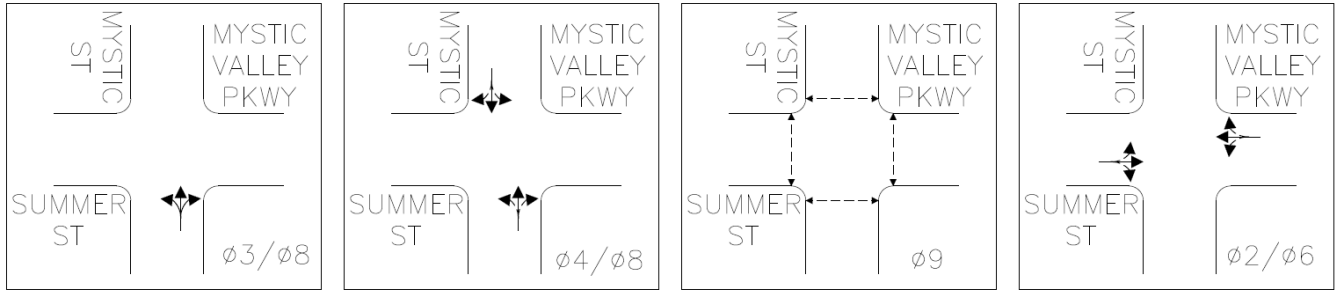


Figure 24. Existing Signal Phasing at Mystic Valley Parkway/Summer Street at Mystic Street

Medford Street and High Street Rotaries

The Mystic Valley Parkway at Medford Street/High Street rotary is located approximately 275 feet from the Mystic Valley Parkway/Arlington Street at High Street rotary to the west. The Mystic River Path runs along the Mystic River between the intersections and crosses High Street. The rotaries do not provide crosswalks along all approaches, and the only north-south crosswalk across Medford Street/High Street is the eastern crosswalk across High Street east of Mystic Valley Parkway/Arlington Street. Curb radii at the rotaries are relatively large allowing vehicles to make turns at high speeds.

Mystic Valley Parkway and River Street Intersection

Mystic Valley Parkway at River Street is a four-leg, signalized intersection with each approach consisting of general-purpose travel lanes. Signal phasing at the intersection begins with the Mystic Valley Parkway eastbound and westbound approaches running simultaneously before the westbound left turn receives a protected phase (Figure 25). Pedestrians are provided an exclusive pedestrian phase ahead of the River Street northbound and southbound approaches running simultaneously.

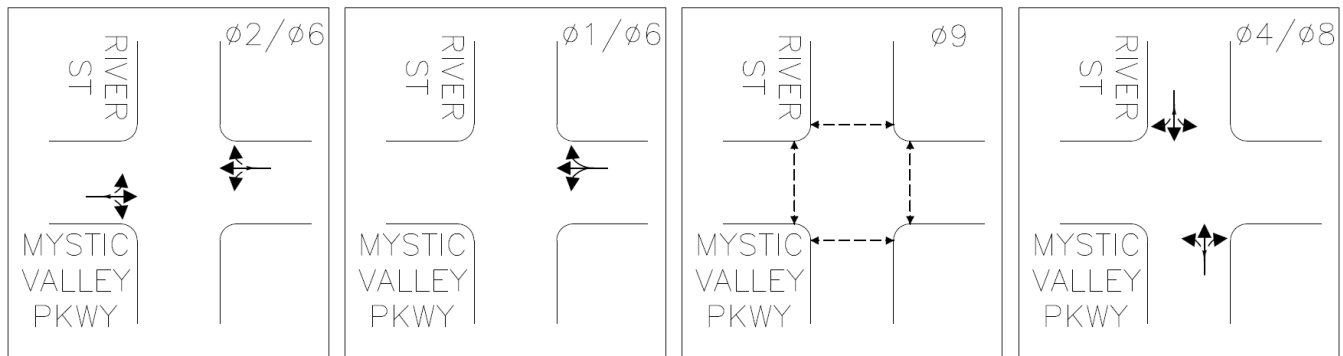


Figure 25. Existing Signal Phasing at Mystic Valley Parkway at River Street

Traffic Count Data

Turning movement counts (TMC) were recorded at each of the study area intersection on:

- Thursday, December 9, 2021 between 7:00 am and 9:00 am and between 4:00 pm and 6:00 pm, and
- Saturday, December 11, 2021 between 10:00 am and 2:00 pm.

There are no nearby developments anticipated to affect traffic at the study area intersections. No seasonal adjustment factor was applied to the TMCs based on MassDOT’s 2019 Historical Traffic Volume Data weekday

seasonal correction factors for urban principal arterial roadways.¹ TMC data can be found attached in Appendix A. Traffic Assessment.

Peak hours by intersection fall between 7:30am and 8:45am in the weekday morning peak hour, 4:00pm and 6:00pm in the weekday evening peak hour, and 11:00am and 1:45pm on Saturdays midday. Table 2 outlines the morning and evening peak hours recorded at each intersection.

Table 2. Peak Hours by Intersection

Intersection	Morning Peak Hour (am)	Evening Peak Hour (pm)	Saturday Midday Peak Hour (am/pm)
Mystic Valley Pkwy at River St	7:45-8:45	5:00-6:00	12:25-1:15
Mystic Valley Pkwy at High St/Medford St	7:30-8:30	4:00-5:00	12:45-1:45
Mystic Valley Pkwy/Arlington St at High St	7:30-8:30	4:00-5:00	12:45-1:45
Summer St/Mystic Valley Pkwy at Mystic St	7:30-8:30	4:00-5:00	11:15-12:15
Summer St at Mill St/Cutter Hill Rd	7:45-8:45	4:00-5:00	11:00-12:00

TMC diagrams for motor vehicles are represented graphically in Figure 26, for pedestrians in Figure 27, and for bicycles in Figure 28.

¹ MassDOT Historical Traffic Volume Data, 2019 MassDOT weekday seasonal and axle correction factors (<https://www.mass.gov/lists/massdot-historical-traffic-volume-data>)



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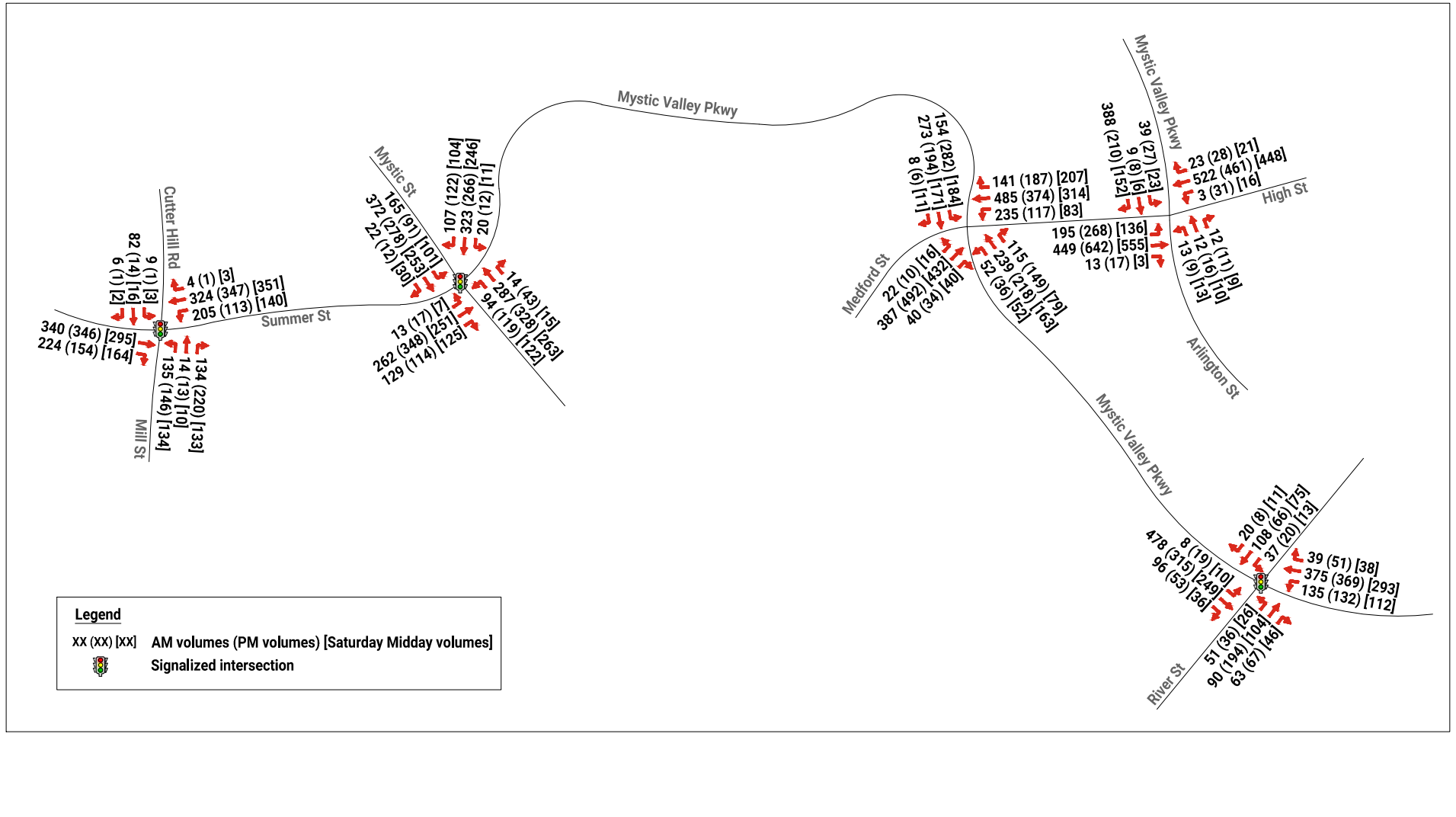


Figure 26 Existing (2021) Condition Peak Hour Motor Vehicle Traffic Volumes

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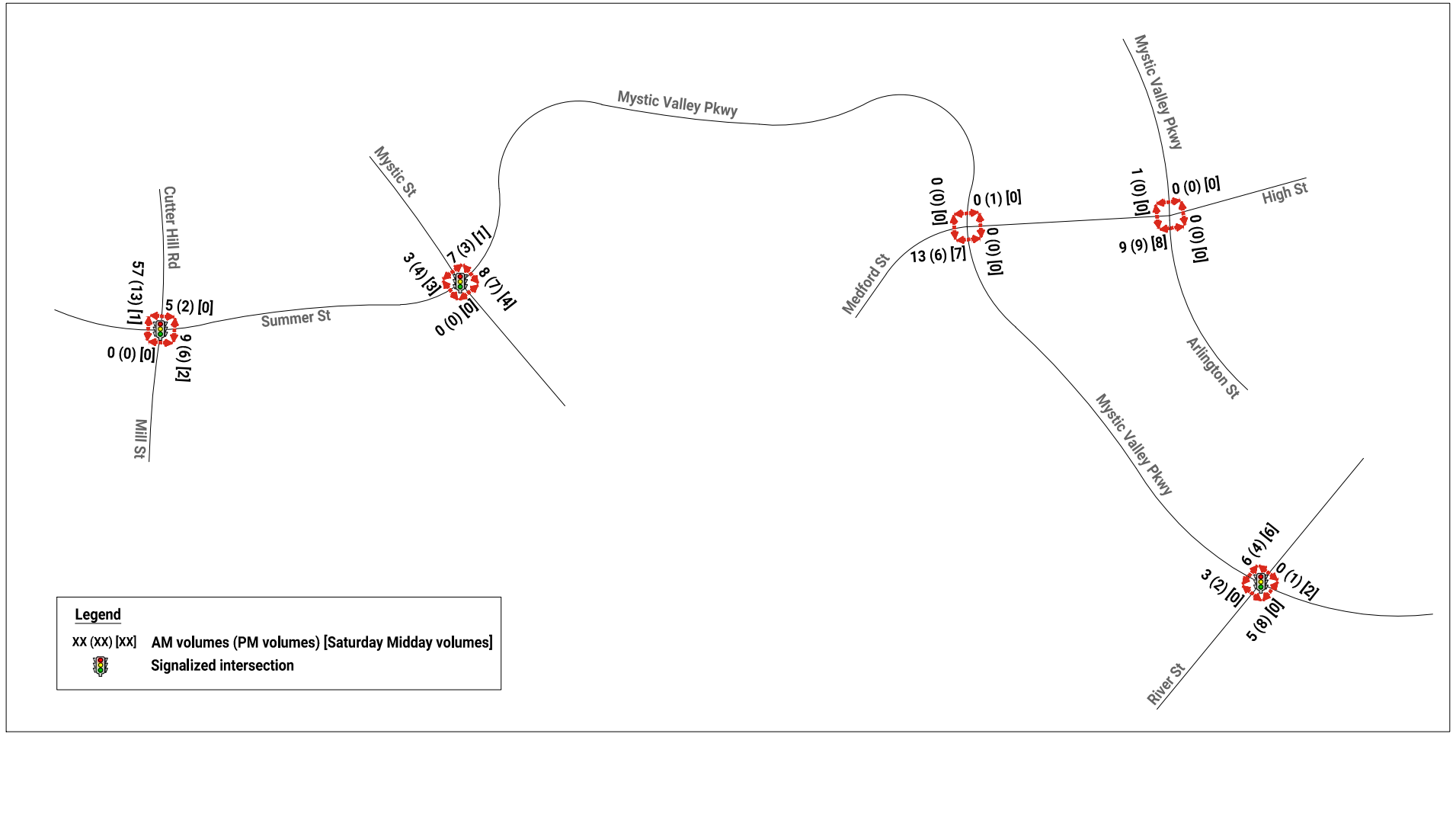


Figure 27 Existing (2021) Condition Peak Hour Pedestrian Volumes

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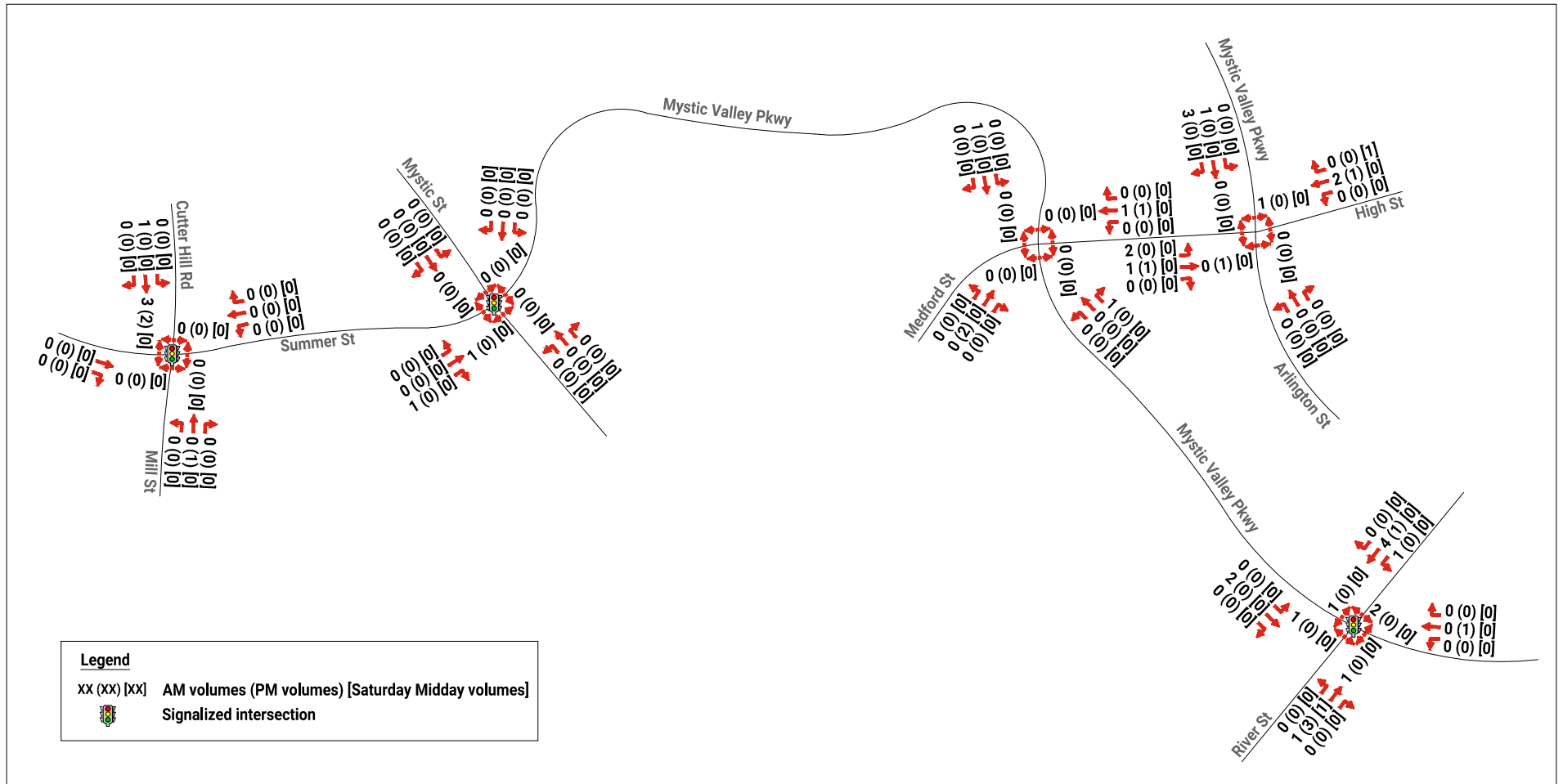
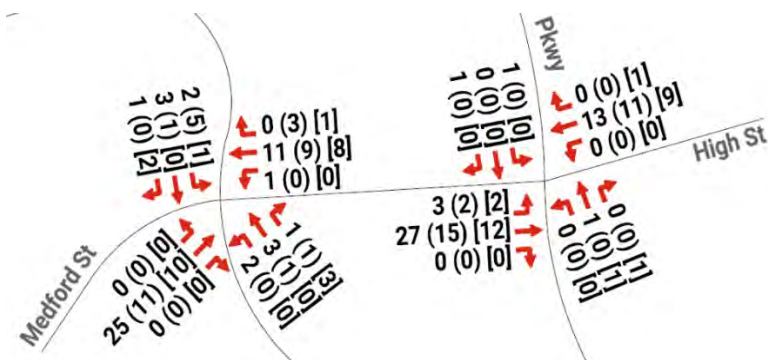


Figure 28 Existing (2021) Condition Peak Hour Bicycle Volumes

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Massachusetts Route 60, running along Medford Street and High Street, is a truck route extending from Waltham to Revere. At the two study area rotaries, Mystic Valley Parkway at Medford Street/High Street and Mystic Valley Parkway/Arlington Street at High Street, heavy vehicle (buses, single-unit trucks, and articulated trucks) turning movements in the peak hours make up up to 6% of motor vehicle approach traffic (Figure 29).

Legend	
XX (XX) [XX]	AM volumes (PM volumes) [Saturday Midday volumes]
	Signalized Intersection

Figure 29 Heavy Vehicle Turning Movement at the Rotaries

Capacity Analysis

Each intersection was evaluated with two primary metrics, motor vehicle level of service (LOS) and pedestrian level of service (PLOS). Both criteria are described below, and a summary evaluation of each intersection is provided. See Appendix A. Traffic Assessment for more detailed data.

Motor Vehicle Level of Service

Level of Service (LOS) is a performance measure that defines traffic operations based on the average amount of time a vehicle waits at an intersection. For example, LOS A defines the condition with minimum vehicular traffic delay, while LOS F represents the condition with significant traffic delay. The HCM states that “the existence of a LOS F condition does not, by itself, indicate that action must be taken to correct the condition,” and proposed traffic conditions reflect this approach by evaluating intersection performance measures not centered around motor vehicle conditions, as described in the following section. Table 3 indicates the LOS conditions based on average delay as defined by the Highway Capacity Manual (HCM).

Table 3. Motor Vehicle Level of Service Criteria

Level of Service	Average Stopped Delay at Signalized Intersection (seconds/vehicle)	Average Stopped Delay at Unsignalized Intersections (seconds/vehicle)
A	0.0-10.0	0.0-10.0
B	10.1-20.0	10.1-15.0
C	20.1-35.0	15.1-25.0
D	35.1-55.0	25.1-35.0
E	55.1-80.0	35.1-50.0
F	>80	>50.0

To compute the LOS and other performance measures, the HCM methodology was used. For the signalized intersections, HCM 2010 methodology cannot be used since signals use standard National Electrical Manufacturing Association (NEMA) phasing, so HCM 2000 methodology was used. Synchro 10 software was used to apply these methodologies, which allows for inputs such as lane configuration, traffic volumes, pedestrian/bicycle to vehicle interactions, and peak hour factors. Results were used to compare traffic operations in existing and proposed alternative conditions to determine a preferred alternative. Detailed Synchro reports are attached to this memorandum.

Pedestrian Level of Service

Pedestrian LOS (PLOS) metrics are based solely on delay and the concepts and procedures in the *Highway Capacity Manual* (HCM)². Table 4, an excerpt from the HCM, provides PLOS criteria for signalized intersections, along with pedestrian noncompliance likelihood guidance. When pedestrians experience more than a 30 second delay, they become impatient, and are more likely to engage in risk-taking behavior. Average pedestrian delay represents the average number of pedestrians anticipated to wait at a signal relative to the average amount of time those pedestrians have to wait and is calculated using the equations below. An additional 4 seconds is included in the pedestrian effective green time to account for pedestrians who begin their crossing a few seconds after the WALK indication has begun.

Table 4. Pedestrian Level of Service Criteria

Pedestrian Level of Service	Pedestrian Delay (seconds)	Likelihood of Noncompliance
A	0.0–10.0	Low
B	10.1–20.0	
C	20.1–30.0	Moderate
D	30.1–40.0	
E	40.1–60.0	High
F	>60.0	Very High

Source: Highway Capacity Manual, 2000. Transportation Research Board.

$$\text{Pedestrian effective green} = \text{WALK time} + 4 \text{ seconds}$$

$$\text{Pedestrian effective red} = \text{Cycle length} - \text{Pedestrian effective green}$$

$$\text{Average Pedestrian delay} = \frac{\text{Pedestrian effective red}}{2} * \frac{\text{Pedestrian effective red}}{\text{Cycle length}}$$

A summary of motor vehicle LOS and pedestrian PLOS at each intersection is provided in Table 5 Level of Service Summary for Motor Vehicles and Pedestrians. Across all intersections, pedestrian delay is 30 seconds or more, so pedestrians are more likely to cross without the pedestrian signal.

Table 5 Level of Service Summary for Motor Vehicles and Pedestrians

Location	Motor Vehicle LOS	Pedestrian PLOS
Summer Street at Mill Street/Cutter Hill Road	C / B / B	D / E / E
Mystic Valley Parkway/Summer Street at Mystic Street	D / D / C	E / E / E
Mystic Valley Parkway at High Street/Medford Street	F / E / C	Not applicable
Mystic Valley Parkway/Arlington Street at High Street	C / E / B	Not applicable
Mystic Valley Parkway at River Street	B / B / B	D / D / D

LOS is listed according to: Morning Peak Hour / Evening Peak Hour / Saturday Peak Hour

² HCM 2000: Highway Capacity Manual. Washington, D.C.: Transport Research Board, 2000.

Environmental Mapping

This section provides an initial review of environmental resources, including open space and protected habitat and wetland/water resources as shown in Figure 30 through data from the Natural Heritage & Endangered Species Program (NHESP), United States Geological Survey (USGS), the Massachusetts Department of Environmental Protection (MassDEP), and the Federal Emergency Management Agency (FEMA). This information will help Toole Design identify potential impacts of project alternatives to environmental resources and permitting implications at a later date.

No NHESP Natural Communities of conservation interest or Estimated or Priority Habitats of rare wildlife are located within the study area. NHESP Priority Habitat is identified only in the southwest corner of the map at Spy Pond, outside the study area. Similarly, no Areas of Critical Environmental Concern (ACECs) as designated by the Secretary of Energy and Environmental Affairs (EEA) are located in the project area. Anadromous fish spawning habitat and water quality monitoring stations are located around the mouth of Mill Brook into Lower Mystic Lake.

Buzzell Field and Arlington Catholic playing field are identified as MassDEP regulated hazardous material site with Activity and Use Limitations (AULs) as these properties were once a solid waste disposal area according to the 2010 Comprehensive Site Assessment & Remedial Action Plan.

As previously stated, 2018 Town of Arlington Zoning Bylaws identifies much of the project area as part of an overlay Floodplain District and Inland Wetland District. This area is identified through Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) reflected in the FEMA Q3 Flood Zone layer of the summary Figure 30 map. This land is regulated by Wetlands Protection Regulations of Town Bylaws and the Massachusetts Wetlands Protection Act (MGL c.131 § 40). Lower Mystic Lake is considered a Great Pond, a pond with a water surface area of 10 acres or more. The lake and Mystic River fall under Chapter 91 jurisdiction.

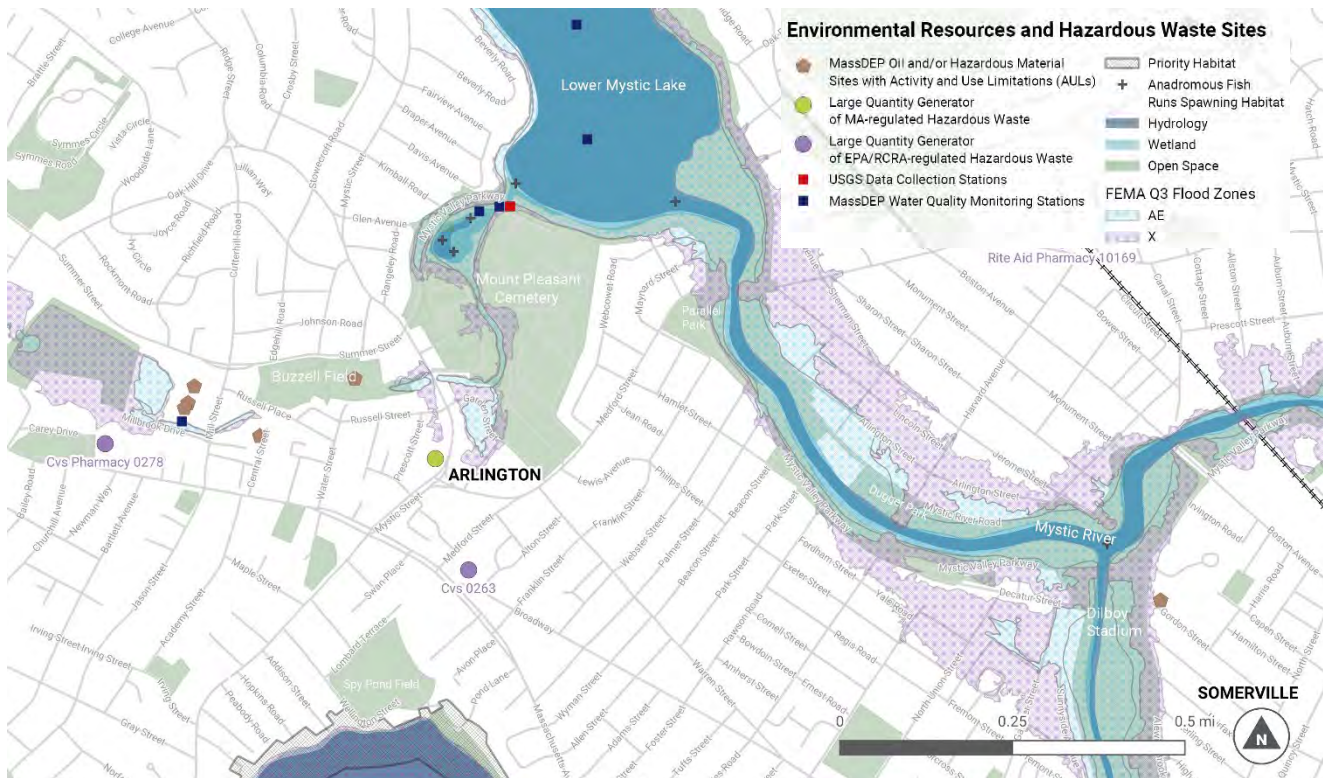


Figure 30 Project area environmental resources and hazardous waste summary map

PLEASE NOTE: This page has been edited from the original memorandum to reflect Appendices location updates for the Final Report.

Appendix AA. Existing Conditions Traffic Assessment

Howard Stein Hudson (HSH)'s *Low Cost Signal Improvements at Mystic Street (Route 3A)/Summer Street (Route 2A)/Mystic Valley Parkway* report collected TMCs at the intersection in May 2015. Compared to the 2015 counts, the December 2021 counts collected for this study are approximately 16 to 17% lower than the 2015 counts (Figure 1, Appendix A. Traffic Assessment). Throughout the COVID-19 pandemic there have been vast changes in traffic patterns since March 2020, and those patterns are continuously evolving. While those patterns are attributed to new work-from-home policies and changes in daily commuting patterns, the reduced traffic volumes reflect *Connect Arlington's* visions and targets of a pedestrian-first, walk-friendly environment that deemphasizes motor vehicle priority. As the basis of design for the alternatives developed for this project is improved safety and comfort for people walking, riding bicycles, and travelling with mobility aids, traffic analysis was conducted with unadjusted 2021 traffic counts reflecting what may be a "new normal."

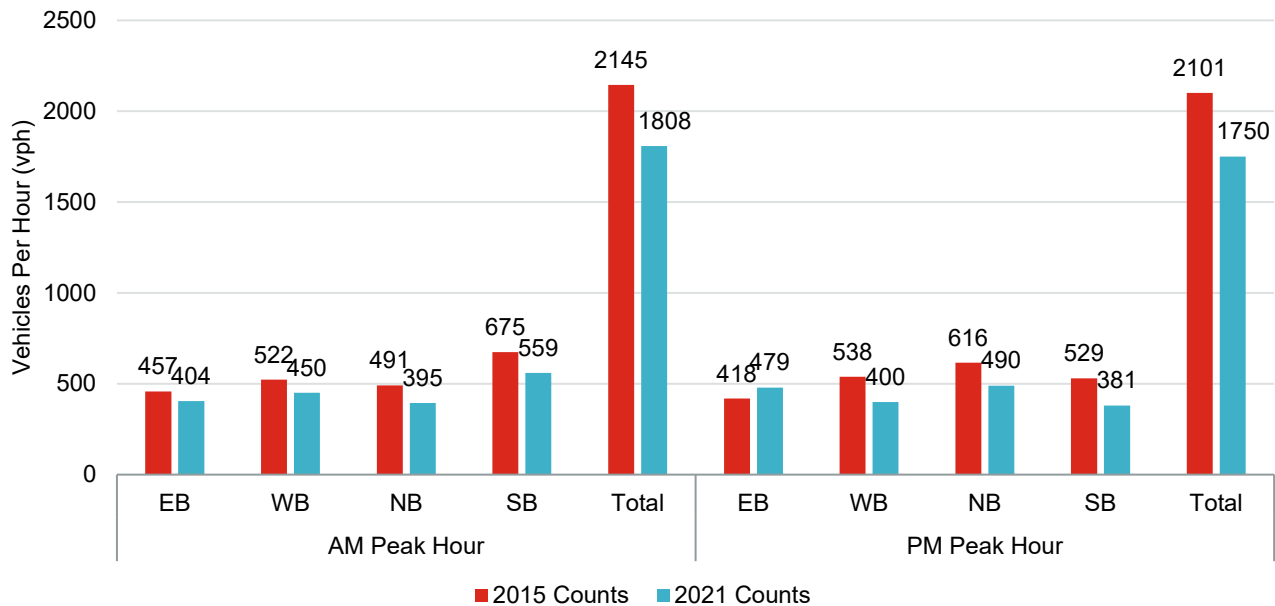


Figure 1. Comparison of Historic Traffic Counts to Recent Counts

Summer Street at Mills Street/Cutter Hill Road

All approaches at Summer Street at Mills Street/Cutter Hill Road operate at LOS D or better in all peak hours which is generally considered acceptable in urban settings. Pedestrians at the intersection experience a PLOS of D in the morning peak hour and E in the evening and Saturday midday peak hours with an average pedestrian delay of approximately 44 and 34 seconds, respectively. A PLOS D indicates a high likelihood of noncompliance.

Table 1. Summary of Motor Vehicle Capacity Analysis at Summer Street at Mill Street/Cutter Hill Road

	V/C ^a	Delay ^b	LOS ^c	Queue (50 th /95 th) ^d
Morning Peak Hour				
Summer St EB Thru	0.68	32.3	C	211/342
Summer St EB Right	0.61	31.2	C	136/241
Summer St WB Left	0.72	40.9	D	130/#274
Summer St WB Thru/Right	0.35	13.6	B	133/230
Mills St NB Left/Thru	0.63	37.0	D	94/172
Mill St NB Right	0.24	18.3	B	54/102
Cutter Hill Rd SB Left/Thru/Right	0.27	30.2	C	57/110
Overall	0.54	28.1	C	-
Evening Peak Hour				
Summer St EB Thru	0.61	21.5	C	105/283
Summer St EB Right	0.38	18.7	B	43/135
Summer St WB Left	0.50	26.7	C	37/#140
Summer St WB Thru/Right	0.37	9.9	A	60/214
Mills St NB Left/Thru	0.62	27.7	C	50/#183
Mill St NB Right	0.43	16.2	B	39/165
Cutter Hill Rd SB Left/Thru/Right	0.04	20.7	C	5/27
Overall	0.52	18.5	B	-
Saturday Midday Peak Hour				
Summer St EB Thru	0.51	18.0	B	77/224
Summer St EB Right	0.39	17.2	B	42/135
Summer St WB Left	0.49	22.6	C	38/#171
Summer St WB Thru/Right	0.34	7.9	A	51/203
Mills St NB Left/Thru	0.55	22.7	C	39/142
Mill St NB Right	0.23	12.3	B	18/96
Cutter Hill Rd SB Left/Thru/Right	0.06	18.6	B	5/31
Overall	0.49	15.5	B	-

^a Volume-to-capacity ratio, ^b Average total delay in seconds per vehicle, ^c Level of service, ^d 50th and 95th percentile queue length in feet per lane (assuming 25 feet per vehicle), ~ volume exceeds capacity, queue is theoretically infinite, # 95th percentile volume exceeds capacity, queue may be longer

Mystic Valley Parkway/Summer Street at Mystic Street

All approaches at Mystic Valley Parkway/Summer Street at Mystic Street operate at LOS D or better in all peak hours which is generally considered acceptable in urban settings. Pedestrians at the intersection experience a PLOS of E with an average pedestrian delay of approximately 50 seconds in all peak hours. A PLOS E indicates a high likelihood of noncompliance.

Table 2. Summary of Motor Vehicle Capacity Analysis at Mystic Valley Parkway/Summer Street at Mystic Street

	V/C ^a	Delay ^b	LOS ^c	Queue (50 th /95 th) ^d
Morning Peak Hour				
Summer St EB Left/Thru/Right	0.70	38.6	D	171/#478
Mystic Valley Pkwy WB Left/Thru/Right	0.91	57.5	E	2159/#625
Mystic St NB Left	0.26	18.7	B	21/85
Mystic St NB Thru/Right	0.39	19.2	B	86/270
Mystic St SB Left	0.54	35.0	D	67/#214
Mystic St SB Thru/Right	0.75	40.1	D	174/#505
Overall	0.65	39.0	D	-
Evening Peak Hour				
Summer St EB Left/Thru/Right	0.87	49.8	D	230/#655
Mystic Valley Pkwy Left/Thru/Right	0.85	49.1	D	194/#565
Mystic St NB Left	0.28	18.0	B	28/108
Mystic St NB Thru/Right	0.49	21.0	C	118/357
Mystic St SB Left	0.33	29.3	C	36/119
Mystic St SB Thru/Right	0.56	32.7	C	124/325
Overall	0.58	37.4	D	-
Saturday Midday Peak Hour				
Summer St EB Left/Thru/Right	0.64	32.6	C	167/#462
Mystic Valley Pkwy WB Left/Thru/Right	0.70	35.5	C	169/#484
Mystic St NB Left	0.26	15.0	B	29/110
Mystic St NB Thru/Right	0.34	15.8	B	82/258
Mystic St SB Left	0.31	25.5	C	40/129
Mystic St SB Thru/Right	0.51	28.1	C	120/315
Overall	0.52	27.5	C	-

^a Volume-to-capacity ratio, ^b Average total delay in seconds per vehicle, ^c Level of service, ^d 50th and 95th percentile queue length in feet per lane (assuming 25 feet per vehicle), ~ volume exceeds capacity, queue is theoretically infinite, # 95th percentile volume exceeds capacity, queue may be longer

Mystic Valley Parkway at High Street/Medford Street

Analysis at Mystic Valley Parkway at High Street/Medford Street see the rotary operate under LOS F in the morning peak hour and LOS E in the evening peak hours. The High Street westbound approach in the morning peak hour and the Medford Street eastbound approach in the evening peak hour operate overcapacity. All approaches operate at LOS C or better in the Saturday midday peak hour.

Table 3. Summary of Motor Vehicle Capacity Analysis at Mystic Valley Parkway at High Street/Medford Street

	V/C ^a	Delay ^b	LOS ^c	Queue (95 th) ^d
Morning Peak Hour				
Medford St EB Left/Thru/Right	0.850	37.9	E	9
High St WB Left/Thru/Right	1.088	79.8	F	23
Mystic Valley Pkwy NB Left/Thru/Right	0.682	21.1	C	5
Mystic Valley Pkwy SB Left/Thru/Right	0.881	44.3	E	10
Overall	-	52.8	F	-
Evening Peak Hour				
Medford St EB Left/Thru/Right	1.029	72.2	F	16
High St WB Left/Thru/Right	0.902	34.2	D	12
Mystic Valley Pkwy NB Left/Thru/Right	0.953	60.4	F	12
Mystic Valley Pkwy SB Left/Thru/Right	0.855	34.9	D	10
Overall	-	49.1	E	-
Saturday Midday Peak Hour				
Medford St EB Left/Thru/Right	0.716	20.6	C	6
High St WB Left/Thru/Right	0.715	17.4	C	6
Mystic Valley Pkwy NB Left/Thru/Right	0.527	15.7	C	3
Mystic Valley Pkwy SB Left/Thru/Right	0.541	13.8	B	3
Overall	-	17.2	C	-

^a Volume-to-capacity ratio, ^b Average total delay in seconds per vehicle, ^c Level of service, ^d 95th percentile queue length in feet per lane (assuming 25 feet per vehicle), ~ volume exceeds capacity, queue is theoretically infinite, # 95th percentile volume exceeds capacity, queue may be longer

Mystic Valley Parkway/Arlington Street at High Street

All approaches operate under capacity in all peak hours except for the High Street eastbound approach in the evening peak hour in which the rotary operates under LOS E. Aside from this approach, all movements operate under LOS D or better.

Table 4. Summary of Motor Vehicle Capacity Analysis at Mystic Valley Parkway/Arlington Street at High Street

	V/C ^a	Delay ^b	LOS ^c	Queue (95 th) ^d
Morning Peak Hour				
High St EB Left/Thru/Right	0.710	15.2	C	6
High St WB Left/Thru/Right	0.699	16.8	C	6
Arlington St NB Left/Thru/Right	0.078	8.1	A	0
Mystic Valley Pkwy SB Left/Thru/Right	0.781	27.5	D	7
Overall	-	18.8	C	-
Evening Peak Hour				
High St EB Left/Thru/Right	1.026	55.1	F	22
High St WB Left/Thru/Right	0.749	20.6	C	7
Arlington St NB Left/Thru/Right	0.108	11.1	B	0
Mystic Valley Pkwy SB Left/Thru/Right	0.441	12.6	B	2
Overall	-	37.8	E	-
Saturday Midday Peak Hour				
High St EB Left/Thru/Right	0.685	13.9	B	6
High St WB Left/Thru/Right	0.541	11.0	B	3
Arlington St NB Left/Thru/Right	0.068	8.2	A	0
Mystic Valley Pkwy SB Left/Thru/Right	0.277	8.7	A	1
Overall	-	12.1	B	-

^a Volume-to-capacity ratio, ^b Average total delay in seconds per vehicle, ^c Level of service, ^d 95th percentile queue length in feet per lane (assuming 25 feet per vehicle), ~ volume exceeds capacity, queue is theoretically infinite, # 95th percentile volume exceeds capacity, queue may be longer

Mystic Valley Parkway at River Street

All approaches at Mystic Valley Parkway at River Street operate at LOS C or better in all peak hours which is generally considered acceptable in urban settings. Pedestrians at the intersection experience a PLOS of D with an average pedestrian delay of approximately 40 seconds in all peak hours.

Table 5. Summary of Motor Vehicle Capacity Analysis at Mystic Valley Parkway at River Street

	V/C ^a	Delay ^b	LOS ^c	Queue (50 th /95 th) ^d
Morning Peak Hour				
Mystic Valley Pwky EB Left/Thru/Right	0.56	10.4	B	117/360
Mystic Valley Pkwy WB Left/Thru/Right	0.72	14.3	B	129/429
River St NB Left/Thru/Right	0.58	27.5	C	80/211
River St SB Left/Thru/Right	0.45	25.4	C	63/171
Overall	0.69	15.8	B	-
Evening Peak Hour				
Mystic Valley Pwky EB Left/Thru/Right	0.41	9.3	A	78/222
Mystic Valley Pkwy WB Left/Thru/Right	0.71	13.9	B	140/406
River St NB Left/Thru/Right	0.63	23.8	C	92/#354
River St SB Left/Thru/Right	0.21	18.9	B	26/106
Overall	0.72	15.1	B	-
Saturday Midday Peak Hour				
Mystic Valley Pwky EB Left/Thru/Right	0.34	7.7	A	30/152
Mystic Valley Pkwy WB Left/Thru/Right	0.60	10.0	B	54/265
River St NB Left/Thru/Right	0.38	14.3	B	27/141
River St SB Left/Thru/Right	0.21	13.4	B	15/87
Overall	0.59	10.4	B	-

^a Volume-to-capacity ratio, ^b Average total delay in seconds per vehicle, ^c Level of service, ^d 50th and 95th percentile queue length in feet per lane (assuming 25 feet per vehicle), ~ volume exceeds capacity, queue is theoretically infinite, # 95th percentile volume exceeds capacity, queue may be longer

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Appendix B: Public Meeting Notes & Automated Survey Reports

PLEASE NOTE: This page has been edited from the original existing conditions memorandum to reflect Appendices location updates for the Final Report.

Public Meeting 1 & Summary of Survey Results

Toole Design met with the Project Team, a group of landowners, project funders, and other guiding stakeholders for the first time on January 13, 2022. The meeting was used to discuss path goals and existing conditions per segment and intersection. Meeting notes and a list of Project Team members are included as part of Appendix C.

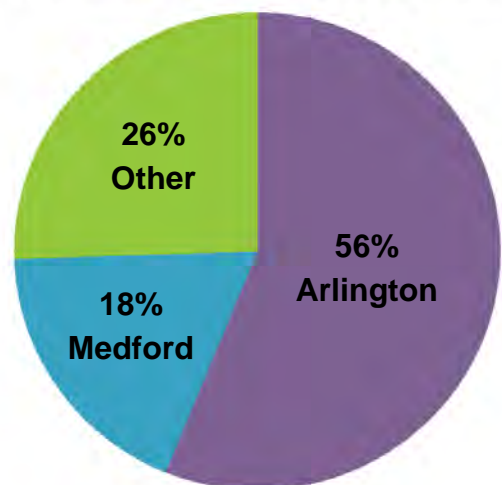
The Town of Arlington and Toole Design also introduced the project to the public as part of a 1.5-hour virtual Zoom meeting on January 26, 2022. The meeting was attended approximately 110 people. The Town gave a welcome, Toole Design gave a short presentation, a 15-minute discussion was held, and then people joined breakout sessions where attendees could share their comments with smaller groups. Breakout session notes were recorded in [Miro - Public Meeting 1](#). After the breakout room, more discussion was held in the main room and through the chat. The notes from the main room discussions and chat are included as Appendix B. Key takeaways from both the main room and smaller groups/Miro include:

- People are seeking broader connectivity, particularly to/through Medford.
- Different types of users, cyclists, ages, and abilities need to be recognized in design.
- Some people would prefer to use neighborhood streets to avoid Summer Street.
- Many people want separation between cyclists and pedestrians, and commuting cyclists would like separate facilities on-road for faster use. South of the rotaries, a couple people would like a stabilized path for use by cyclists near the river to get away from cars.
- Several people have concerns about a path through Buzzell Field due to current field use and configuration. Small breakout groups repeatedly expressed opposition to a path through the field.
- The slope up the parkway toward the Summer Street / Mystic Street/ Mystic Valley Parkway intersection is very challenging for cyclists.
- Stormwater runoff puts debris on the path near Kimball Road / Davis Avenue. Neighbors would like connections from these paths strengthened
- Consider the connection to Parallel Park and to Meadowbrook Park and Mt. Pleasant Cemetery
- The project needs to consider the link with High Street in Medford, where the current plan is to install a westbound bike lane. Parking with sharrows maintained eastbound.
- Many people commented on the unsafe and uncomfortable rotaries and the need for slower speed and safe crossings. Some meeting attendees and survey respondents requested short-term improvements to make these safer rather than waiting years for reconstruction.

Finally, a public survey was released along with the first public meeting. The survey was closed February 11 with 520 completed responses and 132 partial responses. An automated survey report with graphics and tables summarizes all completed responses and is included as Appendix B. Selected survey graphics are shown in this section along with summary notes for each question.

- Q1: When asked in what community respondents live, the largest group of attendees (56%) were from Arlington, followed by 18% from Medford. The remaining 26% of responses came from people living in Cambridge, Somerville, Winchester, Waltham, Lexington, and other communities, demonstrating how important this path connection is for people around the region.

1. In what community do you live?



2. How do you get around? Select all the ways you move for recreation, active transportation, and running errands.

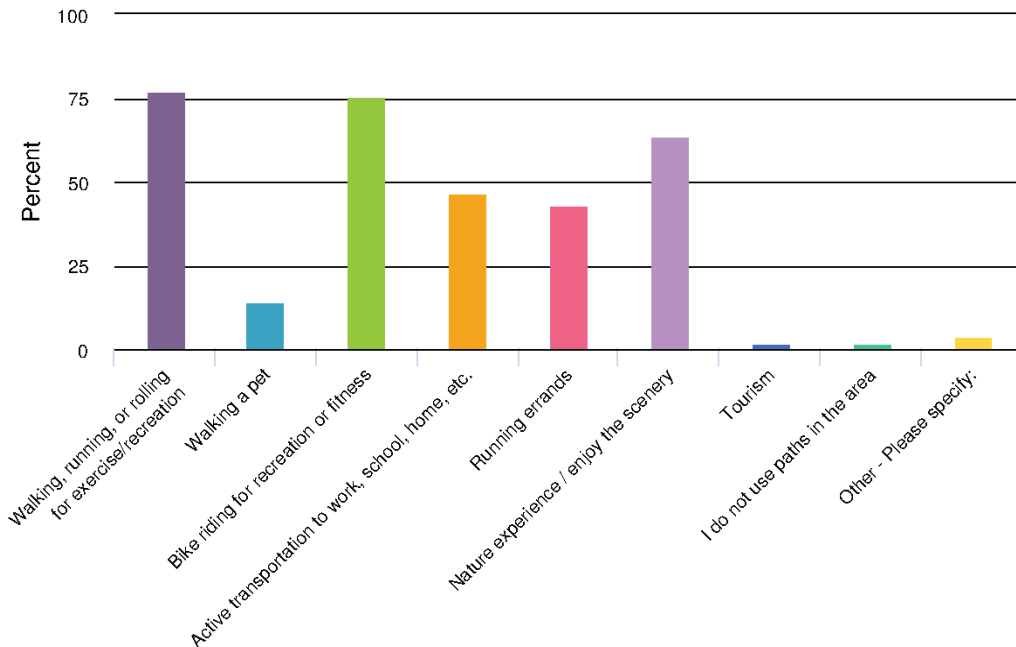
	Almost every day	Once or twice per week	Once or twice per month	Once or twice per year	Never	Responses
Motor vehicle						
Count	158	253	61	11	11	494
Row %	32.0%	51.2%	12.3%	2.2%	2.2%	
Walk / roll						
Count	358	110	15	3	4	490
Row %	73.1%	22.4%	3.1%	0.6%	0.8%	
Walk a pet						
Count	101	5	7	16	288	417
Row %	24.2%	1.2%	1.7%	3.8%	69.1%	
Jog / run						
Count	64	90	59	36	183	432
Row %	14.8%	20.8%	13.7%	8.3%	42.4%	
Bike						
Count	154	162	104	34	36	490
Row %	31.4%	33.1%	21.2%	6.9%	7.3%	
E-bike / e-scooter						
Count	10	23	10	8	361	412
Row %	2.4%	5.6%	2.4%	1.9%	87.6%	
Scooter						
Count	0	6	7	12	384	409
Row %	0.0%	1.5%	1.7%	2.9%	93.9%	
Rollerblade						
Count	0	2	6	19	383	410
Row %	0.0%	0.5%	1.5%	4.6%	93.4%	
Skateboard						
Count	0	2	2	6	400	410
Row %	0.0%	0.5%	0.5%	1.5%	97.6%	

Q2: This question was provided to get a general sense of all the potential modes by which people may be traveling and/or recreating. The graphic shows the response options listed in the survey, with walk/roll selected as the most frequent “almost every day” mode and driving via motor vehicle is the most selected “twice per week” mode. Not shown are the write-in responses:

- A few commenters noted that transit should have been listed as an option. Eight (8) respondents take transit anywhere between once or twice per month or almost every day.
- Other more common write-in responses included paddling (3 people, once or twice per year to once or twice per month), walking with a stroller (4 people, once or twice per week or almost every day), and cross-country skiing (3 people, once or twice per year to once or twice per week)

Q3: When asked what paths they use in the study area, whether occasionally or frequently, the Minuteman Bikeway received the most responses 472 (93% of total responses), while paths along the Mystic River received 390 (77%) responses, and the Alewife Brook Greenway received 344 (68%) responses.

4. What are your reasons for using paths in the area? Select all that apply.



Q4: When asked why individuals use the paths in the area, top choices were walking/running/rolling (77%) followed by bike riding for recreation or exercise (75%) and nature experiences/enjoying the scenery (63%). See Appendix D for individual comments.

Q5: When asked whether they visit the Mystic Lakes for leisure or fitness, 411 (81%) respondents said, yes, at least a few times per year, and 19% said no, rarely or never.

Q6: When asked why people visit the lakes:

- Hundreds of respondents reported visiting the lakes for exercise/physical activity including walking/running, biking, swimming, kayaking/canoeing, and fishing.
- Over 70 people mentioned enjoying nature/scenery, and several people mentioned birdwatching.

Q7: Those who do not visit the lakes reported issues with access, finding parking, or feeling unsafe while biking.

Q8: When asked at what points along the route they are most concerned about safety, all intersections were mentioned repeatedly. See Appendix D for all comment responses. Key takeaways include:

- The most frequent (230+) responses cited the rotaries/circles/roundabouts and lack of safe crossings
- Many people mentioned the lack of useable shoulder on Summer Street or the tight and curved portion of the roadway south of Lower Mystic Lake.
- Several people mentioned poor pavement conditions, whether in the roadway or sidewalk.
- A few people are uncomfortable with the parkway hill near Webster Street both up and down.
- A few people called for improved crossings at Palmer St and to Buzzell Field.
- One person requested a crossing at Park Street and another some consideration for the Franklin Street pedestrian path.

9. What matters to you about the potential path? Please rank how much each element matters to you.

	1 - Not important	2	3 - Somewhat important	4	5 - Most important	Responses
Safe crossings with slow vehicle speeds where I am visible to drivers Count Row %	2 0.4%	6 1.2%	36 7.2%	116 23.2%	340 68.0%	500
Feeling of security, knowing I am visible to other path users or people/homes near the path Count Row %	41 8.2%	65 13.0%	150 30.0%	132 26.4%	112 22.4%	500
Crossings/connections from neighborhood streets Count Row %	13 2.6%	52 10.5%	170 34.4%	150 30.4%	109 22.1%	494
Path or bike lane connections over bridges between Arlington and Medford Count Row %	12 2.4%	26 5.2%	112 22.5%	141 28.4%	206 41.4%	497
Path lighting Count Row %	54 11.0%	80 16.3%	165 33.7%	122 24.9%	69 14.1%	490
Being able to use the path in winter / snow clearing Count Row %	39 7.8%	74 14.8%	135 27.1%	140 28.1%	111 22.2%	499
Preserving trees Count Row %	15 3.0%	38 7.6%	129 25.8%	171 34.2%	147 29.4%	500
Enhancing plant and animal habitat Count Row %	13 2.6%	44 8.8%	148 29.5%	143 28.5%	153 30.5%	501

(Table continues next page)

	1 - Not important	2	3 - Somewhat important	4	5 - Most important	Responses
Opportunities to rest and spend time viewing Lower Mystic Lake Count Row %	33 6.7%	94 19.0%	166 33.5%	126 25.4%	77 15.5%	496
Opportunities to sit and rest periodically along the path Count Row %	58 11.6%	149 29.9%	159 31.9%	90 18.0%	43 8.6%	499
Opportunities for interpretation (of the environment, history, lake use, etc) Count Row %	76 15.6%	162 33.2%	163 33.4%	63 12.9%	24 4.9%	488
None of the above. I'm not interested. Count Row %	81 89.0%	3 3.3%	5 5.5%	1 1.1%	1 1.1%	91

Q9: When asked what matters about the potential path, 340 (68%) of respondents “selected safe crossings with slow vehicle speeds where I am visible to drivers” as “5 – Most Important.” This is by far the most popular selection, followed distantly by “path or bike lane connections over bridges between Arlington and Medford.” Conversely, “opportunities for interpretation” was the most frequently rated “1 – Not important” or “2.”

Q10: When asked what else they would like to share, many people reemphasized the need for safe infrastructure for pedestrians and people on bikes. Additionally:

- Over 30 people are concerned about the narrowness of existing paths and how people will share space on a new path. Among others calling for separate spaces for pedestrians and cyclists, at least two cyclists mentioned that they want separate bike lanes on-road.
- Over 15 individuals talked about lighting. Views were mixed, but several respondents are against lighting the path. In contrast, in question 8, a couple people had mentioned the lack of lighting as a safety issue for cyclists at intersections.
- Seven (7) people asked for signage or other features that help individuals navigate the path.
- Several people would like to see trees preserved. Some would like plantings that support native species, with Alewife Reservation/ Fitchburg Cutoff Path mentioned as an example.
- Several people mentioned erosion of the existing paths. A few individuals are specifically concerned about flooding along the paths and parkway.
- A few people mentioned a desire for some portion of the path to remain unplowed in winter so people can cross country ski
- One person asked to preserve connections from Kimball Road and Davis Avenue, while another person emphasized the need to work with abutters on connections from side streets.

- A few people emphasized the need for strengthened connections to the water, such as overlooks and places to launch canoes/kayaks.
- A few people requested restrooms.
- A few people are concerned that the project will make driving harder and/or increase traffic issues, with an elderly person expressing concern about needing a motor vehicle to get around.

Public Meeting 1 Notes & Chat

Main Room Discussion Notes

Dan Jaffe

- Connection to tri-community path?
- AC: lessons learned in this project to be applied to the next segment directly connecting to TCP--ideally will be another project in near future

Dana Phillips

- Winter maintenance plans?
- Maintenance plan to be developed in design phase--coordination with landowners to allow year round use

Joy Spadafora

- Consider connection to Boston Avenue bike lane which connects to new Green Line station?
- AC: more of a regional nature to that connection--this is Arlington project

Tony Lim

- Connect to downtown Medford via Clippership Connector?
- Setting up connections into Medford, but this scope stays as is, by River

Roderick Holland

- Cyclists tend to use the roads in this area, pedestrians use riverside path, with few exceptions
- River Street is good way to cross the river
- Most of the interesting riding is on the Medford side of Mystic River and east side of Lakes
- "This is potentially interesting"
- Pedestrians informally cross River Street by the bridge, not at intersection

Deniz Karakoyunlu

- Gas station--lots of conflicts with cars
- Summer St--both options--connection through Mill St Park and another connection for pedestrians

Kevin Cuddeback

- River Street crosses into Harvard Street--preferred crossing to avoid rotaries
- Harvard, High Street--currently hard to move ALONG the river
- No good way to cross Harvard Street
- Harvard St too wide on the bridge--room for double wide sidewalk
- Pedestrians cross at high point of bridge, rather than dealing with rotaries--midblock informal crossing for pedestrians
- Hard for people biking to travel along the river from double rotaries

Emily O'Brien

- Will signage be included in design process?
- Existing path network--hard to navigate because lack of wayfinding--people don't know how to connect between facilities

Gerard McQuaid

- "low hanging fruit" to connect near whole foods (?)
- Have both a river-side path with overlooks etc AND improvements to Mystic Valley Pkwy for vehicular cycling?
- "Best of both worlds" dual facilities

Chat Notes

19:40:07 From *Julie Shapiro, Toole Design to Everyone:

<https://tinyurl.com/MystictoBikewaySurvey1>

19:51:27 From Kevin Cuddeback to Everyone:

Pedestrians seem to feel safest crossing from north to south at mid-bridge (given sightlines I think)

19:52:51 From James Ospenson to Everyone:

This is Harvard Ave and High Street, right?

19:53:02 From Todd Blake, City of Medford Dir. of Traff. & Transp. to Everyone:

Yes

19:54:03 From Kevin Cuddeback to Everyone:

River St - Harvard is clearly the less complex way for a cyclist to cross the mystic (no rotary, signal helps a lot)

19:54:15 From Jakub to Everyone:

Please keep in mind that any unprotected bike lane on Summer St is guaranteed to be completely blocked by parked cars on game days.

19:54:58 From Daniel Nuzzo-Mueller to Everyone:

The light at Harvard street has an extremely long light cycle for anyone crossing Mystic

19:55:27 From Daniel Nuzzo-Mueller to Everyone:

via Mystic*

19:55:49 From Michael Quinn to Everyone:

Will these slides be posted separately from the recording?

19:56:17 From Kevin Cuddeback to Everyone:

The giant "ROTARY" signs (c. 2017?) cut down on the number of people who'd come westbound on High in Medford and crash straight into the island

19:56:26 From *Kelly Lynema, Town of Arlington to Everyone:

Yes, these will be posted to the project page on the Town's website

19:56:54 From *Kelly Lynema, Town of Arlington to Everyone:

This page will be updated: <https://www.arlingtonma.gov/Home/Components/News/News/11771/16>

19:57:44 From *Amber Christoffersen, Mystic River Watershed Association to Everyone:

<https://survey.alchemer.com/s3/6710491/Mystic-River-Path>

19:58:08 From Steve Petrarca to Everyone:

just took the survey - thank you.

19:58:28 From Steve Petrarca to Everyone:

good question - I had that one as well (tri-community bike path).

19:58:36 From Roderick Holland to Everyone:

The raise hand control is not available on my display.

19:59:00 From Steve Petrarca to Everyone:

@Roderick - for me, it's under Reactions.

19:59:04 From Phil Goff to Everyone:

Rod - did you look within "Reactions" at bottom right?

19:59:18 From Roderick Holland to Everyone:

Reactions is not displayed

19:59:46 From Michael Quinn to Everyone:

Roderick, it's under "Reactions"

19:59:54 From Emily O'Brien to Everyone:

YES thank you

20:00:04 From *David Morgan to Everyone:

Feel free to offer your comments in the chat if you're unable to raise your hand or have other technical difficulties.

20:00:14 From Bruce Kulik to Everyone:

I'll second Dana Phillips question. Maintenance MUST be a priority.

20:00:19 From Martha Ondras to Everyone:

DCR plows the Medford side path

20:00:20 From Roderick Holland to Everyone:

I'm sure it is under Reactions, but Reactions is not displayed.

20:00:29 From *Amber Christoffersen, Mystic River Watershed Association to Everyone:

@ Roderick we will call on you!

20:00:39 From Emily O'Brien to Everyone:

Clarifying my previous comment - it was a thank you for bringing up the winter maintenance issue

20:00:42 From Roderick Holland to Everyone:

Roger that.

20:01:12 From Phil Goff to Everyone:

Can Stephanie or Amber describe the level of involvement--if any--DCR will have in this stage of the planning/design process?

20:01:48 From BDan Fairchild to Everyone:

the path up to Boston Ave already exists

20:01:50 From Kevin Cuddeback to Everyone:

the dark green path shown as "Mystic River Path" does a good job of getting to Boston Ave @ MVP

20:01:54 From gerard mcquaid to Everyone:

Thanks Joy- simple update could help across from WholeFoods

20:02:21 From Daniel Nuzzo-Mueller to Everyone:

Agreed, right near Wholefoods you open a whole new set of roads and paths that give you access out to South Medford and Somerville

20:02:37 From Juan Ramos to Everyone:

Joy, I think the infrastructure to get to Boston Ave is adequate right now to connect from the rotary on Route 16.

20:03:26 From Aaron Charlwood to Everyone:

Agreed, Juan, there is an excellent multi-use path along route 16 that connects to Boston Ave

20:03:51 From Michael Quinn to Everyone:

to bicycle commute to Tufts, one nice route is to cross the river into Medford at River St, and then take the curving Mystic River Rd along the river which then becomes Arlington St. and then get on Boston Ave.

20:04:08 From Adam MacNeill (he/him) to Everyone:

Rod's experience there w/ cyclists preferring the roads considering the current state of the path is mine, too

20:04:24 From Kevin Cuddeback to Everyone:

I bike up the MVP Rotary-Lake-Climb to Mystic about 3times per week, and the path is unusable given its patches and root intrusions

20:04:42 From Sharman Lappin to Everyone:

Winchester!

20:05:09 From Thomas Pofahl to Everyone:

To clarify: Is the intention with this project to install a new paved off-street path for use by cyclists/pedestrians?

20:05:16 From Steve Petrarca to Everyone:

I ride from the lakes to either MVP or Summer often

20:05:52 From Daniel Nuzzo-Mueller to Everyone:

A common "loop" for cyclists is to ride south on the mystic to the Mystic valley parkway, up mystic street and repeat. Just some context as to a common cycling route.

20:06:16 From *Amber Christoffersen, Mystic River Watershed Association to Everyone:

@Phil, DCR staff member have gone on a bike ride with the project team and are attending ongoing stakeholders meetings

20:06:50 From ernie meunier to Everyone:

Re: Medford access: FYI We at MBAC are planning on installing a bike lane west-bound from West Medford Sq to link with the rotaries; eastbound will have to be shadowed, with parking on this commercial side.

20:07:34 From Donald Gillies to Everyone:

I run the Mystic River (MVP) loop several times a week and cross River St at the bridge as there is no sidewalk on the river side between River St and Medford St

20:08:01 From Daniel Nuzzo-Mueller to Everyone:

A west-bound bike lane is downhill on High on the west side of West Medford Ctr

20:08:21 From BDan Fairchild to Everyone:

I think some people may have missed the request to save suggestions for the breakout groups.

20:09:07 From Daniel Nuzzo-Mueller to Everyone:

Which makes it less useful than east-bound. As a West Medford resident I understand there are more businesses on the east-bound side but I want to raise that it is "less useful" than having a bikelane uphill where the speed differential is higher

20:09:47 From Bruce Kulik to Everyone:

Transportational cyclists need direct routes. Creating bicycle infrastructure for more pleasant recreational cycling doesn't make sense. River Street may be more pleasant, but the direct route is High Street.

20:10:05 From Todd Blake, City of Medford Dir. of Traff. & Transp. to Everyone:

TY for the comments re Medford. Medford is very interested in improving bicycle connections as well. We are attending this mtg. to support Arlington in anyway we can for our shared wants, needs. Medford has a good working relationship with Arlington, Somerville, and other neighboring communities as well as other groups, agencies. So, we look forward to making future connections as well (working with all interested parties). We're encouraged by the attendance and enthusiasm - T. Blake, City of Medford

20:10:07 From Michael Quinn to Everyone:

Movement along the river is very common for both cyclists and runners, and the road crossings at both River/Harvard and Medford/High can be difficult, much more so for Medford/High when on foot.

20:11:38 From Martha Ondras to Everyone:

Yes, running or walking crossings are very difficult at the rotaries.

20:11:42 From Dan Jaffe to Everyone:

GPS maps can help!

20:11:58 From BDan Fairchild to Everyone:

"Find the next grey stone marker" is not an easy game, or even a game that you can tell that you're playing sometimes.

20:12:12 From Dana Phillips to Everyone:

Personally, if heading west-ish for transportation, I take the rotaries to Medford St up to Arlington to avoid the mystic/summer intersection as it's often a mess. And there's a lot of destination options in Arlington; connecting that in would be useful.

20:12:17 From Roderick Holland to Everyone:

Hi, Bruce. I get a lot of use out of River St to Harvard St to High Street, and over the hill to Medford Center.

20:12:28 From Kevin Cuddeback to Everyone:

(I do believe that DCR/Medford are considering a Contra-flow on the Medford side, but I think there's a real need on Arlington side, and only Arlington can make those connections on either end)

20:12:47 From Beth Melofchik to Everyone:

Current crossings for pedestrians discourage use. There are not enough crossings promoting access to the river or lake view. Not ones one feels confident using.

20:12:48 From Roderick Holland to Everyone:

But then, I'm starting in E. Arlington, so this is, more or less, my direct route.

20:13:05 From Jared Powell to Everyone:

Seconding Emily O'Brien's request for clear signage. Roads are labelled consistently for cars; people on inconsistently connected paths get lost or confused, or just have to work harder to figure out where to go.

20:13:38 From Bruce Kulik to Everyone:

+1 to the signage request

20:15:22 From Lisa DiRocco to Everyone:

Would really appreciate consideration of Emily's signage point -- so important in my experience

20:16:55 From Bruce Kulik to Everyone:

Thanks Amber for you comments. I find that many infrastructure designs do not accommodate the full spectrum of cycling abilities, both novice and expert.

20:17:28 From Roderick Holland to Everyone:

+1 to Bruce's point

20:31:01 From Emily O'Brien to *Julie Shapiro, Toole Design(Direct Message):

I'm going to need to take off, thank you!

20:49:06 From Dana Phillips to Everyone:

places to lock up

20:50:00 From Adam MacNeill (he/him) to Everyone:

No worries Doug, our breakout room had a good discussion and wrapped well

20:50:32 From *Julie Shapiro, Toole Design to Elisabeth Carr-Jones(Direct Message):

That's a great point--sorry you got cut off! Will raise that with the project team and maybe we can follow up for further discussion with you

20:51:08 From *Amber Christoffersen, Mystic River Watershed Association to Everyone:

our group was wondering what improvements could be made in the short term, especially for the crossings at the High Street rotaries

20:51:22 From *David Morgan to Everyone:

How can the goals and designs best reflect/accommodate cyclists of differing ages and abilities?

20:51:30 From Beth Melofchik to Everyone:

Please do not bisect Buzzell Field, high volume use for multiple sports and passive recreation. Path is used for spectators of ball games

20:52:19 From *Scott Smith to Everyone:

Challenges for pedestrians, especially at the rotaries. Possibility of quick-build mid-bridge crossing?

20:52:44 From BDan Fairchild to Everyone:

I'll add my suggestion for High St: paint a crosswalk on the bridge right above the middle of the river

20:53:16 From Daniel Nuzzo-Mueller to Everyone:

+1 to BDan Fairchild's suggestion

20:53:20 From Kevin Cuddeback to Everyone:

Tactical: The Palmer St crosswalk of MVP could use better signage, re-grading its curb cut, or flex posts to reduce the bellmouth of Palmer as it meets the Parkway (and we flagged Palmer St as a neighborhood connection point)

20:53:25 From ernie meunier to Everyone:

Yes...for maximal nightlines too.

20:53:47 From *Scott Smith to Everyone:

+1 to cyclists of different abilities

20:53:55 From *Amber Christoffersen, Mystic River Watershed Association to Everyone:

lots of ideas for tactical, short-term solutions!

20:54:21 From Dan Jaffe to Everyone:

+1 to cyclists of different abilities

20:54:23 From Elinore Charlton to Everyone:

I like the idea of separating serious bikers/commuters from low key bikers (like me) and children.

20:54:24 From Joy Spadafora to Everyone:

any off-road path would need to be wide enough for two-way use

20:54:30 From Jo Anne Preston to Everyone:

Work with neighborhood working for pedestrian safety on medford street. We need to slow down the trucks.

20:54:31 From Phil Goff to Everyone:

Given the challenges from a bicycling POV of climbing the hill up the MVP/Mystic/Summer intersection, getting thru that challenging intersection, and riding along Summer St without parking removal (which will be politically difficult), is it within scope to look at a bike connection along Medford St by restricting parking to one side and striping bike lanes that will connect with the planned bike lanes on Chestnut St. Just a thought...

20:54:35 From Michael Quinn to Everyone:

There is no pedestrian crossing of High street between the rotaries. Please make one.

20:54:38 From *Kelly Lynema, Town of Arlington to Everyone:

Could we consider some outdoor public restrooms?

20:54:47 From Dan Jaffe to Everyone:

Meet up so people can go as a group on the weekends

20:54:51 From Jeff Buxbaum to Everyone:

Regarding crossing High Street, there are currently no crosswalks, so it's reasonable not to have to wait 5 years for reasonable crossing.

20:55:06 From Tsun Au Yeung to Everyone:

Crossing at summer and Mystic, that would be either on the east side or diagonally?

20:55:23 From Eric Wemhoff to Everyone:

I hope that much of the wooded, naturey feel of the path and the river between Medford St and River St can be preserved!

20:55:38 From *Julie Shapiro, Toole Design to Everyone:

<https://tinyurl.com/MystictoBikewaySurvey1>

20:55:46 From Dan Jaffe to Everyone:

Stop areas along the river with racks

20:55:50 From *Amber Christoffersen, Mystic River Watershed Association to Everyone:

the hill also poses a maintenance issue as debris lands on the path on the northside of MVP by the lakes

20:55:51 From ernie meunier to Everyone:

Re truck speeds: it's the pickup trucks that speed excessively, not large commercial ones. Don't conflate sound levels with speed...it's a natural mistake.

20:55:58 From BDan Fairchild to Everyone:

+1 for restrooms

20:56:15 From Ambar Johnson to Everyone:

enough bike parking space in greenspaces

20:56:21 From Gina S to Everyone:

+1 Eric - natural area near the river

20:56:32 From Dan Jaffe to Everyone:

Better cross sensors as some don't work

20:56:45 From Patrick Bibbins to Everyone:

Water for people and pets is becoming even more important as global temps rise. A real health and safety issue!

20:56:45 From Jo Anne Preston to Everyone:

Preserve the trees.

20:56:48 From Michael Quinn to Everyone:

Mystic River Rd. in Medford is very quiet and has room for width expansion.

20:57:01 From Phil Goff to Everyone:

Cars don't need more space than this:

20:57:04 From Tsun Au Yeung to Everyone:

Is it possible to utilize Russel street as safe quiet street as connector to Minuteman?

20:57:05 From Adam Auster to Everyone:

Drinking fountains are user magnets

20:57:07 From Joy Spadafora to Everyone:

+2 Eric - Save the trees!

20:57:07 From Kevin Cuddeback to Everyone:

The "Cemetery Notch" climb on MVP. R.Holland and I liked the idea of a climbing bikelane (widened by borrowing from the downhill shoulder) and downhill "sharrows only" similar to both High St in Medford and Powderhouse

20:57:19 From Beth Melofchik to Everyone:

Just Sustainabilities, Prof Julian Agyeman at Tufts U. holistic comprehensive planning with input and consideration of all stakeholders. Please consider watching one of his videos

20:57:25 From Roderick Holland to Everyone:

Mystic River Rd is usable by everyone as is, I think.

20:57:48 From Jo Anne Preston to Everyone:

Link to survey?

20:57:54 From *Julie Shapiro, Toole Design to Everyone:

<https://tinyurl.com/MystictoBikewaySurvey1>

20:57:56 From Kevin Cuddeback to Everyone:

three dots "save chat" :-)

20:58:27 From BDan Fairchild to Everyone:

yes, thank you to all the facilitators!

20:58:28 From Erika Reinfeld to Everyone:

Thank you!

20:58:29 From Cyrus Miceli to Everyone:

Thank you!

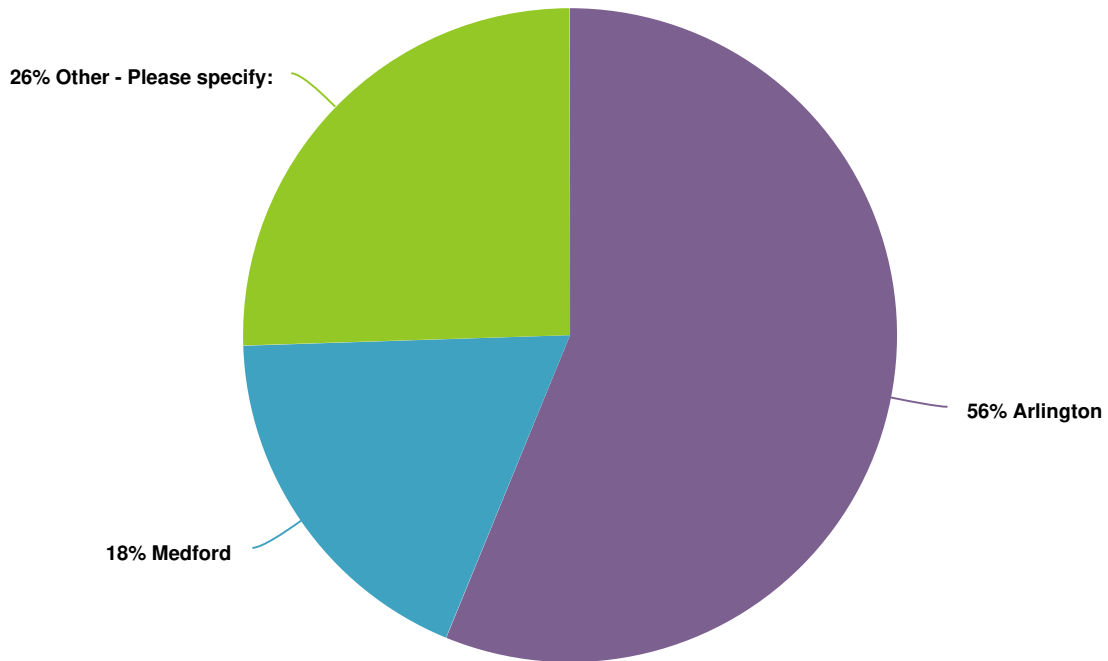
Report for Survey #1: Mystic River Path Connection to the Minuteman Bikeway Study

Response Counts



Totals: 520

1. In what community do you live?



Value	Percent	Responses
Arlington	56.2%	289
Medford	18.3%	94
Other - Please specify:	25.5%	131

Totals: 514

Other - Please specify:	Count
Somerville	56
Cambridge	19
Malden	6
Somerville	5
Boston	4
Winchester	4
somerville	4
Totals	131

Other - Please specify:	Count
North Cambridge	3
cambridge	3
Belmont	2
Brookline	2
Cambridge	2
SOMERVILLE	2
Winchester	2
Woburn	2
Arlington and Medford	1
Charlestown	1
Jamaica Plain	1
Lexington	1
Lynn	1
Melrose but I enjoy biking over to Medford on the Northern Strand	1
Newton	1
North Waltham	1
Stoneham	1
Waltham	1
Waltham	1
Work in Medford	1
boston	1
east Lexington	1
wilmington	1
Totals	131

2. How do you get around? Select all the ways you move for recreation, active transportation, and running errands.

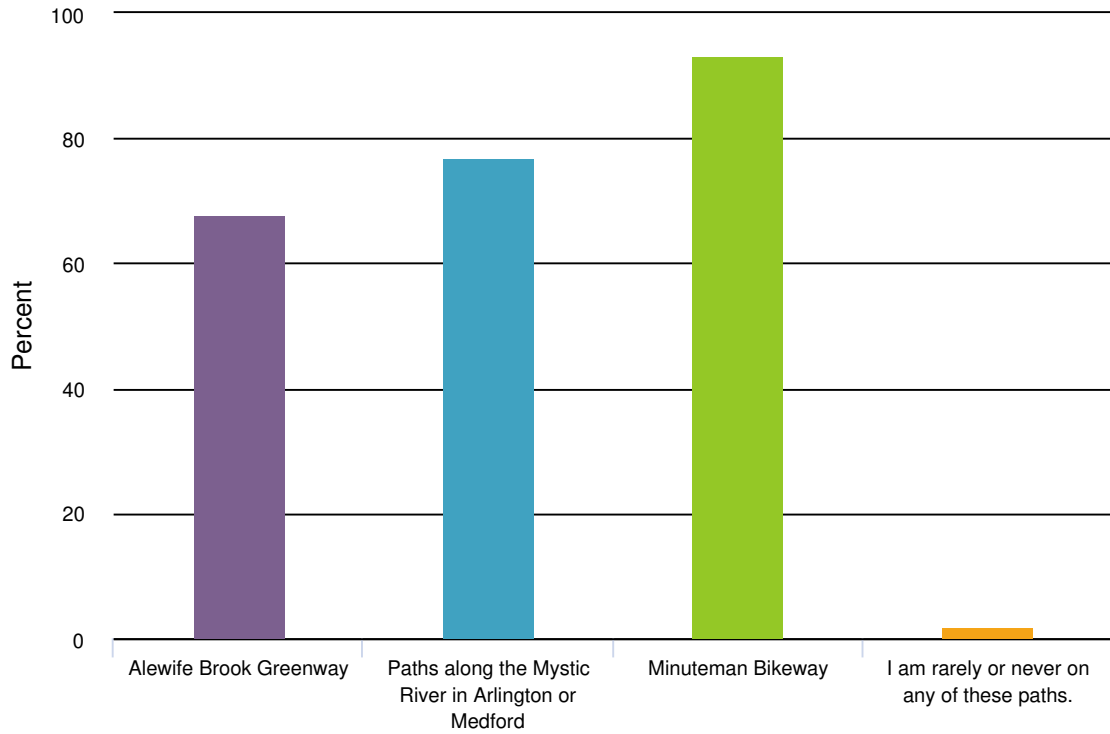
	Almost every day	Once or twice per week	Once or twice per month	Once or twice per year	Never	Responses
Motor vehicle Count Row %	158 32.0%	253 51.2%	61 12.3%	11 2.2%	11 2.2%	494
Walk / roll Count Row %	358 73.1%	110 22.4%	15 3.1%	3 0.6%	4 0.8%	490
Walk a pet Count Row %	101 24.2%	5 1.2%	7 1.7%	16 3.8%	288 69.1%	417
Jog / run Count Row %	64 14.8%	90 20.8%	59 13.7%	36 8.3%	183 42.4%	432
Bike Count Row %	154 31.4%	162 33.1%	104 21.2%	34 6.9%	36 7.3%	490
E-bike / e-scooter Count Row %	10 2.4%	23 5.6%	10 2.4%	8 1.9%	361 87.6%	412
Scooter Count Row %	0 0.0%	6 1.5%	7 1.7%	12 2.9%	384 93.9%	409
Rollerblade Count Row %	0 0.0%	2 0.5%	6 1.5%	19 4.6%	383 93.4%	410
Skateboard Count Row %	0 0.0%	2 0.5%	2 0.5%	6 1.5%	400 97.6%	410
Airplane Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1





	Almost every day	Once or twice per week	Once or twice per month	Once or twice per year	Never	Responses
BUS -- How is this not an option?!? Count Row %	1 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1
CROSS-COUNTRY SKI Count Row %	0 0.0%	1 100.0%	0 0.0%	0 0.0%	0 0.0%	1
Cross Country Skiing Count Row %	0 0.0%	0 0.0%	0 0.0%	1 100.0%	0 0.0%	1
I used to bicycle daily as my main form of transportation and commuting. With Covid and home office, I do it much less. Count Row %	1 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1
Ice Skate Count Row %	0 0.0%	0 0.0%	0 0.0%	1 100.0%	0 0.0%	1
Kayak Count Row %	0 0.0%	0 0.0%	1 100.0%	0 0.0%	0 0.0%	1
MBTA Count Row %	1 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1
Mbta Count Row %	0 0.0%	0 0.0%	1 100.0%	0 0.0%	0 0.0%	1
Motor scooter Count Row %	0 0.0%	1 100.0%	0 0.0%	0 0.0%	0 0.0%	1
Public Transit Count Row %	0 0.0%	0 0.0%	0 0.0%	2 100.0%	0 0.0%	2

	Almost every day	Once or twice per week	Once or twice per month	Once or twice per year	Never	Responses
Public Transportation bus/subway Count Row %	0 0.0%	0 0.0%	1 100.0%	0 0.0%	0 0.0%	1
Push a stroller Count Row %	1 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1
Push a stroller (I add this because specific pavement needs) Count Row %	0 0.0%	1 100.0%	0 0.0%	0 0.0%	0 0.0%	1
Ride the bus! Why isn't public transit included here?? Count Row %	0 0.0%	0 0.0%	1 100.0%	0 0.0%	0 0.0%	1
Snowshoe, cross country ski Count Row %	0 0.0%	0 0.0%	1 100.0%	0 0.0%	0 0.0%	1
Take the T almost every day (bit shocked you didn't include this: poor survey design) Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Take transit Count Row %	0 0.0%	1 100.0%	0 0.0%	0 0.0%	0 0.0%	1
Unicycle Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Walk with stroller Count Row %	0 0.0%	1 100.0%	0 0.0%	0 0.0%	0 0.0%	1

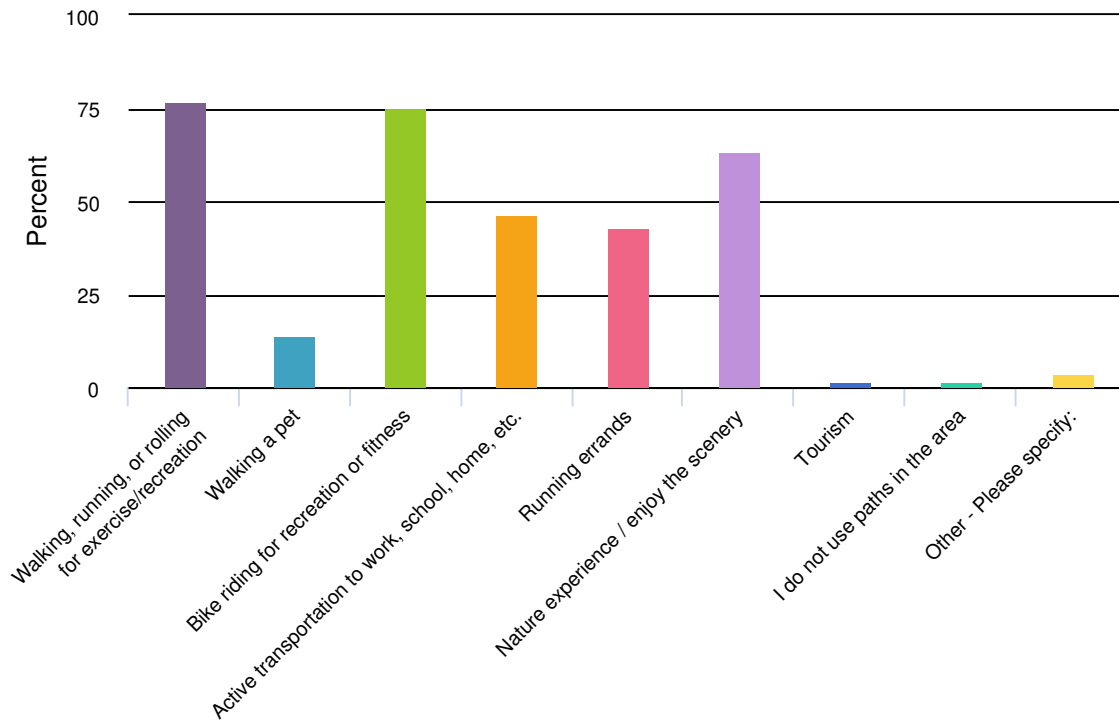
	Almost every day	Once or twice per week	Once or twice per month	Once or twice per year	Never	Responses
With stroller						
Count	1	0	0	0	0	1
Row %	100.0%	0.0%	0.0%	0.0%	0.0%	
canoe						
Count	0	0	1	0	0	1
Row %	0.0%	0.0%	100.0%	0.0%	0.0%	
flying						
Count	0	0	0	0	1	1
Row %	0.0%	0.0%	0.0%	0.0%	100.0%	
motorcycle						
Count	0	1	0	0	0	1
Row %	0.0%	100.0%	0.0%	0.0%	0.0%	
paddle, I have paddled to work in Boston from medford						
Count	0	0	0	1	0	1
Row %	0.0%	0.0%	0.0%	100.0%	0.0%	
stop and look, photograph, enjoy flora & fauna						
Count	1	0	0	0	0	1
Row %	100.0%	0.0%	0.0%	0.0%	0.0%	
transit						
Count	0	1	0	0	0	1
Row %	0.0%	100.0%	0.0%	0.0%	0.0%	
Totals						
Total Responses						494










3. Whether occasionally or frequently, what paths do you currently use connected to the study area? Select all that apply.



Value		Percent	Responses
Alewife Brook Greenway		67.9%	344
Paths along the Mystic River in Arlington or Medford		76.9%	390
Minuteman Bikeway		93.1%	472
I am rarely or never on any of these paths.		1.8%	9

4. What are your reasons for using paths in the area? Select all that apply.

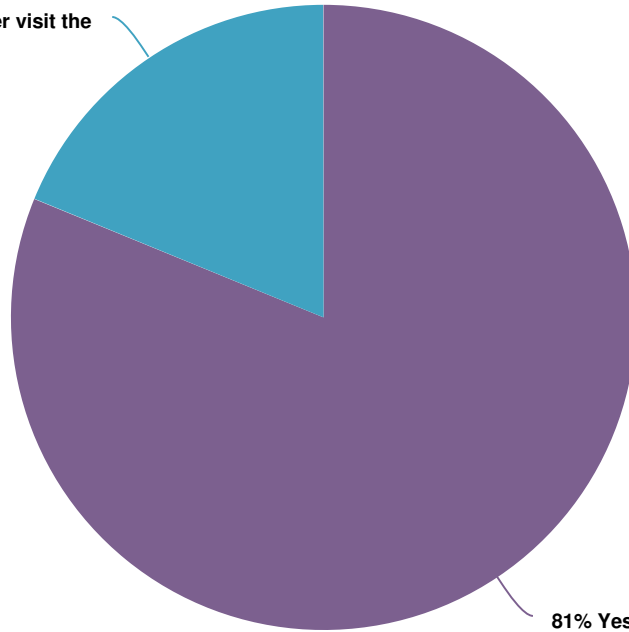


Value		Percent	Responses
Walking, running, or rolling for exercise/recreation		76.9%	390
Walking a pet		13.8%	70
Bike riding for recreation or fitness		75.3%	382
Active transportation to work, school, home, etc.		46.4%	235
Running errands		42.8%	217
Nature experience / enjoy the scenery		63.3%	321
Tourism		1.6%	8
I do not use paths in the area		1.4%	7
Other - Please specify:		3.4%	17

Other - Please specify:	Count
Being near trees and water!	1
Biking to get to Shannon Beach	1
Birding	1
Get outside with my child	1
Going shopping	1
Kayaking in the mystic	1
Safety compared to routes that don't involve paths	1
Visit friends and family	1
Visiting a local playground (Duggar)	1
Visiting friends in Arlington	1
Walking canoe to river	1
commuting	1
gardening, invasive removal	1
invasive removal - SAVING TREES	1
to get away from traffic	1
to get to Spy Pond and to the dog park.	1
visiting senior housing in Somerville (405 Alewife Brook Parkway)	1
Totals	17

5. Do you visit the Mystic Lakes for leisure or fitness?

19% No, I rarely or never visit the Mystic Lakes.



81% Yes, I visit or ride along the Mystic Lakes at least a few times per year.

Value	Percent	Responses
Yes, I visit or ride along the Mystic Lakes at least a few times per year.	81.2%	411
No, I rarely or never visit the Mystic Lakes.	18.8%	95

Totals: 506

6. Please tell us why you visit the lakes in the comment box.



ResponseID	Response
7	They are very beautiful and home to interesting wildlife
8	Great place to ride my bike to, even in the winter
9	I live across the street from where the upper and lower Mystic Lakes meet and ride my bike on Mystic St in both directions.
10	it is a pretty place to visit
11	Usually, for transportation up to Medford or towns beyond, but also because it is pretty! Plus nice birds and fishes
12	Bike, walk, read, rest
15	Recreational walks
18	The natural resource of that is incredible - being able to ride long distances off street is wonderful.
19	I live near the lakes and go there often to check out the birds, paddleboard/canoe and biking.
20	I bike-commute between Winchester and Boston daily, all year
21	Kayaking
22	to swim!

ResponseID **Response**

23	Beautiful
24	to bike to Winchester Center
25	exercise, to see the area, long rides
26	Birding, walking, and checking on the Mystic Riverfront Restoration habitat project along the Mystic River in Arlington
28	Serenity, Connectedness
29	Recreation and count Alewife for MyRWA
31	I visit to run for recreation along the lakes and river
34	walking, birding, nature
35	Bird Watching, to get to tri-community bikeway
37	a regular bike workout route
39	swimming
41	Recreation
42	It's a pleasant walk,
43	Walking, biking, or paddling
46	I live 2 blocks away, so it is a natural draw for me.
47	drawn to open water
48	Recreation: kayaking and swimming in the summer, just walking along the shore year round.
51	Kayak, hang a hammock, Shannon Beach, biking, use the porta potties
54	Conveniently close, accesible by walking, biking and on the water (kayak), swimming in the summer, chance to see eagles
55	Swim/Picnic at Sandy Beach
58	Swim, walk, whatever
59	Live near by and own a canoe, we like to boat on the river/lake as a family.
60	Scenery, bird watching, swimming at the public beach.

ResponseID Response

61	Cycling and swimming
62	scenery
63	Fitness—cycling and swimming
64	Biking, running.
67	Swim, Bike, and Run!
68	Run around them
69	views, birds, plants, fungi, animals, (relative) quietude, exercise, meeting with friends, socializing during the pandemic, checking on the eagles & herons, muskrat, alewives, etc...
70	Family
71	to decompress
72	Swimming
73	Swim at Shannon Beach
75	I mostly just ride by on the way to other places, but occasionally swim.
82	Great running loop and to go kayaking
84	nature viewing
85	A convenient, shorter ride with an interesting mosaic of communities and connections to other trails (e.g., Bike to the Sea) and good, paved roads with challenging hills in the Fells Escarpment.
88	Observe nature, hike, walk, bike, swim, picnic, attend gathering
90	Swimming, biking, running
92	I like the view, I like to bird watch. I find the nature healing and access to it very important
94	Beautiful place to walk and I also kayak on the Lakes
95	Walk the dog, recreational biking, enjoying the beauty!
98	boat access
99	Errands and to stop off at the dam to see the eagles.

ResponseID Response

100	swimming, running, biking for fitness
101	I love riding around the lakes. It's a great bike route and and generally quiet enough (Mystic Valley Pkwy side)
102	to swim
105	To swim, to explore, to play, for fun
106	Natural beauty. The water (swim and kayak)
107	exercise
108	Walking in Nature, bird watching
109	I run and bike around them and I swim in the Upper Mystic
110	variety of lovely scenery
120	scenery
125	Nice scenery for walks, canoeing
127	fitness/recreation/training for event
128	beautiful, nearby.
134	mental and physical health
136	I live nearby
137	Excercise in a scenic area
138	peace and quiet
139	Recreation, swimming when the weather is nice
141	We live on Lower Mystic Lake
142	EXERCISE
145	Running and scenery
150	birds, kayaking, swimming, walking, biking, transportation to other places, counting herring!
153	It's a beauty spot in my neighborhood

ResponseID **Response**

155	exercise variety
159	birdwatching, botanizing
160	swimming in the summer
161	Fishing, canoe
162	mostly to run, sometimes to swim at Shannon Beach
173	watch fish on the fish ladders, lookfor eagles, other creatures, nice views
174	Recreation
175	Biking along the side of the lakes is beautiful. I also like the sandy beach for me and my 2 year old son
176	Great place to run along the lake on the dirt path with no street crossings for almost 2 miles
177	Bike commuting and riding for exercise.
185	Because it's beautiful.
189	Paddle, swim, fish, pedal
191	They're so pretty. I love biking and running around them.
194	Exercise, swimming, relaxing
195	Exercise, bird watching
198	I like to walk along the path on the Lakes, and swim in them.
202	I mean, lakes are gorgeous.
206	Kayak there for fitness/recreation
207	Being outside to enjoy the beauty, nature, swimming, meditation, yoga, picnic lunches, hanging out with friends.
211	Beauty, serenity, biophilia
213	fun, fitness, errands
214	Their Beauty and my wellness
215	local green space... with bald eagles!

ResponseID Response

216	Scenery and swimming
217	to relax, walk, run
219	Birdwatching, swimming
220	Early am's looking for eagles, admiring g the beauty of the Lakes
224	one of my favorite bike routes is "lakes and rivers" along this stretch
227	My family (including elementary aged children) walk and or bike along the mystic river and lakes 3-4 times per week, and every day in good weather! We also enjoy canoeing on the river/lake.
228	Jog and canoe
229	scenery, fitness
231	Closest nature to my house.
238	walking the dog, would ride my bike there if it was better connected to the other side of Rt 60
241	I like biking to all of the waterfronts in the Boston area: the harbor, the Charles & Mystic Rivers, Fresh Pond, Middlesex Fells Reservoirs, and Mystic Lakes.
243	Beautiful part of this area - feeling of riding a state park for a mile or two :)
245	Kayaking, local beauty/general recreation, "getaway" close to home
246	Recreation
248	It is a beautiful location to run.
249	Nice to run around them year round and see the herring in the spring run
250	Scenery, visit the dam
252	swim
255	Bike ride
258	Exercise with a view
262	recreational biking

ResponseID Response

263	Beautiful area with many wildlife to be observed. And good location to get exercise.
265	Kayaking
267	Nice shady area for bike riding.
269	Leisure and fitness
270	live near lakes and walk the full lake route round
271	natural beauty
272	Beautiful to ride along; relatively safe biking could be better; birding
273	Check out birds, scenic view
277	Regulrikeridesin to Wincheter, Woburn and Lexington via east side of the lakes. When I worked in Lowell, on nice days I would bike to Wedgemere from E Arl. to catch the train.
278	Mostly to run on the trails around the lakes.
281	I ride along them 3 time a week in the summer. It's a great spot to ride
282	They are beautiful!
285	I often walk/run along the lower mystic lake path to west medford to run errands (see dentist, visit friends, run for exercise)
286	They're right next to my current housing & are a nice view while walking my dog.
288	exercise and recreation
291	Enjoy the scenery when running
292	connection with nature
295	Biking along the parkway, stopping at The Dam for bird watching and meditation, swimming in the summer, chipping golf balls at the park.
297	Recreation/Fitness
298	recreation
300	bike, walk, kayak, swim

ResponseID Response

303	for swimming!
304	It's a nice walk
305	swim, run, walk, bike, relax, boat club
308	Shannon beach, fresh air, nature, swimming
309	Nice green space along the lakes and a good bike route towards Winchester
310	I enjoy cycling by the water
312	Enjoying nature, bird watching
314	Boating
318	swim, bird watch, visit w friends
320	Beautiful scenery
321	Lovely nature get-away
324	I run around both Mystic lakes for exercise.
325	Cycling (circumnavigating) and visiting the park by Wedgemere
326	I swim/kayak at the lakes during the warmer months
327	Enjoy nature year-round, informal bird watching, swimming in the summer, exploring the area with family
328	Scenery, wildlife viewing, recreation, fishing
329	It's nice to see a lake in the city.
330	For leisure and the feeling of nature and being far away, but close enough to access from my urban area of residence.
331	Convenient access to nature, wide shoulder for biking, easy access to bike trails in Arlington, Medford, Winchester
334	Great area for biking and walking and to commute to work in Woburn area
335	swimming
337	Predominately recreational fishing but I also live next to Lower Mystic Lake and walk to work (Arlington High School) most days.

ResponseID Response

338	It's the most beautiful area
339	I walk along the Mystic when I'm at Assembly Square.
341	running / swimming
342	Birding, walking, counting herring and eels, photography,
345	Pleasure hiking
346	easy and safe bike route, and one of few swimming areas that's easy to bike to in metro boston
347	They are pretty, and the parkway is a good way to get to Winchester, Woburn, or beyond.
348	Nice place to run/ride around
351	Nature experience
352	I have been taking care of all the trees as best I can in the upper lake area cutting away invasive plants and picking up any litter.
356	birdwatch, swim
358	recreation and fitness
360	It is beautiful
361	It's a lovely place to read, contemplate nature, and meditate. I also take regular walks to the dam with a friend.
364	Running route
368	They're beautiful. I often will catch glimpses of birds of prey (including bald eagles), and love to see the fish ladder in action in the spring. There are often swans, ducks and turkeys all long and in the river and lakes, not to mention the occasional heron I'll see swooping low along the river.
369	to swim or walk along the lake
370	Ride bike or swim
371	I like to peak at the bald eagles and enjoy other nature sightings around the lakes.
372	For exercise and the views. I like to rest at the dam.

ResponseID Response

377	My travels are more along the lower Mystic River, but I do bicycle to the Minuteman via the different paths further up the Mystic River to get there.
381	Bike my son to the playground on the Lakes
382	walking, kayaking, biking, swimming
383	Sense of peace and calm
384	I use my cargo bike to bring me and my two kids to visit Shannon Beach
385	Nature, views, wildlife
387	Nature, birds, wildlife, exposure to daylight, mental health
388	They are beautiful and close to where I live
389	Running, swimming and biking
390	To visit Shannon beach, swim or kayak
391	Especially during the pandemic it has become more important to find solace joy in the outdoors. My husband I come to sit at the lake for picnics, tailgating, walks, bike rides
396	To see weird ducks and migrating herring, participate in citizen science, get exercise.
400	Beautiful and calming scenery, beautiful in the fall, view of sunsets in the summer
403	For relaxation & enjoyment of being near water
404	Swimming paddling walking.
406	Fitness - run the perimeter (particularly Medford / Winchester side, returning via Turkey Hill in Arlington)
407	Walk and run exercise and walk for enjoyment
408	I bike around the Mystic Lakes for exercise, and regularly take my kids to Shannon Beach by bicycle.
411	Excercise, relaxation, enjoy the natural scenery
415	Fitness
417	Beatuiful, good stretches of nice paths with limited street crossing

ResponseID Response

423	exercise. dog walking
424	I like walking and running where I can see across the water and where I don't often have to cross a street
425	Swim, ride bikes, walk
426	I walk on the lakes almost every day. Those lakes are the reason I purchased my home.
427	to kayak; fly kites; run
428	Recreation, to get the family moving.
432	Walking and running along the shore on the Medford side is very pleasant. Sometimes I go to swim as well.
433	beauty of paddling and citizen science
436	Pleasure
439	Close by to my home and easy recreation and exercise
440	Beaches, trails, kayaking
453	Fishing, walking/cycling
454	Love them. Every SINGLE day for the 2 yrs
455	Part of our neighborhood.
458	Visit Medford Boat Club for swimming
459	I have lack access in my neighborhood and kayak or swim in the summer. I enjoy walking by the lower lake most days.
462	Boating and fishing, occasional swimming.
464	Sailing and paddle boarding.
465	paddleboarding
467	Walking, pleasure, sometimes swimming in winchester
468	recreation
469	Walks

ResponseID Response

470 Scenic

472 It's a beautiful, if bike unfriendly area

473 To get to the beach.

474 To walk and take in green space.

475 I like to bike and run around them when working out, and sometimes to kayak or swim at the beaches.

476 They're beautiful and a wonderful piece of nature near the busy city!

478 Running loops around the lakes

481 walking to see friends, kayaking

482 paddling mostly

483 Mostly enjoying the view

485 Xcountry skiing, walking - it is scenic

486 Kayaking!

487 for leisure

498 Love the water, trees, wildlife!

500 Kayaking, general recreation

501 Birding

503 Get to the Middlesex fells

505 To walk the paths

506 Kayaking / biking / wildlife

507 Walk in the Medford park and swimming

510 So pretty!

513 To count herring

519 Swimming and picnic by the water, also biking along the east side

ResponseID Response

521	I walk from East Arlington to Mystic Lakes on a regular basis, for exercise and scenery
525	Birdwatching, walking near the water, swimming at Shannon beach, but most often for running
530	Exercise / I go to the beach in summer
531	beauty and nature
532	exercise
533	They are beautiful!
536	Home on Lower Lake
540	bike along Medford/Winchester side
541	Like the scenery - swim in summer
544	Just to get out & enjoy nature.
545	beautiful place for a walk or kayak
547	Pleasant walk, occasional canoeing
548	They are pretty and tranquil. It is scenic to walk around the lakes
549	I go in the Summer for swimming and relaxing
552	Pretty area, nature, great for biking around and paddling/sailing on. It would be wonderful to have the Minuteman connected to them directly.
556	Varying my bike excursions.
563	bike riding along Mystic Valley Parkway & beyond
564	commute, recreation on bike/walking
568	swim, kayak, bird watching, exercise to get there, scenery
570	Kayaking
582	Playground near the lake

ResponseID Response

584	It's lovely to have a vista over the water. I like trying to see alewife migrating up the fish ladder. I enjoy the community feeling of many different groups of people there fishing, boating, etc. While biking over the bridge at the mouth of the Aborjona River, I've seen an osprey dive to catch a fish in Upper Mystic Lake.
585	It's a nice place to run with no stop lights. And it's scenic.
586	swimming, exercise, natural beauty
587	It's a nice natural setting to enjoy and be close to the water.
589	my kids like swimming at Shannon Beach
590	It's a quiet area near home, and it's good for occasional bird sighting.
591	sandy beach/playground
593	Scenery and relaxation
597	Resident
599	kayaking, cycling past on my ride, beaches
601	I run around the lakes frequently and in the summer I visit Shannon Beach
602	I swim in Upper Mystic Lake
604	Pleasant area with wide shoulders and limited hard stops when on the road, decent scenery when on path
607	nature experience/scenery
608	exercise
609	enjoy the green space, safer biking, whether trail or road; used to swim there
611	Enjoy the view, part of exercise or as a way to get to a final destination
616	exercise
618	nice bike ride, beautiful lakes, Winchester is a beautiful town, visiting friends
619	it is beautiful and peaceful
620	enjoy nature
622	time in nature

ResponseID Response

631 Occasional swimming, socializing

632 To swim!

633 For the nice scenery; also to use the playground at the lakes; and to use the public beach.

635 Change of pace from the minuteman bike path

636 Recreation, fitness (running along the path), visiting Shannon Beach and its playground for playing/swimming/picnicking

637 on the way to long pond middlesex fells

638 scenery

639 It's such a beautiful spot! And it's a great stop on the way to Winchester and the Tri-Community Greenway

643 They're pretty and a great place for the kids to run around

644 both for fitness - runs / biking, and swimming in the summer

648 My family and I live near Mystic River and frequently walk on the paths on both sides of the river year-round. In warmer weather we also take walks in the parks by the lake on the Medford side, and picnic on the beach at the lake as well.

651 Scenery, exercise

652 I like to paddle board or swim there

7. Please tell us why you don't visit the lakes in the comment box.



ResponseID	Response
76	I ride by them often (Mystic Valley Parkway), but I do very little aquatic sports
79	access isn't comfortable
86	Not great access; there are better recreation options that are easier for me to get to
93	I'm 88 and don't get around much
103	need to drive, don't know where to park
119	Too busy working. Taxes, mortgages, general cost of living
126	I would have to drive and park.
131	It's difficult to get from the Minuteman to the Mystic Lakes
132	No good reason I guess
143	Not familiar with them.
146	It's hard to bike there from where I'm starting
147	Never thought to explore them...but now I will!
151	I usually go to the Fells
154	Not part of activities I like to do / too crowded in summer

ResponseID **Response**

158 Usually stay closer to home

197 I don't really know what they are

204 not good connection to the paths I normally enjoy

209 Annoying to get to / traffic

210 Because they're not as easy to get to by bike

212 Never thought to do it, maybe I should.

226 Not convenient on a bike

236 No good walking or bike route

247 Not convenient to access with my preferred methods of getting around (i.e. walk/bike)

257 nothing to visit. too near road

259 A bit out of my way (can do the same things I would do there closer to my home)

260 Don't know where to park or how to access from Arlington side

275 Hard to get to and to park

284 Inaccessible

290 No easy way to get there

296 New to area but route from Alewife Greenway was broken up and bit confusing.

311 not easily accessible from Arlington Center

316 not convenient to access (e.g. rotaries, lack of paths/sidewalks)

332 I don't know how to get to walking paths along the lakes (I know how to walk along the river)

340 It's further than I typically go on a casual walk

353 I visit the mystic river as I live on it but dont often go upstream to the lakes!

363 Other trails are close or more appealing for walking

ResponseID **Response**

373	off bike path route
380	not accessible safely
386	lack of access
395	They seem out of the way.
398	Far away
399	I would have to drive to it, I can walk or ride to the Minuteman trail.
402	Parkways are dangerous for pedestrians to cross.
412	Not easy to access
431	I don't swim in the lakes nor do I run for recreation
435	I live along it, there's nothing to see
438	Not familiar with the access routes. I perceive it to be a bit too far outside my typical range in E. Arlington
443	don't know how to walk there.
447	I live in Malden (used to live in Arlington 30 years ago) and can't get there easily unless driving. I would like to go there for walks. I walk along the Mystic sometimes.
456	Because I live on the Minuteman bikepath and the two do not connect
457	No convenient access
471	Don't know if I can bike safely/Haven't had the chance yet to explore & figure it out
477	Never thought about it.
492	no easy access
493	No low stress way to bike or walk there.
496	Distance too great
502	It's not convenient for me
509	No easy access from Arlington Center/Heights

ResponseID **Response**

516 no reason.

537 no particular reason.

546 Not easily accessible

551 not part of my routine

562 Don't know where they are

575 In Arlington there are places to stop to use restroom or get a cold drink or a snack.

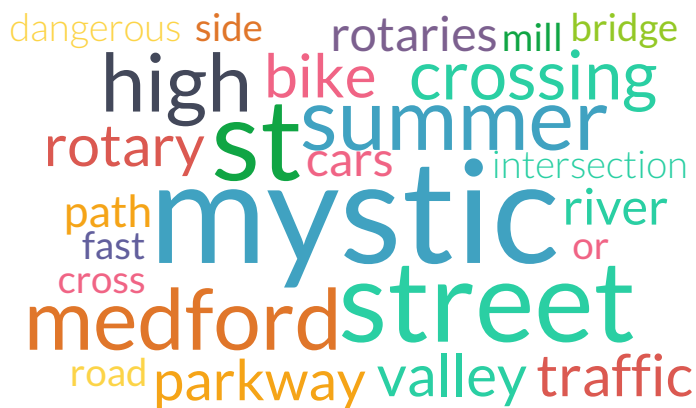
579 Use paths by walking/running/biking from house, no easy connection to them - if there was I would use them!!

621 I would if it was connected to the Minuteman Bikeway

634 I am often travelling to other places around the lakes but not actually at the lakes.

647 I stick to the Minute Man path to avoid riding with traffic

8. Please see the map of the study area and general route. At what points along the route are you most concerned about safety, and why are you concerned? Please tell us about intersections, crossings from neighborhood streets, and any other points along the potential route that matter to you.



ResponseID	Response
4	Medford St/High St River St/Harvard Ave Summer St/Mystic St Alewife Brook Minuteman
5	The rotary
7	The small rotary close to where the alewife brook flows into the mystic river is extremely dangerous. The whole mystic valley parkway has too many cars traveling too fast.
9	I do ride a lot in this area on bike (and car). I ride from Mystic St (at Window on the Mystic near my home) towards Mystic Valley Pkwy. Then either onto left onto MVP or right onto Victoria to Summer to the Minuteman. Anything that would make it safer for me to ride (occasionally with my kids in tow) would be amazing. There are definitely some thinner stretches of these roads were cars and bikes can potentially get too close to each other.
11	The connections with Medford St/High St., the connections with Summer St., generally getting onto the path from a perpendicular direction (ex., coming N/S)
12	Mystic St-MVP...Tough intersection to cross. High-Medford and at both rotaries... not too bad but still tough.

ResponseID Response

15	Intersection with Mystic St, roundabout by High St and Mystic Valley Parkway in general - high car traffic volume and speed of cars on Parkway. Separated pedestrian and cycling infrastructure would be preferred
16	Crosswalk at Palmer and Mystic Valley Parkway. Not a straight line with ramp for strollers, wheelchairs access to the River. Also the rotary at Mystic St
18	Rotaries at Medford and High, and all the other streets that cross this path, as traffic is super fast on those, with wide lanes.
19	YES! I am concerned about the crossing at Mystic VP and Summer street and at the rotary. Heavy traffic there and cars do not always stop per traffic lights. Also MVP is very windy in this section and cars drive fast so there needs to be good visibility for biking/walking
20	I use the River Street bridge to cross the river, to get between Alewife path and MVP on the east side of the lakes to/from Winchester. Better curb crossing needed. The stone dust surface is fine except when very wet, or snowy.
21	High Street Intersection, Summer Street.
22	definitely the rotaries, I try and avoid them. intersection of Mystic and Summer is also pretty hairy, I usually get off my bike and walk. Also because it's too steep for me to bike.
23	Medford Street-High St as well as Mystic St intersections
24	Rotaries are a catastrophe
25	the end portion where the sidewalk, paths disappear, bridge crossings
26	Mystic Valley Parkway/Medford St Rotary - very concerned about safety here. It is almost impossible to cross this rotary as a pedestrian during busy traffic times. My husband's car was crashed into in this rotary by a small bus that did not yield. Also, there was a 10,000 gallon tanker truck that overturned in this rotary in 2013 and spilled almost all of it's fuel oil into the Mystic River. This is a very dangerous intersection that is in dire need of improvement. The other intersections that are dangerous because they are so busy, such as the Summer St / Mystic Valley Parkway - at least have lights so that helps with being able to cross safely.
27	The rotary and the path near the cemetery — danger from motor vehicles.
28	River St crossing.
29	Rotaries and connections at Summer St. Rotaries are pretty scary on a bike with cars and moving so fast, plus traffic.

ResponseID Response

31 I am most concerned about the intersections at Medford St, River St, and Mystic St, as well as part of the path below Lower Mystic Lake. I find that crossing the intersections I listed above to be quite unsafe currently. Medford St and River St both lack crosswalks for the paths that travel on both sides of the river, and require pedestrians to cross at the nearby road intersections, which are very out of the way. In fact, the Medford St intersection completely lacks a safe crosswalk, and I often find myself waiting until there is no traffic to safely walk through the middle of the street to cross. Also, motorists travel extremely fast through the rotaries on Medford/High Streets, and the bridge itself is too wide, which is very unsafe. The Mystic St intersection is also quite problematic, as the crosswalks are very very long and the crosswalk signal is barely long enough to cross the street diagonally. The roadways are wide and the slip road from Summer St to Mystic St is unnecessary. Finally, the Lower Mystic Lake segment is a cause for concern because the sidewalk as it currently stands is narrow, and motorists travel very fast on the street, which is concerning for pedestrians like me.

33 Medford street and high street intersections are bad and as someone mentioned in the meeting we cross on the bridge to minimize the amount of traffic to deal with.

34 rotaries and Mystic-Summer St intersections

35 High st bridge and rotary area. I often cross on the medford side to get to the mystic lakes and have witnessed some close calls with pedestrians and fast moving cars.

37 I almost never ride a bike along Mystic Valley parkway once it crosses Route 60 heading toward MEDford. I am not familiar enough with the condition of it -- worry that it is full of roots, etc. and will just dead end on me. I ride Route 60 instead which is not terribly safe, but it's wide enough

38 Roundabouts. All the intersections really. Also make sure the connection from Franklin street that is only for bikes and pedestrians is considered. It's also best practice to add in a bike lane heading with traffic on the opposite side of a 2 way bike facility.

39 at the intersection of MVP, Summer, and Mystic, I'd love to see flex posts installed at the top of the MVP hill at the light. Frequently, cars encroach in the shoulder making it necessary to stop mid-hill. Much of the time, I take a right on Mystic. If there aren't any cars blocking the shoulder, it's safe and easy to take a right turn.

40 The traffic circles are the most concerning part, they are currently very difficult to cross.

ResponseID Response

41	High Street rotaries are currently very difficult (dangerous) to navigate as a pedestrian or while biking. Harvard Ave bridge intersection is also tricky as people drive fast and the wait time as a pedestrian or cyclist is extremely long with the signal timing.
42	Ped crossings at Rte 60 at both rotaries. Joint use by bikes and peds.
43	Motor vehicle speed on Mystic Valley Parkway; Medford St rotaries, particularly lack of safe crossings for bicyclists and pedestrians; Steep grade up/down Mystic Valley parkway between Medford St and Summer St; Mystic/Summer intersection; Lack of formal pedestrian crossings across River St
45	Kimball Rd (adjacent to MVP near Summer) - Google Maps geometry fools drivers into believing Kimball connects to MVP because of the existing pedestrian/bike connection to MVP. Lost drivers come down Kimball at high speed (because they think it's a main road), where people/kids/dogs are frequently walking in the road, which looks safe because it's a dead end. The existing Kimball Rd ped/bike connection to MVP is used daily by commuters and for recreation. If it could be realigned to correct the confusion when using map apps, it would be safer.
46	1. Pedestrian crossing of any street at either rotary. 2. Traversing the rotaries and bridge to transit from MVP EB to Medford to MVP NB. 3. Making connections to the path along the NW side of MVP when traveling EB on MVP near Alewife Brook.
47	I ride daily from west medford on boston ave to the Minuteman Bikeway, crossing the Mystic River either at Harvard Ave or High Street. Usually I go River St - Broadway -- Mass Ave to get to the Bikeway. Riding back I most often go Bikeway - Medford St - Boston Ave, crossing the Mystic at High Street. Weekends I ride on a buddybike with my daughter, an adaptive bike for people w/ disabilities. Slow & clumsy! Prefer riding on substantially separate bikepaths; seek to avoid busy roads...
48	High St especially: the road is much too wide, the rotaries do not slow down through traffic, and there are no pedestrian crossings along the river. A road diet, expanded rotary centers, and a crosswalk at the peak of the bridge, directly above the river (so there are sightlines in both directions) are all needed.
51	The worst part of this study area for me is along Summer Street from Mill St to Mystic St. I am comfortable biking on MVP and through the rotaries, but Summer St often has cars parked along the curb that constrict traffic flow.

ResponseID Response

54 The MVP-High St rotaries are the biggest concern to navigate especially going westbound. Motorists often do not signal so it is hard to know where they intend to exit the rotary. The nature of rotaries favor the motorist in the rotary therefore making it difficult for bikers and pedestrians to enter or cross the rotary safely.

55 Palmer St, Arlington, existing crosswalk across MVP. Park St needs a crossing too. Summer street is such a terrible pinch and cars seem to be permitted to move at all kinds of crazy angles and across the sidewalk

56 Regarding safety the trickiest ones (IMHO) are: Going from Summer into Minuteman (Summer St game parking lane; or tricky Mill St intersection); Mystic/MVP intersection (wide/busy); First/downhill MVP east bound section (visibility) and Medford/High St rotary.

58 The rotary at Medford St is probably the biggest hassle. The light at Mystic St is tricky if on a bike and need to pass cars in their blind spots.

59 The rotaries at Medford St/High St feel like a death trap any time I have to cross through them, whether driving, biking, or walking. The crosswalk at Buzzell field across Summer St also has safety issues. Drivers often do not yield and I have witnessed some scary near misses.

60 No safety concerns when walking. Uncomfortable bicycling along MVP on Medford side. I think I have never bicycled on the Arlington side roadway.

61 The double roundabout on Medford St/High St. People rarely indicate and cycling around them feels like an accident waiting to happen.

62 My largest overall concern is ensuring that safety for pedestrians, cyclists, and motor vehicles have equal consideration. Rotaries @ High Street: plain crosswalk at high point of bridge connecting the rotaries was a good idea. It also gives the best visibility to all. Motor vehicles should be able to have a continuous flow through the rotary, otherwise it does not function as designed. The light that was inserted on MVP to access the greenway quickly flashes yellow then turns red when a person presses the walk light; it abruptly stops traffic, leaves cars stopped in the rotary, and has a poor sight line when directly coming out of the rotary. River Street Intersection: Utilizing the existing connecting paths on the Harvard Ave bridge already works well. Improve reliability of walk light crossing MVP; often will need to wait multiple full traffic cycles to get a walk signal after pressing the button if at all. In general, there are other places to add plain crosswalks along MVP that offer better visibility to traffic coming in both directions. I have stopped using the path between River Street & Rt 60 due to the amount of tree roots to navigate. I am concerned at the suggestion to narrow the streets. MVP is curvy and prone to flooding in areas. When the roads are icy or there is snow piled up some additional width is needed. Also, the current width allows for access to Decatur Street using the access road and L turn near River Street without significantly impeding through traffic.

ResponseID Response

65 River St, beacon st, anything near Kickstand

67 Crossing at High St circle

68 Busy street crossings are most concerning.

ResponseID Response

69 I believe that the bikeway at Mill Street is much closer to the Summer St intersection than shown in the diagram above - a busy area with lots of competing traffic from businesses, school, residential developments in a very short concentrated "block." I mention this because traffic builds up from cars turning onto Mill from Summer St. and the bikeway crossing (with the flashing lights) is never a sure thing for either cars or people. I cross from the Minuteman to Summer Street via Water Street, through Buzzell, but the path behind Pumbing Supply is very badly maintained or lit, and the turns are sharp for cycling. Once at Summer Street across from Victoria Road, crossing is iffy, even when visibility is good. (The cars travelling West have poor visibility for those crossing from the north and when the sun is setting. At night or on "game days" when parked cars line the south side of the street, the cars travelling East cannot see you. The sidewalk on the field side is continuous, with only one major driveway near Mill and a wide drive before Mystic. The current sidewalk is very narrow, especially at the high fencing. Other than parking for games, this makes an ideal stretch for a commuter path connection to the Mystic St/ MVP intersection. At the Mystic St/ MVP intersection, during the traffic light "walk" cycle, it is possible to cross the street on the diagonal, as all cars are theoretically stopped; however, cars do move through the slip-lane out of habit. Pedestrians and others going from the traffic island to the diagonal corner have just about as much time as those who use the crosswalks, as the walk cycle is short for the distance traveled. MVP is very curvey (cars have run off the road) and still subject to flooding, as well as having the steep grade at Mystic Street. Bike and pedestrian visibility is best on the sidewalk/lake side of the road. Traffic calming would be desirable and the "no commercial vehicles" sign seems to be ignored and unenforced. The guardrail at the lakeside does not protect walkers from cars. If the walkway could be widened to accommodate multiple users and separate us from the cars travelling 20 MPH that would be an improvement for safety and enjoyment. As an aside, the bridge over the Mill Brook needs maintenance. The metal plate at the sidewalk was installed after I brought the problem of a hole in the sidewalk (for the second time) going straight down through to the water. Access to the shore just after the bridge means climbing over the guardrail. It is a great place to see waterfowl, fish, and put in a kayak or canoe, but for the rail. Crossing to the conservation area across from the bridge is a risky endeavor, as the roadway curves, so those who access the land and the entrance to the cemetery would do better to cross elsewhere. The Medford Street rotary is a gamble, both for cars and others. The High Street rotary has a very uncertain traffic flow, and is equally but differently challenging. I cross at the high-point of the bridge where there is the most visibility, ability for cars as well as those crossing to stop, and fewest merging paths of cars & cyclists. Cyclists making a right hand turn have little difficulty, but those crossing or turning left rely on hand-signals and gracious drivers. After all of that... phew!... it's easy. I live on Kimball Road, one of the dead-end streets that has informal access to the MVP.

70 Mystic Street Crossing

71 -crossing medford st at the rotaries -biking along mystic valley pkwy along the lake / cemetery (fast traffic) -biking on summer st

ResponseID Response

73	Mystic Valley Pkwy & Mystic St, Mystic Valley Pkwy & Medford St / High St (both of these rotaries are really scary and unsafe - lots of confusion; once almost got hit by a car here), Alewife Brook Pkwy & Mystic Valley Pkwy, visibility is really bad / lack of safe biking facilities when heading north on Mystic Valley Pkwy by Palmer / Webster
75	The double rotaries on High St/Medford St are dangerous, and traffic is too fast. They're particularly intimidating for less confident cyclists. Traffic on MVP between High/Medford streets and Summer street is also excessively fast. An additional problem for cycling on MVP is that when the overall road width changes, the travel lanes stay the same but the shoulder changes. So a cyclist riding on the shoulder sees their riding space suddenly shrink, with nothing to notify the passing traffic in the travel lane that the cyclist has to merge. This is also a common problem with how many bike lanes end, incidentally. But it means that a changing road width creates stressful bottlenecks.
76	Rotary on MVP, near the intersection of High Street, Medford. When cycling, I generally find rotaries challenging. Summer Street, between MVP and Mill St. When cycling, you more or less have to compete with traffic for space.
79	Both the intersections of Summer & Mystic Streets and Medford Street & Mystic Valley Parkway are complex even without bikeway crossings. They will need extensive engineering improvements... and that will be a good thing.
81	Protected ped/bike crossing at rotaries. Minimizing wait time for peds/bikes at Rt 3 crossing.
82	The Mystic/Summer intersection on the hill is difficult on bike due to the squeeze point and gas station entrance. The crosswalks at the rotaries are with fast traffic.
84	Rotary at Medford St and MVP
85	The Mystic Valley Parkway between Summer Street and the first, larger rotary (High Street bridge) requires a certain amount of awareness and discipline (holding a line) to ride safely. I've been riding it for over 40 years, so I'm used to this, but I could imagine an inexperienced rider being challenged by it.
86	Perhaps outside the study scope, but the Minuteman crossing of Mass. Ave./Mystic St. needs major safety improvements. Would be nice to see bike improvements on Mystic St. as well. Summer St./MVP/Mystic intersection is also a concern.
88	Mystic and summer street crossing Route 60 crossing, can that intersection become a traffic light controlled intersection instead of rotary so safe crossing with pedestrians light cycle is possible
90	Along Mystic Lake

ResponseID Response

91	High street/mystic valley parkway rotary-some autos use this as 2 lanes entering, which makes this much more dangerous. Mystic valley parkway/mystic/summer is dangerous because of volume and geometry/configuration- any turns on a bike are difficult if not just a right hand turn
92	Access to Mystic River from EArlington as a pedestrian is challenging and scary. Intersection at Summer and Mystic is not pedestrian friendly or bike friendly. Why is access point at FoodLink at Summer St not on the list as an option?
93	From driving along Mystic Valley Pkwy. several times a year, this seems pretty safe to me.
94	I am most concerned about traveling from the Minuteman Bikeway (Mill Street) along Summer Street to Mystic St and the beginning of the Mystic Valle Parkway. To a lesser degree I would be concerned about biking along the Arlington side of the Mystic lakes/river area depending on how the bike lanes were constructed. There's fairly heavy, fast traffic along that side and not the best visibility due to the curves.
95	Concerned about safety when biking along Mystic Valley Parkway due to the speed of traffic and seemingly lack of awareness of cyclist from drivers. The intersection of the Alewife Brook Greenway and Mystic Valley Pkwy is difficult to navigate on bike. I often must go out of my way and dismount to cross.
97	The main concerns are the circle leading into Medford High Street and at Route 3. Still to this day, people do not know how to get on the circle and who has priority. The width of the bridge over the Mystic River there is quite wide. I've seen cars make two lanes approaching the circle just after going over the river. The intersection at Route 3 is annoying, and not really dangerous because there is a light. It might be better though to go south on Rt 3, then go pass over the road by the police station, over Cooke's Hallow, then over to Water Street by Plumber's Supply.
98	Traffic circles - cars flying around without really looking, except how to cut in front on the next approaching car.
99	The High St./Medford St. double rotaries are of particular concern. Anecdotally, I've heard of some serious bike crashes there that we're not included in the study data. The section of High St. in Medford between the river and Boston Av. is commonly regarded as one of the most dangerous and anxiety-provoking roads by users of all modes. The Harvard Av./River St. is an excellent crossing that connects many good bike routes and could be made even better with modest improvements.

ResponseID Response

100	Crossing Rt. 60 right now is very difficult for recreational users trying to the Mystic River paths. It essentially cuts the park in two. Also it is dangerous for bikes trying to navigate the two rotaries. Also, The Mystic Valley Parkway/Mystic St. intersection is difficult to navigate for bikes and pedestrians. The somewhat steep gradient there is also a factor for bikes.
101	River St bridge can be really challenging to cross when biking or walking. Crossing mystic valley pkwy at the end of the greenway is better now there's a light The entire roundabout section at the bottom of Medford st in Arlington is a nightmare for pedestrians and cyclists in all directions. As an aside, more education for motorists on how to use roundabouts would be much appreciated. There are regular crashes there, and I observe people using it incorrectly each time I use it - Going when someone is to your left in the roundabout; Yielding to incoming traffic when you are already on the roundabout, etc.
102	through the rotaries
103	Mill street is a mess, potholed, visibility for bikes is bad, drivers frequently don't stop at bikeway flashing light. Summer/Mystic intersection is bad enough in a car, wouldn't brave it on bike.
105	The rotary at MVP/High/Medford is terrible for bikers/walkers, (non-cars). Taking your life in your own hands, especially with kids on bikes! Try to get from the path across to the lower lake! No crosswalks, need to cross twice, cars don't need to stop at rotary, so really hard to find a safe place to cross
106	Mill/Summer. Very busy roadway. The more of that you can avoid the better (e.g. cutting from the bike path along baseball field, expand sidewalk to make a bike lanes and walking lanes,....)
107	The river and the paths next to it are between the double rotaries, there is no crosswalk between the double rotaries, and it can be a very difficult crossing when on foot.
109	Crossing Alewife Brook Parkway is always stressful, and it can be especially confusing on a bike to know how to get across and which route to take. The sidewalk along Mystic Valley Parkway is very narrow in spots (I think the section immediately touching the lower lake) and, though there is a decently wide shoulder, the lack of a dedicated bike lane can be stressful - for example, I have seen a family walking on the sidewalk, a runner trying to run around them, a jogger with a stroller running in the shoulder, and a cyclist in the shoulder, all trying to get past each other safely while cars are speeding by.
110	Summer st to Webcowet is challenging on a bike
114	The Mill St crossing of the MM Bikeway is hazardous. My personal observation is that 90% of bicylists do not heed their stop sign and speed through the intersection

ResponseID Response

115	The Medford St. rotary has no north/south crosswalks and would need to be completely redesigned to accommodate a path.
117	Crossing on foot at the Medford St. @ Mystic Valley Parkway circle.
119	I'm more concerned that you not tie up traffic more than you already have. To properly do this would cost at least 10's of millions, if not 100 million dollars. You would need bridges for Mystic Valley Parkway, Medford St, and Mystic St. at a minimum. Then there isn't enough room on Summer St. for both the bike lane I suspect you are envisioning, and the existing traffic lanes that are barely adequate. Here's another idea for the Mystic St. end. Build a bridge over Mystic Valley Parkway where Webcowet Rd would intersect MVP, if it continued straight. MVP curves to the right. A straight bridge would land in Mt Pleasant Cemetary. Follow the existing roads in the cemetary and cross Mystic St beside Tetragraphics. Build the bike path along side Mill Brook, along the edge of Arlington Catholic's field, behind Plumber's Supply and the condo complex to the Buzzell Field path.
124	The rotaries at High street are very dangerous. Pedestrian crossing needed asap.
125	A HUGE problem is that there is no way to cross at the rotary at High St. as the path is drawn here - there is no crosswalk!!!! This is very dangerous and people cross anyway because there is literally NO OTHER OPTION. Also, a lot of this path is not paved which makes it very difficult to use with a stroller for families with young children.
126	I'm most concerned about safety because of inconsiderate bikers who won't slow down and pedestrians who walk 3-4 abreast.
127	The rotaries stress me out, as a driver, cyclist, pedestrian (the majority of my use is as a cyclist).
128	Summer St near AC and Buzzell: narrow roadway with fast-moving autos and ad hoc parking. Space is not available for bicycles. Mystic St intersection: steep grade, fast-moving autos. Rotaries: fast-moving autos, confusing for them, and no clear pathways for walking or cycling.
131	I don't know the area well, but: -Summer Mystic looks tricky, coming from the Minuteman towards Mystic Lake
132	I don't know how to think about the safety of an unbuilt path? I guess it would be pretty safe? I'd be interested in how the path interfaces to the rotary with 60 and how it crosses Mystic Street. The Mystic St. crossing seems like it could be a tricky one when heading westbound, cyclists would have to accelerate uphill through that wide intersection.
133	I find that cars drive fast along the River, especially along the lower Mystic Lake.

ResponseID Response

134	Traffic along MVP travels very fast, and because of the curves drivers may not have good sightlines. It would be good if the new bike/walking path were physically separated from the cars, ideally by a narrow but high-visibility barrier. Why narrow? Because it would be a shame to pave over a lot of green space in such a beautiful area.
136	I can't picture how a path would negotiate the already hazardous rotary at Rt 60 (I live within view of it and see flashing lights post car accidents there frequently) and find that crossing it as a pedestrian as I do is pretty dangerous already.
137	Crossing alewife brook into somerville area.
141	Rotaries at Mystic Valley Parkway and Rt. 60 both sides of the river - no obvious space to keep bikes and cars separated. Along Lower Mystic Lake - steep slope on opposite side of road from lake prevents additional bike or sidewalk space. Too narrow on lake side to keep sidewalk but add separate bike path. Summer St from Rt 3 intersection old be tricky to keep bikes and cars separated. Buzzell Field better option than Mill St for connection to bikeway.
142	Both roundabouts of Medford St (Rt 60) and Mystic pkwy (either on Arlington side or Medford side) are chaotic and unsafe, especially for bicycles
146	I didn't even know there were paths at the dotted lines.
149	Summer/Mystic intersection and the rotaries.
150	biking along the summer street portion of the above proposed map feels like the most problematic, congestion makes bicycling more dangerous. a clear path will help, but I don't want to have a major bike thruway interrupt the park...could it routed around the back of the Arlington Catholic field somehow?
151	All of Mystic Valley Parkway -- high speeds without protection or buffer for people using small wheeled vehicles (bikes, scooters, wheelchairs, etc.). It's also pretty poorly lit, so there's some dangerous considerations while riding at night.
152	No major safety concerns
153	intersection with Mystic St. Why not put a pedestrian crossing bridge there? The sidewalk along the lake has the protection bar on the lake side of pedestrians thus not protecting them from cars. This needs to change.
154	Rt 16, High Street Rotary, Rt 3 crossing: all have fast traffic, wide roads with few obstructions that make cars drive like it's a highway. The Summer Mill Street areas are great for connecting to the minuteman though.
155	Condition of the path along the Mystic, and all road crossings.

ResponseID Response

157	Between Mill St and High St there are so many bad intersections and motorists driving extremely fast and no bike lanes. The traffic circles are especially terrible for all transportation modes except automobile. The light at Mystic St is not timed very well for pedestrians or cyclists and the red is regularly run by motorists.
158	Pedestrian conditions at the route 60 rotaries. Awkward connection through Buzzell field.
159	Rotaries at Mystic Valley Pkway
160	High street area
161	I have small children and like the scenery of the lakes. We walk along the mystic valley parkway until the high street rotary. Our biggest concern is the difficulty of crossing the rotary and getting to the Medford side of the lake.
166	All along the thick solid line is unsafe. Vehicle speeds are typically much higher than posted.
172	High St rotary on both sides of mystic River is very dangerous for pedestrians and bike riders
173	Traffic along Mystic Valley Pkwy is often too fast, given all the curves in the road, so access from side streets can be dicey. The Mystic St./Mystic Valley Pkwy intersection at Summer St. is very busy and too wide for safe crossing by slower pedestrians.
174	Intersections with major streets
175	Any major intersections
176	The rotary at Medford and mystic valley parkway. There is NO way to safely cross if u are on the side of the river the crosswalks are at inconvenient places and i often see people run across the bridge and almost get hit because there is no where to cross now. I think a cross walk in the middle of the bridge would be best b/c cars often speed thru the rotary and don't look for pedestrians.
177	The stretch of Summer street has fast cars and no good shoulder or bike lane for biking, especially when cars are parked for the field. Have almost been doored. Very uncomfortable biking. On Mystic Valley parkway, cars go too fast. It is signed 30, yet cars go closer to 45-50.
180	The two rotaries over the Mystic River are very dangerous for anyone not inside a motor vehicle. Need crosswalks.
181	The rotary at Mystic Valley Parkway and Alewife Brook Parkway is terrifying for bikers. It should receive treatments that help force drivers to slow down, and there should be dedicated space for cyclists.

ResponseID Response

183	Protected bike lanes on mystic valley pkwy.Both directions west east not a painted lane.Blind spots.Speeding cars.Summer st also to mill street.Bumpers at Rt 60 circle.
185	I think the most problematic areas are the rotary at Medford/High St, and the intersection between MVP and Mystic St.
189	I am most concerned in the vicinity of the Alewife Brook Parkway. There are homeless encampments there with heavy drug use.
190	I love the idea of more Bike paths. I hope they will be kept in good repair. Upheaval from tree roots is common and not always repaired in a timely fashion! The intersection of High and Winthrop on the Medford - Arlington line will need reduced speed signs and crossing lights.
191	The two rotaries on rte 60 at the bottom of the lakes. The intersection at rte 3 at the sw corner of the lakes
192	The intersection of Summer and Mystic has very poor visibility coming up the hill from the Parkway.
193	I use the Greenway path on bike, which feels safe, but I'm not sure bikes are allowed there? I would never ride those streets along 16. Not safe at all. Crossing by the Stop and Shop is barely safe
194	Route 60 crossing at the river bridge!!!! I hate crossing there. They put in no crosswalks when they fixed the Arlington rotary- just plain stupid and disrespectful of the many pedestrians and joggers.
195	The traffic circle at Rt 60 near the river is very busy. There could be concern about many bikes and people crossing there during rush hour with all the cars that go through.
196	Crossing Rt.60 & rt.3
198	The path at Harvard Street is one we use to bike to Duggar Park - there are no curb cuts to get off the path onto the street to get to Duggar. Would love if the street along park were not thru traffic, but an Open Street open only to residents and park users.
199	Navigating the two rotaries on route 60. Cars and trucks do not take care and share the road in those locations.
200	Unsure
206	When biking, the entire route. Currently I just would not go that way. I would go down Alewife Brook Greenway to the T station and then up the Minuteman. When walking, I would have no concerns being in this area even if no action is taken.

ResponseID Response

207	Rotary at high street is challenging to get around when biking to get to Upper Mystic, this intersection could use bike facilities and crosswalks.
211	Hard to tell, but I think it's where the path meets / doesn't easily join Alewife Brook Parkway at Lower Mystic Lake. There was a cyclone fence & we had to turn back.
212	The mystic valley parkway is difficult to cross. Drivers tend fast (in my opinion).
213	At the summer St/Mill St intersection, at the rotary at High St , and at the River/Harvard St intersection
214	Currently use only the dirt path as the roads feel unsafe
215	Summer St is usually quite busy. Moreso the left turn onto Mill St is usually busy with lots of competing vehicles
216	MVP by the lake and cemetery. It's fast, steep, and curvy.
217	The rotary at Medford/High St is very dangerous for pedestrians. It's hard for cars coming over the hill from High St to see us
218	The rotary area on Rt 60, by Parallel Park
219	Mystic/Summer: Poor visibility coming uphill on MVP Medford St/High St bridge: Poor crossing opportunity Summer St by AC Turf Field: busy parking when games are on at AC Turf and Buzzell, narrow busy street Summer St/Mill St/Minuteman Bikeway intersection: Bikes failing to stop on Bikeway cause car traffic on Mill to go very slow.
220	Under the bridge at Whole Foods. It's a nightmare. Riding or walking along Rte 16 can be treacherous. I think someone will be killed one day as traffic driving WAY TOO FAST passes alongside footpaths with people children dogs.
224	Any crossing at MVP esp Harvard Ave/River St. All of the traffic circles need traffic calming and PBLs
226	Entire area in thick red. Path is too narrow to bike and have pedestrians, some parts of the path have significant tree roots or are not well paved. Transiting to Summer Street through square is for the brave.
228	Mill Street to Lower Mystic Lake. There isn't much room for pedestrian traffic and people drive quickly around blind corners.
230	When I bike on the South side of the lower mystic lake, cars travel quickly and there are lots of turns. I'm afraid I won't be seen on my bike and that I will be hit. Although there is a shoulder, there is usually a lot of debris in the shoulder and it is not safe to ride there.

ResponseID Response

231	High St is so difficult to cross. I cross up on the bridge instead of at the rotary as it seems a bit easier but still you have to wait a while and then run!
234	I think this great. More paths the better.
235	I've never really explored the Mystic lakes because it doesn't feel safe/approachable to bike there. A good connection to the Minuteman would go a long way to making that better.
236	Mill and Summer Streets
238	Crossing High St at the rotaries - there is NO SAFE WAY TO CROSS, so I don't. We just have to turn around. Cars also speed on Mystic Valley Parkway along the lakes, so a bike lane would need to be separated to be/feel safe.
240	I would be concerned about the intersection of Harvard Street and also the High St rotary to Medford St. Those are both challenging areas to cross so I'd love to see how this will work.
242	Areas for crossing between traffic circles or near them are regularly an issue because there is no crosswalk
243	The intersection at Mystic Valley Pkwy and Mystic St, crossing into Arlington to Summer St, then Summer St up to Mill St is not fun on a bike. Narrow, no designated bike area.
245	The dotted area because of traffic/not always passable sidewalks
246	Harvard Ave in Medford and River St in Arlington. Harvard Ave should have a sharrow to let cars know bike to use that road. And River St is a wide enough street and needs a proper bike lane in each direction.
247	Rotaries along Mystic Valley Pkwy - Width of crossing, protected areas while crossing Victoria Rd/Summer St crosswalk - Visibility to automobiles especially during athletic events
248	The High Street rotary is very dangerous to cross, especially with cars coming over the bridge in both directions.
249	Traffic on Summer St. is brutal @ Rush hour; not sure there is room for a dedicated/protected bike lane(s) there; perhaps inside the fence perimeter of Buzzell Field in a manner which goes around - not through the existing ball fields, ie a new path along the chain link fence and behind the large baseball diamond backstop (the one closest to Mill St side of the park). The idea would be to enhance by adding a bike path hugging the fence line, not detract by bisecting the field and potentially disrupting games there (or having a few cyclists nailed by line drives)

ResponseID Response

250	Rotaries at Medford Street bridge, hill from Mystic Valley Parkway to Summer, Summer from Mystic Street to Jason.
252	the rotary at medford and summer street is dangerous for cars and pedestrians as well as bikers, also the curve of the road between lower mystic lake and Rt 3 has reduced sight lines and limited shoulders plus people drive quickly there - we call it hte speedway!
253	Mill St. that intersection is busy so i would be concerned about bike crossing safety
257	crossing to medford. speeding traffic routes
258	Route 60 rotaries are scary on foot OR bike. I think the project should seriously consider having the new path pass UNDER the roadway, closer to and near the elevation of the river. Consider that the Minuteman extension (Reformatory Trail) that Bedford is about to commence work on will pass UNDER route 62 (Concord Rd) and that has much lower traffic volume than Route 60. I think anything else is just asking for tragedy.
259	Possible intersections with the Minuteman Bikeway as drivers may be inattentive
262	Intersection between Summer Street and Mystic valley parkway needs to have good lights for bikers
263	I often bike from home in Winchester, south along the parkway east of the Mystic Lakes, through the rotaries where route 60 crosses the Mystic River, and then over the parkway to the beginning of Summer Street. These are perilous areas for a biker. While I am very experienced as a biker I take these intersections VERY seriously! Also biking along Summer Street is not very pleasant when connecting to the Minuteman Trail.
265	High Street Crossing. MVP to Summer, as well.
267	Route 60 rotaries.
269	The rotaries are death traps for pedestrians and cyclists. Motorists blow through at high speeds, crossing from the paths is difficult and in unmarked crosswalks. The River St. light phasing is very anti-ped. Summer St. is also very hostile for peds.
270	from the mystic valley parkway coming into Arlington from Medford througho summer st or buzzell field (in particular)
272	Taffic circles at High Street are very ambiguous and cars can still speed through. Paths along the river don't have proper crossings at High and River. Sidewalk between lake and 3 is narrow. No proper place to be on final stretch along 2A.

ResponseID Response

273 Rotaries on High St/MVP. Cars drive fast; not ever understands the rules of the road at rotaries; no safe way to cross on a bike

274 Mystic/summer street intersection, then along summer street to get from Mystic Lakes to Minuteman. It's a busy intersection and road with little protection - definitely a missing link if riding with kids - that section is too busy/dangerous, as there is little shoulder, and sidewalk is narrow, with lots of traffic.

275 All road crossings

276 All the road intersections along the route are marginally safe to drive a car through, and consequently not safe to ride a bike or walk through.

277 All of Summer St including Rt 3 intersection. The road is busy and the intersection feels messy and unsafe for bikes/peds

278 Traffic at intersection of Summer Street and Mystic Street. Also, need solid trails on the banks of the Mystic River - the dirt trails prone to washing out.

279 The rotaries with no crosswalks.

280 MVP from the lake to Mystic St- must be separated from roadway and wide enough for 2-way travel

284 The rotaries on high street are virtually unpassable on foot. Traffic drives fast, roads are wide, there are limited crosswalks.

285 mystic valley pkwy & high st. (1) As a pedestrian, I found it's very difficult to cross the street, especially from lake side to the other lake side, or from lake side to parallel park. It's a rotary, no traffic lights, no pedestrian lights. Usually, people who are driving the cars are nice to me and stop to let me cross. But I would hope there is some lights which can force drivers to stop. (2) there are two rotaries here. The other concern is walk to west medford side. Same problem.

286 The roundabout where Medford St meets the Mystic Valley Parkway feels dangerous for a pedestrian or a cyclist, and I don't love crossing the parkway at the bottom of Palmer St, nor how it doesn't connect to the path at the edge of the river - it just dumps you into a field. The lack of sidewalk on the south side of the Mystic Valley Parkway along the stretch between Summer St and Medford St is very frustrating and doesn't at all feel safe. It would be great to have more of a buffer between the path & the roadway in that area as well, particularly with trees, benches, and/or community art (like along the north side of the Mystic River with the doors - how great are those!) to increase visual stimulation for drivers and promote slower and safer speeds. Additionally, the stretch of path between Medford St and Alewife Brook Parkway being unpaved makes it challenging to ride my bike there, particularly if any kind of wet weather has occurred.

ResponseID Response

290	MV Parkway and Mystic Street
291	Rotary at Mystic Valley Parkway and High Street. Difficult to cross as a pedestrian. Traffic does not always yield properly.
292	The Minuteman bikeway has become unpleasantly hectic. Routing bike traffic through Buzzell field would likely be a mess when the field is active. I live off Mill St, and cycle up to Summer St. When I'm on a bike, I most often ride on the shoulder of Mystic Valley Parkway (easier to get to than crossing both Summer and Mystic, and the current path isn't bike friendly), when I'm on foot, I cross to the gas station. I can only describe the rotaries as "hellish", both when walking along the river path, and when cycling along Mystic Valley Parkway. And as fast as the traffic across the bridge can be, it's actually better now than it was in the past, when people driving across the bridge would speed through without slowing down or (gasp!) yielding.
295	The very beginning from Whole Foods to Alewife is broken pavement that tilts toward the street on some of the worse parts. I wish the path along the River was paved as it's very bumpy and roots make it a little precarious. If I'm on the road heading north I feel OK I wish there was more of a shoulder especially as you climb the hill then go down the hill toward the rotary. Ironically I'm not as concerned about the double rotary bridge because my senses are hyper it's so dangerous if you don't pay attention. Heading north just as you separate from the lake heading up to the police station that path is littered with broken pavement it would be so much easier if it was smooth to ride up that hill relatively easily. Due to the pavement and narrow shoulder I typically just stay on route 60 and join the Minuteman rail trail in the center it's a little smoother except for the part near Arlington Catholic and Saint Agnes. I typically do not use the Summer Street area I may in the future if this works well.
297	I'm concerned about the section just below the Mystic Lakes (narrow road, not much room for shared path with bikes, pedestrians AND cars right next to the path) and to the northwest of that--cars go really fast on this section of road. Also, I worry about the intersection of Mystic Valley Parkway and Mystic St.
298	I am most concerned about biking on any road that does not have a protected lane. I have tried to go safely from the Minuteman path to the Greenway, without success.
299	Rotary at Mystic Valley Pkwy and High St. Drivers tend to go fast through it.
300	Mystic Valley Pkwy junction with Summer St (unsafe for bikes waiting to cross or turn left while in roadway); Harvard Ave/River St intersection, high traffic, speed of cars
303	from Alewife Brook Parkway to High Street-- impossible to bike in the dark on the path, the way Google Maps would tell you to! Path hard to ride on at night.

ResponseID Response

304	<p>the bridge over the river at Medford Street/High Street has no option for pedestrian crossing other than jaywalking (the rotaries at each end do not even have crosswalks all the way around, which would still require going considerably out of one's way), and gets A LOT of traffic. Crossing always feels somewhat unsafe.</p>
305	<p>the rotary at Mystic Valley Parkway and Medford Street. Cars go too fast and don't stop. It's a NIGHTMARE for pedestrians. Summer and Mystic is also not super pedestrian friendly. How are you going to run bike traffic on the street (vs river) side of Mystic Valley Parkway? I'm surprised you're not leveraging the existing paths and green space.</p>
308	<p>The rotary where Mystic valley parkway intersects medford/high st. has always felt dangerous to me. I've seen at least a dozen runners/pedestrians almost get hit trying to cross the high street bridge. Don't know how it would be for bikes.</p>
309	<p>The rotaries at Medford St and Mystic Pkwy are particularly dangerous for non-motorists due to the high speeds, lack of crossings, and the expectation that only motor vehicles would use the road. The intersection of Mystic St and Mystic Pkwy is also challenging due to its size and lack of space for bikes to be. I currently connect to the Minuteman at Arlington Center via Mystic St, but would consider connecting off of Summer St if it were easier.</p>
310	<p>This path would be a tremendous improvement on how these roads are currently set up for cycling.</p>
311	<p>I'm most concerned about safety along Mystic Valley Pkwy itself.</p>
312	<p>The double rotaries and attempting to cross River Street. We live nearby, and trying to get over to the paths by the Mystic River and lakes inevitably mean crossing busy areas without a crosswalk.</p>
313	<p>Crossings at the rotaries and mystic Street. At the rotaries you are at the mercy of automobiles, and at mystic st there aren't crosswalks in all directions. The shoulder is pretty narrow between the mystic lakes and mystic st as well.</p>
314	<p>From the bike path, i usually go through the field to get towards mystic lake because the intersection with summer street is too tight. Along MVP, the intersection with summer st doesn't feel safe when going straight because there's cars going right and you have to make sure you are seen. The next roundabout with Rt 60 is always a challenge, especially going all the way across. Once you get past rt 60 going east, the road is fine, but cars usually go pretty fast</p>
315	<p>The rotary at High Street and Mystic Valley- too many distracted drivers at that intersection. It covers a lot of space where cars dominate.</p>

ResponseID Response

316	the two rotaries by medford/high street, the area around the route 3 intersection through mill street.
317	The rotary at Medford street will be a challenge. Right now, I see people who are trying to cross the street, and often a few cars go by before one stops. The West end of Mystic Valley pkwy, the intersection seems very large. It may also add to the difficulty on a bike because it comes immediately after a pretty good climb.
318	Summer St. & Mystic Valley Parkway - danger from cars.
320	Traffic circle at High St
321	I'm concerned about heavy traffic, access and visibility at the intersections at Mill Street, Mystic Street, River Street, Route 16.
324	I don't see the bridge or the rotary at the end of Medford street on this map. This is an area of concern. The Mystic Valley Pkwy as a whole has a few spots where cars tend to go fast. The section around the cemetery is also uphill if you come from the river and tends to make is slow for bicycles. The intersection with Mystic street tends to be busy. Connecting to Mill street seems to make more sense but again, it is a very busy intersection.
325	The rotaries on either side of the Medford Street bridge are really dangerous as either a cyclist or a pedestrian. It is challenging to cycle up the Mystic River and then proceed up the parkway to Summer Street _OR_ proceed to the parkway on the Medford side of Lower Mystic Lake.
327	The traffice circle at Mystic Valley Parkway and Medford Street is a tricky crossing, though I typically find drivers are very aware of pedestrians. Improved signage/visibility there would be helpful.
328	The section from River Street up to Summer Street often has high speed motor vehicles and inadequate cycling facilities. Sight lines are poor, also, so motorists may have little time to react to slower moving cyclists in the roadway, especially when cyclists are travelling uphill. The intersection of Mystic Valley Parkway and River Street seems to have some inoperative pedestrian crossing signal buttons, which mean that the walk sign never turns on if you're walking along the river towards Summer Street. The Alewife Brook Greenway has a gravel path that has sections that are frequently washed out after heavy storms. Encroaching and uncontrolled invasive Japanese Knotweed creates poor sight lines on the Greenway by midsummer.
329	I'd be concerned at any points where there are crossings of intersections, places with heavy traffic, etc.

ResponseID Response

330	Turning onto Mill street from the MM Bikeway. Cars don't always stop for pedestrians and bikers when they're crossing Mill Street and I suspect the same could occur if the route is built on-street. The Summer St-Mystic St intersection is also dangerous since there are multiple lanes and the split in Summer St means traffic is unpredictable. Similiarly as above, an off-street option would be preferable to minimize safety threats.
331	Mystic Valley Parkway is narrow and speed limit too fast
332	Rotaries at Medford St, Summer/Mystic interection.
333	The stretch between High Street and Summer St. Traffic picks up around there, if the path is right on the road/shared with vehicles, there are some blind corners where motorists whip around. During wet conditions, it's even more sketchy.
334	the two roundabouts connecting Arlington to Medford on high st, specially when crossing the bridge from Arlington and making a left on the Medford side to continue along the lake on Mystic Valley Parkway across mystic river road. The mystic valley to mystic st crossing: making sure that bikes do not have to stop mid-section of the uphill as it could be challenging with cars rushing around turning right and left. The lack of street lamps around Arlington makes it difficult to see pedestrians or bikers at night in a lot of areas and in particular along mystic valley parkway.
337	I walk along this EXACT path most days from where I live near the Medford rotary to Arlington High School. I cross Mystic Valley Parkway everyday at Hayes Street and often have to sprint rapidly across to avoid traffic. Westbound traffic appears last minute due to the shape of the road and it can be hard to tell when a car is coming until it is there. I would honestly prefer if there was an additional path on the southern side of Mystic Valley Parkway as I cross it, then Summer Street again after I'm beyond the Dunkin' Donuts. A cross walk at Hayes/Mystic Valley Parkway would suffice though, and signage for cars coming in both directions that a crosswalk is approaching after the curve. Cars also move very fast along this route, so speed limit signs (perhaps the ones that flash when it is exceeded) would help.
338	Getting onto the bike path via Alewife brook parkway. The traffice circle and traffic on the streets in general is chaotic and high risk.
340	Crossing the Parkway / Summer St. could be a challenge. When the Minuteman was trying to implement a good way of crossing Mass Ave, it took a lot of trial and error to come up with a signal / lane system that wasn't completely confusing to everyone.
341	not concerned by safety
342	The Rt. 60 traffic circle is problematic.

ResponseID Response

344	Medford St roundabout doesn't have a cross walk on the river side. To stay on the trails you either cross randomly in the middle of the bridge or you have to cross three streets to get back to the river side path. Mystic valley parkway/Mystic Street by the police station should have the ability to cross on the diagonal. There isn't enough time with the walk signal walk across and over, so you need to wait two cycles to where a diagonal crossing would get you in one cycle.
346	Medford center is so perilous, so while this path looks great, I'd be nervous getting on/off through medford center to go restaurants.
347	There needs to be a way to cross the rotary at Alewife Brook Parkway and Mystic River Parkway (Route 16) on the Somerville side, without having to cross the brook to the signalized crosswalk on the Arlington / Medford side. All you need to add are curb cuts on both sides of the rotary.
348	harvard av intersection, hill past mystic lake
351	As a pedestrian, concern with proximity to vehicle traffic along section of Alewife Brook Greenway between Henderson Bridge and Broadway, as well a route from Summer Street via Mill Street, connecting to the Minuteman Bikeway
353	river st and mystic street crossings
357	Mystic Valley parkway
360	From Harvard Street to the end of the proposed trail
361	The intersection at Summer St. and Mystic St, which is always intense, even when I'm driving it! Also MVP between Mystic St and High Street, especially that rotary. Drivers treat it like a highway. The rotary on the other side of Lower Mystic Lake is a bit more tame, for some reason. Finally, getting across the intersection on MVP at Whole Foods, which is very dangerous, and the lights don't change often enough to make ped/bike crossings easy. The way I do it is to cross to the Whole Foods side of the road at Boston Ave, and then cross over Auburn St on the WF side, then pick up the bike path again. Otherwise it's impossible, dangerous, and very time consuming.
363	Roundabout at Medford Street is not well designed for pedestrians
364	The rotary on Medford St feels extremely unsafe. There are paths there but no way for pedestrians to cross. Also Mill St. at Summer St., and the bikeway crossing at Mill St. are both intersections that feel unsafe.
365	The farther away from streets it can be, the better! Nothing concerns me about the route - I just hope for a protected path along mystic street between the intersections with mystic valley parkway and summer street.

ResponseID Response

368	traffic moves fast along the MVP. it's not a big deal for an experienced cyclist/runner like myself, but I know people who are intimidated by traffic like that and won't venture out along the MVP without a car. I don't have a problem crossing Summer St between Mill St and MVP when on foot, but I'm sure that's an issue for others. When cycling, I just go with the traffic flow and feel safe enough.
369	the on-road segments would be the most scary, because of the presence of cars
370	Summer -Mystic intersection. I have biked thru there and it feels dangerous. The cars aren't expecting bikes and you have to cross the slip lane to go across. There is not much of a shoulder on the MVP side at the intersection. I also am afraid f biking in the rotaries.
371	I'm more excited than concerned but emphasis on safe street crossings would be helpful.
372	The Summer street/mill street intersection is busy and crossing mill street at the bikeway can be tricky, especially with cars turning onto mill street.
373	Approaching/in rotary at Medford St, Arlington- where it connects to High St, Medford
374	I regularly bike the proposed route, using Medford street to connect to the Minute Man. A paved path on the Arlington side of the Mystic would be such a welcome improvement. The current situation, with many roots crossing the path, has great potential for a fall. And I would be so grateful for a connection to the Minuteman that did not involve riding in car traffic.
377	My route to the Minuteman from Malden is via Medford Sq. which is just outside the map shown. At Main St. and rte 16 I take a path that brings you to an on-off ramp to Medford Sq. It's a little dicey but there is a cross walk and a light there for pedestrians. From there's no clear markings to work yur way along the river although I have found ways to get to where I'm going through trial and error. To me there is a good opportunity to direct walker, runners, bikers, etc. with a sign illustrating the various paths along both sides of the river and the occasional mileage sign for reference.
378	Rotary at Rt 60 , hope to slow cars like at powder house circle MV Pkwy / high st, most cars drive straight thru without slowing, especially on High st portion going east west Summer st, because of incline and poor visibility uphill
380	Summer and Mystic High St and Mystic on bike, Section between Summer and High where lots of sharp turns, and Southside of road is often overgrown with weeds forcing me to rid e more in middle of the road than I'd like.

ResponseID Response

381	<p>I have biked from the Alewife Brook Greenway to (I think) High Street. I would be very nervous continuing on to bike with traffic on Lower Mystic Lakes. I drive this way to my parent's house, and I'm one of those drivers who goes right at the speed limit. I think it's 35 there. And the cars line up behind me. They're going too fast, all the way up to the stop light at the end of the cemetery. And Spring St is narrow and busy, and doesn't have bike lanes, as far as I remember. I would go out of my way to avoid that route, currently.</p>
382	<p>The worst places are the 2 circles on Mystic Street on either side of the river. Traffic on route 60 often fails to yield. There is no safe and reasonably convenient way to cross Route 60. Access from Summer Street to the Minuteman Bikeway is awkward and not very safe, particularly crossing Summer Street. Left turn from Summer to Mill is also not bike-friendly.</p>
383	<p>Where high street crosses the River from Medford to Arlington there is not even a crosswalk on one side of the traffic circle, very dangerous.</p>
384	<p>Leaving ABG and turning left onto the sidewalk is a sharp turn that's hard to make. It's not clear whether to be on the path or sidewalk in order to cross the street.</p>
385	<p>The connections between the Minuteman to Mystic Valley Pkwy. and from Alewife Brook Greenway to Mystic Valley Pkwy</p>
386	<p>The beginning of Mystic Valley Parkway from Summer Street because of the windy turns and slopes</p>
387	<p>Crossing Medford St and High St at the river, and all crossings around the two rotaries, are extremely difficult and dangerous for pedestrians to cross, and for drivers and bicycles. The Alewife Brook Parkway - Mystic Valley Parkway rotary is also dangerous.</p>
388	<p>Crossing the rotary from Medford into Arlington along rt 60 is always terrifying on foot and by bicycle, especially at night. There is no safe way to do it.</p>
389	<p>Crossing Summer St at Buzzell field to access the bikeway. There is a crosswalk without traffic lights, traffic is heavy and there are parked cars that obstruct the view, making it dangerous to cross, especially for children.</p>
391	<p>The crossing that is the most dangerous is the section of the Alewife Brook Greenway that crosses Mass Avenue at Boulevard Road in Arlington, across from Homewood Suites Hotel/Menotomy Grill Restaurant. There is no crosswalk there.</p>
392	<p>Mystic st High st rotary Speed of cars and complex traffic patterns Perhaps if going under the bridge that is high at to avoid all pedestrians/ cyclists crossing</p>

ResponseID Response

395	<p>The rotaries on Medford St and High St are especially worrisome to me as a grandmother. I can imagine the grandkids trying to bike into Medford to see friends and trying to get through those intersections. I travel often along the parkway between Summer and the Medford rotary and observe that drivers often do not keep to the speed limit in an area where there are (and should be more) walkers and bikers.</p>
396	<p>I walk and ride my bike along all the marked routes at least a few times a year. I would definitely use these routes more if they were more-bike friendly. I don't really like riding on the street, but also find the dirt paths a bit hard to navigate. I have also found that it is very tricky to figure out the best bike route between Arlington Center and the base of the Lower Mystic Lake.</p>
398	<p>n/a</p>
399	<p>The proposed sections that would require sharing the road with cars. Less concerned with intersections that have lights.</p>
400	<p>High Street bridge on the Arlington side. I frequently run along the river and crossing from one side of the path to the other is very dangerous. Also crossing River Street - as a runner, timing and keeping moving is important to my workout so I always jaywalk across the road rather than cross at the light.</p>
401	<p>The rotaries coming from West Medford on High Street are a concern. Also, I would much prefer having the connector through the field to reduce traveling on roads with vehicles.</p>
402	<p>The Medford Street roundabout is dangerous as is the River Street bridge crossing. The Parkway is a highway and pedestrians are at risk.</p>
404	<p>Not too concerned about safety.</p>
406	<p>Medford St Rotaries - always busy, and poor vehicle visibility over the high bridge, with no marked pedestrian / bike crossing Summer & 3: Cars turn blindly here, especially the right from Mystic Valley Pkwy to 3, and I avoid crossing at the intersection if I can. I don't love the Mill/Summer intersection, but it's reasonably well controlled.</p>
407	<p>Crossing the road by the rotary/bridge at the end of Medford st. I find it hard as a pedestrian here.</p>
408	<p>The rotaries are the toughest part. The rest is actually not that bad. It'd be nice to have a protected bike lane rather than a vaguely-defined berm, though.</p>
411	<p>Crossing Mystic Street in both directions from Summer Street and Mystic Valley Pkwy. Also crossing Summer St to and from Mill Street. Safety concerns in these areas in particular because of busy motor vehicle traffic.</p>
412	<p>Safety concern at the route 3 intersection and rotary on the parkway</p>

ResponseID Response

414	Route along Mystic Valley Pkwy - Curvature and visibility. Riding in the road, width of road. Intersections of Summer/Mill - Congestion, traffic, narrow street, high student/walking area. Intersection of Mystic Valley Pkwy and Mystic St. - Visibility do to elevations of area. Speed through intersection during traffic flow.
416	High st to the lake isn't a smooth path.
417	path quality along the river and crossing the streets at Harvard is troublesome.
418	I'd love a safe way to get around. To me, safe means two paths ("fast", for bikes, rollerbladers, runners, etc., and "slow", for walkers, families, and anyone under 5mph) that are separate from cars and from each other. Stockholm, Sweden, has amazing examples of this, where they have a street, curb, grass, bike lane, more grass, and then a walking path. My concerns are trying to bike on the street, on rocky/root-filled non-paved paths, anywhere near a car rotary or roundabout, anytime I have to cross bridges or streets, because a path suddenly ended on one side, and any path that is too narrow for passing. Basically, the entire are of study.
419	There isn't a great cross walk across High Street. I also don't feel super comfortable biking along this route because cars are driving too fast and there is no bike lane.
420	Alewife Brook parkway scares me the most. The lanes are very narrow and cars seem in a rush to get past bicyclists on the road. Summer Street as well when I try to go from Medford and access the minute man bike path from mill street. There's no dedicated bike lane
423	The Medford Street intersection with Mystic Valley Parkway. medford street and access to children's park. The trucks need to slow down.
424	Crossing Medford St / High St. It has always been bizarre to me that at these major intersections on either side fo the river, there are no crosswalks in that direction on either the Medford or Arlington side. Many people cross on foot here, myself included.
425	Slowing down traffic on Medford street, safety of all rotary crossings, river street crossing.

ResponseID Response

426	<p>The entire section along the lower section of Lower Mystic Lake is treacherous for crossing. Cars drive too fast there. There is a crosswalk at the rotary near the High Street Bridge but that is a very dangerous place to cross as well because cars fly through the crosswalk on their way around the rotary, or especially when making a right turn from the bridge onto Mystic Valley Parkway. Numerous car accidents have occurred at that spot and I have been almost run over on that corner trying to walk across the crosswalk. The intersection at Mystic Street is also dangerous but the crosswalk there is not nearly as dangerous as the other side of the rotary, People drive far too fast going down Mystic Street and everybody from every direction drives too fast through that rotary.</p>
427	<p>1. There are few safe crosswalks / ways across Medford Street. 2. Managing the roundabout as a pedestrian is often harrowing. 3</p>
428	<p>Crossing safely from the Medford street/webcowet is very important. It is difficult to cross there and the traffic moves way too fast.</p>
429	<p>The rotary at Medford St. while there is a crosswalk, drivers are watching for their break in traffic rather than for pedestrians/bikes.</p>
430	<p>The rotary at Medford St. & Mystic Valley parkway could be improved.</p>
431	<p>Mill street is very busy to be used as a dedicated bike path.</p>
432	<p>I'm concerned about cyclists barreling downhill at high speed along Mystic Valley Parkway going down from Mystic St towards the rotary at Medford St.</p>
433	<p>It is not depicted here...but the traffic circle at Medford Street/Mystic Valley Parkway and any traffic circle can be dangerous for bicycles. Summer Street is a shortcut for cars so that they can avoid MA Ave. and the traffic light is busy at Summer/Mystic Valley Pkwy. Dedicated lanes will be helpful - but traffic calming is necessary at commuter hours.</p>
435	<p>Crossing points would cause further congestion to an already an already excessive traffic flow</p>
436	<p>Medford St</p>
437	<p>Medford street. We cross the mystic valley pkwy to go to Dugger Park.</p>
438	<p>Pedestrian crossing at and around the Medford St Bridge and roundabout always seems dangerous and uncontrolled. Is it really possible to walk or bike on MVP adjacent to Meadow Brook Park?? When I drive by, it looks nearly inaccessible by foot....</p>
439	<p>The area between Medford and Arlington on the parkway near mystic lake is treated like an expressway by many drivers. Even if riding in the shoulder, biking is treacherous at best. This area is prime for a path!</p>

ResponseID Response

440	Crossing River St and the traffic circle at Medford St
443	The rotary at route 60 has a lot of traffic and no lights to cross it on foot or with a bicycle. That would stop me from using the new connection.
447	Crossing the Parkway.
448	The rotary by Parallel Park, on both the Medford and Arlington sides. You have to Be very strategic about crossing, and it's awkward when trying to cross at certain points so people don't always use the crosswalks. If the path is there this may get worse if not reconfigured.
449	Rotary at the intersection of rt. 16, getting from Medford into Somerville or Arlington.
454	Crossing both rotaries is impossible and terrifying. There needs to be a crosswalk to be able to get from Arlington to Medford, or from the Webcowet side to the Parallel Park side. When my son wants to walk to the park in Medford, I am terrified.
455	The rotary at Medford St. lacks proper pedestrian crossing.
457	Any spots where the bikeway is close to the auto road
458	Intersection with Rt3 Westbound, and both rotaries at either end of the Medford Street/High Street Bridge.
459	I Often bike round both Mystic Lakes. Mystic Valley parkway between Medford and Summer Street is winding without a real shoulder which feels unsafe. I often cup up to Davis/Draper Ave from the parkway.
462	On mystic valley parkway between mystic street and mystic lake. There is a section where the path is close to the road; occasionally cars will splash water onto the walking path. Visibility is also impaired due to the curves.
464	The Summer St. Mystic St intersection is very dangerous since it's always busy. There is a hill for the westbound MVPW traffic with a lot of cars turning rt. onto Cambridge St. The rotary is also dangerous and at the very least needs better pavement markings. At the mid- block X-walks on MVPW there could be yellow flashers to notify drivers pedestrians are crossing.
465	Near any police station or Dunkin Donuts
467	The rotary at et 60 is a big problem. We really need a better pedestrian crossing and bike paths to connect it to minuteman.
469	The Summer St/Mystic St intersection. The Medford St roundabout intersection.

ResponseID Response

470	Rotary at Mystic Street due to poor crossings.
472	The rotaries are a disaster. Many places along the river don't have a safe/paved path for bicycles and require riding with high speed traffic or riding over bumpy dirt/rocks.
475	I currently avoid biking on the Mystic Valley Parkway because the combination of narrow shoulder, fast cars, and low visibility around the turns makes it feel less safe than other routes. I'm most concerned about the roundabouts as they are very difficult to navigate on a bike currently for those same reasons. Additionally, Summer St has narrow shoulders and lots of potholes which makes biking hazardous.
476	Intersections!
477	Can't really prioritize. All crossings that involve cars concern me.
478	For biking, I would not take that route from the Minuteman to the Greenway - 1, too much car traffic and 2, car traffic that is moving fast. Protected bike lanes would make me comfortable taking that route.
481	The intersection between Summer Street and Mystic Street and Mystic Valley Parkway is large and can be tricky to navigate as a pedestrian, especially since one can't always see vehicles approaching on MVP. I haven't attempted to cross this intersection on a bike.
482	no particular concerns as long as there is good signage and, where needed, traffic lights and cross walks.
483	Mystic Valley pkwy: I'm concerned about bike/car or bike/pedestrian interactions (depending where the bike lane is put). Buzzell field: I'm concerned about bike/pedestrian interactions.
486	Can't load the map so I'm not sure where this is, but hopefully the two small rotaries in Medford on the Arlington side of the train tracks.
489	I think the new route is a great idea! If the connection is through Buzzell field, I'd want it to avoid passing between the playground and baseball fields, since children cross here often. I'd also want to make sure there's separation between these areas and the new bikeway so that children can't easily run in front of bikes that might be passing the playground and fields at a quick pace. The crosswalk on Summer Street at the end of Victoria is already dangerous and would need to be improved if the bikeway crosses Summer there. If the path continued down Summer onto Mill, some attention would be needed at sidewalk crossing while entering the existing bike path, as this already can be a dicey area for this using the sidewalk.
492	medford street intersection - rotary circle needs more guidance like powderhouse circle in somerville. vehicles don't know how to navigate safely.

ResponseID Response

494	High Street - while biking I've almost been hit several times in the traffic circle on the other side of the river. Alewife Brook Parkway - it would be great to have a connection to Boston Ave because there's no way I'm going to put my life at risk by biking on Alewife Brook Parkway.
498	Mystic Valley Parkway, from Summer Street Alewife Brooke Greenway is all pretty dicey. I'd say that the section from summer Street to Franklin Street is the worst.
501	- Crossing at rotary intersection at Medford St/High St. - cars aren't looking for bikes. - If the route between rotary and Summer St isn't protected as a separate lane with barriers I would feel to vulnerable to cars, esp when going up hill to the intersection.
503	Not overly concerned with any part of it.
505	The section of Mystic Valley Parkway from the Lower lake up to the intersection where the APD station is, can be very dangerous for cyclists. The combination of the curvy roads, sun glare and speeding cars all contribute to this.
506	Getting from the Minute man to the lakes involves riding with higher speed traffic on narrow shoulders. The rotary at high street has a lot of traffic.
507	Crossing the traffic circle intersections as a pedestrian or with kids on bikes is very difficult
509	The rotary at Medford Street seems like the most problematic place on this route, and the most likely to need changes for safe crossing.
510	The rotary where Medford at / high st crossed the river
512	I've tried biking this route many times and it can be terrifying for folks on bikes or rolling/walking. Overall the rotaries, high speeds and lack of bike lanes are challenging. I'm very excited about this project!
513	Summer street. Traffic is crazy and lanes are undefined.
515	Rotary crossings by foot or bike are very dangerous.
517	The Medford street - Mystic Valley pkwy roundabout is currently not safe for bicycles or pedestrians. Cars generally travel very fast along mystic valley pkwy between Medford St and River St, so riding a bicycle or walking close to the road feels somewhat unsafe, as well.
518	Currently, biking on Summer St doesn't feel safe at all.

ResponseID Response

519	1) Large intersection at Mystic River Pkwy Rt 3- I used to drive thru here and the crossing is huge and the cars are aggressive, it needs a lot of work to be incorporated into a comfortable all-ages bike/walk path 2) cars go really fast down the pkwy after that intersection away from summer st- need large buffer b/w them and bikes/peds here
521	I am very concerned about losing the pleasant and spacious nature of unpaved pathways along the Mystic River. If there are to be bike connections, please put them along the road, NOT where the walking path is.
524	Summer street/mystic street connection and biking on summer street as it is a busy road/intersection. Need path separated from road where cars drive.
525	crossings at River and High Street - poor visibility combined with inexperienced rotary drivers
528	The Medford street rotary - there's simply no way to cross in a crosswalk if walking on the path along the river. It feels extremely dangerous.
529	Mystic Valley parkway and the rotaries that it has are very dangerous for walking/cycling at the present moment.
530	Any street crossing is a safety concern. I think that in every major intersection or street that the path is crossing, the road should be significantly narrowed or downsized.
531	I'm not to concerned if its designed to take the traffic into account. If not at Mystic Street
532	Along the Mystic Valley parkway
533	That entire stretch. Cars drive very fast, the road curves so can be hard to see pedestrians or bike riders. It's also dangerous to cross the parkway (I do so often as I have a dog.)
534	River street intersection
536	I ride from home (Beverly Rd) to connect with Minuteman path via Mill St. Often return via playground path. Also cross MVP at High St rotary. Prefer to bike thru cemetery rather that MVP path.
538	The Mystic Valley-Mystic-Summer St intersection and Summer St are not bike friendly
540	Mill St, Mystic St, and Route 60 intersections. I use the stoplight at Bridge St. intersection when biking.

ResponseID Response

541	Traffic circle at lower mystic lake - people from Medford direction tend to drive straight through the circle as if they don't have a yield. I worry about that intersection
543	Mystic Valley Parkway from rotary to Summer Street until connection to Minuteman bikeway due to heavier traffic and difficulty transitioning through the rotary. Stretch of MVP from the rotary to Summer Street has some curves that impact visibility.
544	Safety would be a big concern.
545	Summer St. Mystic St. Intersection High Street Rotaries
547	Summer St to Mystic Valley Pkway is narrow and has parked cars on both sides during sports season. (There is a desperate need for a crosswalk at the Dunkin). The rte 60 rotary should have pedestrian/bike lights. If there is room, it would feel safer to have the little posts, like the ones on Mass Ave in No. Cambridge, along the Mystic Valley Parkway to separate the bikes from the cars,
548	The intersection of the Minuteman Trail and Mill St is already a hazard due to the confusing flashers that like cyclists run stop signs and endanger themselves and pedestrians on Mill St. Adding another path intersection to that mix is reckless; connect it through Buzzell field.
549	I am concerned about the mystic street crossing and the river street intersection.
551	I wouldn't walk along that path at night for obvious reasons (burglars, rapists).
552	1) The rotary at the intersection of Mystic Valley Parkway and Medford Street: this could be a much clearer, calmer, and better designed roundabout/traffic circle. 2) The intersection of Mystic Valley Parkway and Mystic Street: This intersection is large and off-angle. Squaring up the intersection, reducing the area it takes up, creating shorter crossings and better sightlines, more predictable traffic paths, would be a big help. Potential for a circle design, to make traffic slower/more steady and more climate friendly?
554	I currently ride my bike only on the Minuteman Trail beginning at Mill Lane. I would love to connect to the proposed area from the MMTrail only if the entire path was a bike trail.

ResponseID Response

556	<p>Medford St/High St rotaries -- drivers don't always make space for bicycles. Note that it's common for me to come down from Mystic Street, <u>cross</u> that bridge, bike through Medford to the River/Harvard bridge, and cross back; this avoids climbing a steep hill somewhere around Franklin Street. Note too that I'm mostly biking on the shoulder of the road rather than on the paved trails; I tend to think of those as pedestrian sidewalks and hence not suitable for riding at speed.</p>
558	<p>Crossing at the rotaries is difficult because there are no crosswalks currently on the river-side of each road, and traffic flows quickly.</p>
559	<p>The rotaries at Medford Street are terrible. Even if you want to walk around a rotary to cross Medford street, there is no path that has crosswalks from one side of Medford Street to the other. We often choose to turn around at Medford Street because unless you're planning to go a long way, it's just not worth it. The end by Mill Street isn't great either, but I don't go over there as often.</p>
560	<p>Mystic -summer junction , very busy intersection and multiple lanes all ways</p>
563	<p>The rotaries - manageable by a skilled cyclist, perhaps more of a challenge to novice cyclists, and really problematic for pedestrians walking up and down the Mystic. Also very infrequent pedestrian crossings serving neighborhood streets to get to the river.</p>
564	<p>rotaries at highh st and medford st is very unsafe to cross. river st and MVP is also dangerous to cross.</p>
568	<p>this looks great!</p>
569	<p>Rotaries and bridges</p>
570	<p>The crossing at High Street and Mystic Street.</p>
572	<p>Crossing high street between the roundabouts on foot. Very dangerous.</p>
575	<p>I live on Newton Rd. I usually cross Mystic Valle Pkwy at the crosswalk at Palmer St. It would be great to have pedestrian-friendly crossing (with hazard lights) at the rotaries! At the existing crossing to the Alewife Brook Greenway, the button to activate the stop light is not very sensitive and must be hit quite hard to get it to work. It would be nice if that could be fixed.</p>
577	<p>Intersections/circles at River St and at Medford St on the parkway along the Mystic River. Connections at the Alewife Greenway Bike Path and also at Alewife Brook Parkway</p>
580	<p>High street rotary</p>

ResponseID Response

582	Currently no sidewalks or crosswalks at Hayes, Mystic Lake Dr, Maynard St side of the parkway. Crossing Medford St also has few crosswalks. Getting across Medford and the Parkway to reach the current path tends to be dangerous, given the speed and qty of traffic.
584	Medford St / High St rotary - cars never have to stop so you can cross the street... bicycle trail overpass here??? Narrow shoulder between cemetery and Lower Mystic Lake and also along Mystic Valley Parkway up to Mystic St.
585	I live on Rawson St so the best way for me to get on the new path would be the un signaled crosswalk at Palmer St (which doesn't feel safe when it's busy) or the River St intersection, which doesn't have a sidewalk on the east River St side. There's also no bike lane or "sharrow" so bikes don't seem welcome right now.
586	The rotary from high street/medford st is a big challenge. There is no good way to cross the street there and it really disconnects the mystic lakes from the alewife brook path. Cars move fast in the area and are looking in multiple directions they don't always see pedestrians.
587	The connections at Summer St. or Mill St. where you will leave the path and go onto the road with vehicular traffic.
589	I'm concerned about the rotary at High Street. I drive through this intersection often and it is usually very busy. Currently when I have ridden my bike along the Mystic as is, the intersection at High Street feels like a dead end.
590	I frequently run on this route. The intersection that gives me the most pause is High St / Route 60 - the lack of crosswalks is a big challenge. (River St. / Harvard Ave seems well managed, and I usually don't cross at the MVP / ABP rotary.) Summer Street is also a challenge because the sidewalk in front of the AC field is narrow and bumpy - it's fine for running/walking, but not for pushing a stroller or biking or using a wheelchair.
591	mystic/summer street intersection w/gas station---concerned about cars running through lights/site lines, etc. congestion. circle at W Medford (west side of river) near bank. better now with lines but still dicey for crossing on foot/bike.
593	My concerns are mainly around biking. Rotaries connecting West Medrod to the proposed path via High St. Also concerned about a lack of bike lanes along High Stree. It is very dangerous to bike down that street. In terms of walking, I am generally concerned with crosswalks and the speed at which cars make turns and generally do not yield to pedestrians in crosswalks
596	The roundabouts have no safe road crossings
597	Rotaries @ Mystic V Pkwy, High St., and Alewife Brk Pkwy; narrowness of lanes. Also, potential changes may create traffic congestion.

ResponseID Response

599	Summer Street into MV Parkway is often trafficked with fast cars. There is not much of a bike lane on Summer and the shoulder on MVP is not maintained so there are usually small obstacles to avoid that could case tire puncture. Also drainage basins are present which are very dangerous to bikers if they are not level with the road which they are not on MVP.
601	I am most concerned about the two rotaries where the parkway intersects High St. It is difficult to cross as a pedestrian. I feel fine biking through because I am a confident biker but I know other bikers would benefit from improved bike infrastructure as well.
602	Mill Street is tough for cyclists- construction, poor paving, but it's a really important thoroughfare for cyclists & walkers, including families and kids biking/walking to Bishop, AHS, Lakes. I am also concerned for cyclists at the High Street circle & Medford St circles along the river.
604	Rotaries intersecting Rt 60 / High street / Medford Street. The middle is too small and many cars do not need to slow down at all to go straight which leads to dangerous speeds at this intersection
607	River st. Crossing: bike/pedestrian unfriendly crossing Rotary and North part of the pkwy: bike pedestrian unfriendly/unsafe paths
608	Inersection where Summer meets Mystic Valley Parkway. Also Mill Street meets Summer. On my bike I would have to get off and walk there to take advantage of crossings.
609	The "top" of Mystic Vally Pkwy, just after crossing Mystic from Summer. Curvey street with somewhat blind corners and narrow shoulder.
611	High street crossing is scary. Getting all cars to see you and stop takes a huge amount of time. The section between Summer St and RT3 is ok for walking on the sidewalk but too tight and too much traffic to ride on the road. Rt 3 to High St shoulders are very narrow for biking and cars drive too fast around the turns. The side with the sidewalk is not a good choice for biking. I saw a biker once do that and end up hitting a crack and almost land in the road with on coming traffic.
613	Intersection where summer street is. I regularly run from mystic lakes to the bike path into Lexington. The intersections between mystic up to the bike path are dangerous.
618	the traffic circles, and along the lake. The lake traffic is slow and the road wide, so it feels safe, but would feel much safer if it was a separated cycle path
619	the transition area from bikepath across busy roads to get back on path can be a disruptive and stressful.

ResponseID Response

620	I don't know the area well - in general I'm concerned about busy street crossings
621	I'm not more or less concerned about any of these intersections than the intersections on the Minuteman. Route /Mystic St and Mystic Valley Parkway might be the riskiest intersection.
622	main connections points: medford st, alewife greenway and mill street. Many cars driving fast
623	Rotaries, mill street, High St in Medford
625	Major path-street intersections, especially those with non-light-controlled crossings
626	Medford st/High St rotaries at Mystic River need crosswalks on side near the water! Very dangerous currently.
628	Intersections and places without adequate protection from cars. Access to Arlington Center.
632	My current route is to use River street to connect between Mass Ave and the lakes. That whole section of the Mystic parkway is pretty hairy, to say nothing of the double roundabout.
633	1) I'm concerned about summer street, as it experiences high levels of traffic but currently does not have very safe sidewalks (in fact it doesn't have a sidewalk on one side for a significant section near the intersection with Mill St.). 2) I'm concerned about safety at the rotary crossing near the High St. bridge. Biking through there currently feels very unsafe, and there is no easy way for pedestrians to cross either.
634	Summer/Mystic Valley Pkwy at Mystic St - Awkward intersection for everyone. Never felt comfortable driving through here and I see people walking taking chances because it takes too long to cross on foot. Medford/High St at MVP - People on foot have no good place to cross Medford and High Sts. and motorists tend to drive too fast and aggressively to feel comfortable to walk anywhere around here. As a bus rider, I've gotten off down the street and then found no good way to actually cross to where I wanted to go. Motorists trying to enter the residential side streets along this section are also quite aggressive -- especially the left-turners for "North/west" bound MVP traffic -- they don't really look for people walking before they accelerate quickly into a gap in opposing traffic.
635	Crossing at the Pleasant St rotary is the worst, most dangerous crossing. We go up into the neighborhood and cross mystic st at the light near the Crosby school, go past the school and come down oak hill, crossing summer st. near our home. (So we don't cross mystic at the summer st intersection.

ResponseID Response

636	<p>1) All of the Summer Street intersections feel dangerous while walking or biking - no bike accommodations very narrow sidewalks, poor crossing conditions, ped signals do not allow sufficient time for crossing 2) The Medford St/High St rotary is scary as a pedestrian, particularly during rush hour. 3) There is also a MAJOR need for a crossing of the High Street Bridge at the Mystic River Path intersection. It is very risky crossing there and the pedestrian crossings on the Medford rotary are not convenient for trail users. 4) I do not feel comfortable biking along Mystic Valley Parkway except on a separated path.</p>
638	<p>Mystic Valley Pkwy is dicey on a bike, no Q... it's not bike friendly</p>
639	<p>1. Connection to the Minuteman: I don't have much experience riding on Summer Street, but just from my observations from riding along the Minuteman and crossing at Mill St, it looks like a busy road that I wouldn't enjoy riding on without some changes. I hope we can make the connection to the Minuteman both convenient and safe, and make the route along Summer Street as comfortable as possible. 2. High St: Most of the problems are captured in the conditions assessment, but let me just emphasize that it is terrible. The rotaries are huge, there are minimal provisions for non-motorized users, and it is incredibly jarring to have this tense and dangerous crossing in the middle of what is otherwise a quiet and pleasant riverside path. 3. River St: Similar to High St, but not quite as bad because there are no rotaries and the desire line is straight across. However, having the crossing set so far back from the intersection, with no crosswalk or curb cuts, means drivers simply are not looking for you. You just feel forgotten.</p>
644	<p>I find the intersection at Alewife Brook Greenway to the Mystic Valley Parkway is scary - the cars on 16 just don't care and the bike access can be spotty</p>
646	<p>It is unclear from the map and description where this path is proposed, or maybe the route has not been determined. I presume, as it seems the best route, that from Alewife Brook Parkway to Medford/High St it will be on the path next to the river not on the Mystic Valley Parkway. I presume the crossing of Medford St will be above/north of the rotary so only one roadway will need to be crossed. I presume the path will continue next to the river in the grass until the curve of Lower Mystic Lake. From there to Mystic St is the most challenging part of the path. The road is very curving, narrow and cars move fast. Where will the path be here? Hopefully, not on the road, but there are a couple of bottlenecks where it would be difficult to make an off road path that doesn't share the sidewalk, unless the sidewalk is widened. A nice place for a path and good to connect to Minuteman.</p>
648	<p>I'm concerned about safety along the proposed stretch west of Medford/High Street, since the paths/sidewalks narrow significantly in that stretch and Mystic Valley Parkway is a lot more winding/curvy, leading to lower visibility for motorists.</p>
649	<p>Passing by lower mystic lake. This is a tight turn with fast-moving car traffic.</p>

ResponseID Response

651 Passing along Summer Street is dangerous with no ideal crossings and getting to/from Mill Street is a highly dangerous situation. The roadway of Mystic Valley Pkwy is dangerous due to storm drains forcing bikes into car lane. This stretch of road really needs bike lanes especially given how fast car traffic goes.

652 The roundabout where Medford st meets Mystic Valley Parkway has a lot of cars traveling fast, and I don't know how to cross on foot safely.

9. What matters to you about the potential path? Please rank how much each element matters to you.

	1 - Not important	2	3 - Somewhat important	4	5 - Most important	Responses
Safe crossings with slow vehicle speeds where I am visible to drivers Count Row %	2 0.4%	6 1.2%	36 7.2%	116 23.2%	340 68.0%	500
Feeling of security, knowing I am visible to other path users or people/homes near the path Count Row %	41 8.2%	65 13.0%	150 30.0%	132 26.4%	112 22.4%	500
Crossings/connections from neighborhood streets Count Row %	13 2.6%	52 10.5%	170 34.4%	150 30.4%	109 22.1%	494
Path or bike lane connections over bridges between Arlington and Medford Count Row %	12 2.4%	26 5.2%	112 22.5%	141 28.4%	206 41.4%	497
Path lighting Count Row %	54 11.0%	80 16.3%	165 33.7%	122 24.9%	69 14.1%	490
Being able to use the path in winter / snow clearing Count Row %	39 7.8%	74 14.8%	135 27.1%	140 28.1%	111 22.2%	499
Preserving trees Count Row %	15 3.0%	38 7.6%	129 25.8%	171 34.2%	147 29.4%	500
Enhancing plant and animal habitat Count Row %	13 2.6%	44 8.8%	148 29.5%	143 28.5%	153 30.5%	501

	1 - Not important	2	3 - Somewhat important	4	5 - Most important	Responses
Opportunities to rest and spend time viewing Lower Mystic Lake Count Row %	33 6.7%	94 19.0%	166 33.5%	126 25.4%	77 15.5%	496
Opportunities to sit and rest periodically along the path Count Row %	58 11.6%	149 29.9%	159 31.9%	90 18.0%	43 8.6%	499
Opportunities for interpretation (of the environment, history, lake use, etc) Count Row %	76 15.6%	162 33.2%	163 33.4%	63 12.9%	24 4.9%	488
None of the above. I'm not interested. Count Row %	81 89.0%	3 3.3%	5 5.5%	1 1.1%	1 1.1%	91
A paved path for cycling on the Arlington side of the river! Count Row %	0 0.0%	0 0.0%	0 0.0%	1 100.0%	0 0.0%	1
A variety of safe biking routes (safe for ALL ages and mobilities! aka protected lanes) that enable transportation across towns Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Ability for all ages/skills of cyclists/peds to use the path Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Access to water from the path. Not having to climb over guard rail. Count Row %	0 0.0%	0 0.0%	0 0.0%	1 100.0%	0 0.0%	1

	1 - Not important	2	3 - Somewhat important	4	5 - Most important	Responses
As in most surveys you do, you ask leading questions, eg. the first question. The proper question is: Safe crossings that don't interfere with traffic Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Bicycle safety when riding along, not just at intersections Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Clear signage Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Clearly marked route Count Row %	0 0.0%	0 0.0%	0 0.0%	1 100.0%	0 0.0%	1
Connection to Minuteman Bikeway Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Connection to Mystic paths and beyond to Lynn Count Row %	0 0.0%	0 0.0%	1 100.0%	0 0.0%	0 0.0%	1
Connection to the water along the lake/river (especially the section near the lake). Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Connectivity to larger trail network Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1

	1 - Not important	2	3 - Somewhat important	4	5 - Most important	Responses
Crossings that are not reliant on drivers yielding (e.g., all-way stop, automated signals) Count Row %	0 0.0%	0 0.0%	0 0.0%	1 100.0%	0 0.0%	1
Designing the path space so it can easily accommodate both walkers/rollers and people on bikes without them being an impediment to each other. Count Row %	0 0.0%	0 0.0%	0 0.0%	1 100.0%	0 0.0%	1
Effective westbound commute options (connecting Medford and Lexington via Minuteman) Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Efficient transportation options Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Fishing access along the southern edge of Lower Mystic Lake Count Row %	0 0.0%	0 0.0%	0 0.0%	1 100.0%	0 0.0%	1
Good signage Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Guardrail/barrier from MV traffic Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Having a dry/non-muddy surface to walk on Count Row %	0 0.0%	0 0.0%	0 0.0%	1 100.0%	0 0.0%	1

	1 - Not important	2	3 - Somewhat important	4	5 - Most important	Responses
Lake/River Lookout viewing platforms like in Spy Pond Park, picnic tables Count Row %	0 0.0%	0 0.0%	0 0.0%	1 100.0%	0 0.0%	1
Make paths accessible to strollers, wheelchairs Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Opportunities for kids to engage/interact with the space, yet still be safe Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Path is direct and convenient to use. Count Row %	0 0.0%	0 0.0%	0 0.0%	1 100.0%	0 0.0%	1
Paved bike path suitable for road bikes Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Physical separation from car traffic Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Protected bike lanes on abutting streets Count Row %	0 0.0%	0 0.0%	0 0.0%	1 100.0%	0 0.0%	1
Protected cycle tracks please, not just bike lanes on the road! Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1

	1 - Not important	2	3 - Somewhat important	4	5 - Most important	Responses
Providing path/bike lanes to accommodate both family/novice and transportational/experienced cyclists. Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Restrooms!!!!!!!!!!!!!!!!!!!! Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Safe sharing of path between cyclists and foot traffic Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Separated, clearly marked off-road path facilities (mode segregated for people walking vs. biking) Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Shared communal public space- ie garden etc Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Smooth paths Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Smooth surface Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Total time spent at crossings Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Trash/Recycling receptacles along the route Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1

	1 - Not important	2	3 - Somewhat important	4	5 - Most important	Responses
Trash/litter - more trash cans, signs about litter Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
length - extending reach/distance of recreational paths Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
maintaining a natural foot bed that is permeable and not paved. Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
slowing car traffic at all places Count Row %	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1
Totals Total Responses						501

10. Is there anything else you would like to share with the project team that may not have been covered in the survey questions above?



ResponseID	Response
7	Canoe and kayak launches along the path would be helpful for local boaters
8	In the winter it's great to be able to walk, cross country ski, and fat bike along the Alewife Greenway and Mystic Valley Parkway. It would be great to leave some path segments unploughed in the winter. This is one of the few areas where you can enjoy the snow locally. It would be good to balance the needs of winter transportation and recreation.
12	Definitely concerned about separation from moving vehicles
16	The drainage project at the end of Park St/Rawson Rd is a horrible, unattractive eyesore as well as the benches. Can there be work as part of this plan to beautify that area?
20	My commute puts me on the east side of the river, (between River/Harvard and High St) where the road is wide, quiet, safe. Along the river on the west side is nice (but currently bumpy) but not important to my needs at the moment
21	Thank you!
22	thank you!
24	The most critical need for this corridor is to develop a safe way to cross the Medford/High St bridge so path users can continue along the greenway. As such the design for this crossing should be able to be pulled out from the rest of the recommendations and developed as a quick-build project and not need to wait 3, 5 or 8 years for fundraising.

ResponseID Response

26 There is an existing exemplary project that restored a small riverine habitat and improves water quality along Mystic River - it has signage already = Mystic Riverfront Restoration project.

29 Will there be crossing lights like we see at other crosswalks to stop traffic? Not clear. Also many cars don't stop even with the lights!

31 Mystic Valley Parkway desperately needs a path that allows safe crossings across potentially dangerous intersections for multimodal path users. I thank Arlington city staff and Toole Design Group for pursuing an effective solution to the issues with the path/sidewalk as it stands currently, and I look forward to the continued efforts. Safety is my biggest concern for the path, and I hope that the final design will include measures that protect path users from motorists and allow cyclists and pedestrians to safely travel along Mystic Valley Parkway.

36 I am a bike commuter AND I bike for recreation and errands with my young children.

42 Please consider short term improvements. We shouldn't have to wait 5 years for a way to cross Rte 60 at the rotaries. It's unfathomable that there are not even crosswalks there now. Similarly, it wouldn't be hard to do a tactical enlarging of both rotaries and narrow the traveled way in between to slow and better direct traffic and create safer environment for everyone.

45 Removing Summer St parking will be a battle but it's an important one. Painted bike lanes will NOT do - people will simply park in the bike lanes. I wouldn't be surprised if they jump the curb to park on a separated bike path. The Kimball Rd ped/bike connection should be more offset from the road because plows will pile snow right towards MVP. This should also be considered at other streets that form a T into MVP. Neighbors walk small boats (canoes, kayaks) down the MVP sidewalk to the lake (and presumably elsewhere along the corridor). Preserving that direct access to the water would be nice.

46 Recognize that building infrastructure requires good integration at transition points, not just designing for through path users.

48 Facilities for users traveling at different speeds: cyclists rolling at 20mph should not have to be in conflict with pedestrians at 3mph any more than they should have to be in conflict with cars at 40mph.

51 Will this path be paved or crushed stone? Will there be garbage pails for trash & dog poop?

ResponseID Response

52	<p>The first set of questions weren't quite the right ones IMO. You asked how I get around now - it's by car, *because it isn't safe to bike around*. I live in Arlington (Orient Ave) and go to Medford every day or two to visit my kids. If there were a safe bike route between our houses, I would go by bike instead of car. Great that you are planning improvements to the route along the Mystic Valley Parkway. Please also put in protected bike lanes along all the other major routes in Arlington! Summer St, Park St, Pleasant St, Mass Ave, etc. Every middle and high schooler in Arlington should be able to safely bike to and from school, for example. We also have the bikeway, a pretty unique resource. It should be the spine of transportation in Arlington; there should be a network of protected bike lanes from every corner of Arlington connecting to it.</p>
54	<p>The sections along the MVP between the Alewife Brook Greenway to the Rt 60 rotary, offer a rare opportunity to have a separated bike path far from motorists which is better for safety and health (less exposure to exhaust). I highly endorse having the path as close to the Mystic River as possible here. This has another benefit of highlighting/featuring the river rather than the road.</p>
55	<p>(1) River St-Harvard Ave needs to be easier to cross in the "upstream/downstream" direction and the bridge itself could double the width of its sidewalks. (2) Palmer St is the critical existing crossing & neighborhood access point, (3) Park St needing a new crossing at the little "interpretive garden - water outfall" point.</p>
58	<p>You know what, I would actually prefer a bike lane for my bike riding. If there is space, bikes and cars mix well. Bikes and other modes on a path not so much. By all means make a path, but leave me the option of riding in the street, especially if it's crowded on the path or I'm in a hurry.</p>
59	<p>If the guard rail along the lake/river (between Summer St and Medford St) on MVP could be moved/reduced to allow more access to the water, that would be great.</p>
60	<p>I am just shy of 80 years old. I am not going to be using the bikeway for commuting or errands, ever. Mostly use paths on foot and would like to be safe from spandex-clad riders.</p>
62	<p>Though there was a great turnout at tonight's meeting, I do feel that the average Arlington citizen who is not a cycling enthusiast was underrepresented. I love the paths in my area and rely on them for both my work commute and recreation. I also ask the team to be mindful of the average person living in Arlington and the need to be able to traverse the town efficiently. Many people drive Summer Street to access other towns and to get cross town.</p>

ResponseID Response

69	<p>There is wildlife present in the area. Any construction should take this into account. The paths near the river are well worn and tree roots are exposed, river banks are vulnerable to erosion. This is not the location for a commuter path, but a strolling path.</p>
70	<p>Wide paths for cargo bikes</p>
73	<p>Please don't bother making changes if you don't create facilities for all-ages. DCR keeps creating bike paths and lanes without vertical separation and they're not safe. Create something everyone will feel safe using and get something done ASAP with decent flexposts / concrete dividers. Don't let us down.</p>
75	<p>Clear signage is a frequently lacking aspect of bicycle and pedestrian facilities. Without it, people don't realize the connections exist and don't make as much use of these facilities as they could. Signage should regularly give the name of the facility you're on, and arrows pointing the direction to landmarks. And at road crossings or connections with other paths, wayfinding signs should be spaced so that from each sign the next sign is in clear view. Signs should be reflective, and standardized. This isn't a new concept. No one would dream of building a road that didn't have signage like this. I can get on Rt. 16 in Medford Square and stay on it all the way to Webster without consulting a map, because at every single intersection there are signs telling me which way is Rt. 16. But if I get on the bike path at Assembly Square and want to get to Arlington Center, there are at least ten places where I'd need local knowledge or a map just to cross a road to continue on the existing paths. Reflective metal signs are very inexpensive compared to the cost of building these facilities, it's crazy to omit them from the process.</p>
76	<p>I like the connector idea.</p>
79	<p>My experiences on the Minuteman Bikeway make me wonder how realistic it is to have a successful multi-modal path. Many cyclists resent pedestrians and many pedestrians resent cyclists. I would love to know if there are ways to minimize this.</p>
82	<p>The Mystic street floods periodically - will the project be able to address improving the drainage pattern?</p>
84	<p>Very important to have marked lanes for each direction. SAVE THE TREES</p>
85	<p>The whole Mystic River/Mystic Lakes area, on both the Arlington (West bank) and Medford/Winchester (East bank), are a single riding area for me. Sometimes the aim is recreation, sometimes I'm passing through to points East (e.g., Medford, Malden, Northern Strand, etc.) On a bicycle, I primarily (but not exclusively) ride the roads there. On foot, I stick to the trails for the most part, supplemented by sidewalks. I also drive on the roads, and am sympathetic to the needs of drivers as well as cyclists and pedestrians.</p>

ResponseID Response

92	Existing converging point of bikepath and Summer St at spot west Food Link. Why is this not an option?
99	If you build it they will come, but that's hope—not a plan. How to promote new resources, their benefits and how to access them should also be considered.
106	Anytime you go there you can see how much each of these resources are valued by people - connecting them (and more) is great.
119	Will you use this when it's raining? Will you use this in the winter? Will you use this when it's hot and humid? What increase in your taxes will you be willing to tolerate to make this happen? What decrease in your ability efficiently travel will you accept?
126	Add more restrooms.
131	There's a tradeoff between safe crossings, and frequent long lights that detract from my ability to get a good workout. I think the Minuteman has a good balance right now; if there were substantially more lights I had to wait at I would be less likely to use a new path.
133	So glad this portion of the path planning is under way! Thank you to all working towards its implementation!
134	Please prioritize preserving existing trees, and think about how to make the space more of a habitat for native species -- plant host shrubs, perennial native flowers for pollinators, etc. Alewife Reservation/ Fitchburg Cutoff Path is a great example of how to do it right.
141	Consider how to maintain it with frequent flooding on Mystic Valley Parkway.
149	Winter plowing and deicing is extremely important—it's very frustrating to have plowed shoulders removed to put in bike lanes/paths that are not plowed, because then you're stuck having to take a busy lane when there used to be a shouldr.
152	No
156	Please do not light the path. Lightning contributes to light pollution, high maintenance costs and in efficient. Folks can bring thier own lights - that's much more efficient. Please don't salt the path. It can kill some types of plants and trees and salt runoff ends up in the water.
166	Make this area safe enough for new and young cyclists. Make it safe enough for me to ride with my children. Get rid of parking – it's public storage for private property. Do whatever you need to do to lower vehicle speeds. Provide vertical separation. And ample space for cycling.

ResponseID Response

173	Better access -- and more visible -- for getting boats/kayaks into the lake and/or river. How the public can get to view/walk or bike along the lake from more access points.
175	Thank you for considering this!!
176	Thank you for doing this. It would be great if there were a bathroom or port-o-potty along the route too
187	Do not allow right on red near crossing as I noticed that is often a safety issue when using crosswalk. Other cars visually block pedestrians from being seen by those coming up right lane and they are so intent on making the turn they aren't thinking about pedestrians crossing.
190	The safety of pedestrians and cyclists could be enhanced with frequent police on bikes patrols.
193	Discovering I could get to the minuteman from Medford by using the Greenway changed my leisure time. I love that ride. But the areas of sand make me feel like bikes aren't supposed to be there.
198	I recently purchased an e-bike to replace a second car and will be primarily using it as transportation. I hope all transport options that aim to reduce car use, increase perception of safety among potential cycle users (a majority of folks I talk to would cycle more if they felt safer doing so) and claims space for cyclists and walkers is paramount. Massachusetts and our towns can be national leaders in multi-modal, non car-centric transportation. Let's find the will, the plans, the funding and the way!!! Think big, think bold - the people will thank you as they leave their expensive, polluting cars and create a built environment that is quieter, cleaner, safer, childhood-boosting, and more social/neighborly.
206	This seems nice, and I would definitely use it, but personally I would be much more interested in a connection from farther downstream on the Mystic to the network of paths along the Charles / Kendall Square.
212	I think we tend to undersize bicycle paths in general, and this leads to potential bike/bike and bike/ped crashes/conflicts on e.g. the Minuteman Bikeway (and perhaps, a fatality). For all the expense that goes into studies, planning, design, ROW, etc, we should make the path as wide as practical, not as skinny as we can get away with. To be concrete, 15 feet wide seems like a nice minimum.
213	no right now
215	Enhancing the whole route not just in the Summer st area is important. Although there is an existing trail along MVP/DCR land not all sections are in good repair due to roots and run off

ResponseID Response

219	At Mystic/Summer intersection, consider using Brookdale Rd and Johnson Rd to Cutter Hill Rd to Mill St to connect with the Minuteman Bikeway; or consider using Mystic to Russell St
220	Long overdue. But please design with care. These areas are precious.
231	I get on the current path at Mystic Bank/Davis or Kimball. There is a sort of paved area to MVP but it would be great if it could be improved.
234	I really help this gets done!
238	pedestrian on-demand crossing at rotary w High St would be preferable. I'm also interested to see how this path would look on Summer St, before the connection with the Minuteman.
240	MVP going up from High St to Summer St is very steep - I have never been able to do it on my bike, much less with my children. Not sure how this could be changed/accommodated but I love the idea of this connecting path!
241	I'm just glad to see the segments in the greater Boston bike path network getting linked together, which enhances this specific area, but also provides people with better ways to get around to work, school, errands without having to drive. Thank you!
242	I love to use the path to observe wildlife through ever season so having habitats to encourage this would be amazing.
246	I was hit by a car on my bike at the intersection of Bates Rd and Raleigh St. I fractured my neck and was in a neck brace for 6 weeks following the accident. A proper bike lane should be added to Bates Rd and River St connecting Mass Ave to the Mystic River trail. When Arlington recently repaved Bates Rd I was disappointed they didn't add any bike protection that street.
247	It would be great to look at the local roads opposite the path and find a way to integrate the neighborhood, even if it means impacting auto traffic. When I drive along Mystic Valley Parkway it feels very highway-like as if the road disconnects the path with the community.
248	A better crossing solution over the bridge would be wonderful for our family. I often cross with children on bikes and never feel safe.
249	Better bike lanes = at least a few fewer vehicles = Win/Win; but it needs to be done in a way which shares the space, i.e w/ walkers, joggers, ball players, BBall court players etc. Do not bisect Buzzell; go along the fence line so as to minimize sharp turns for the cyclists and disruption for those using the field/courts for other activities. Oh, and, as a regular biking commuter, my take is that the Mill St. lights are sufficient to protect cyclists; no need to spend a fortune over building the Lake Street intersection boondoggle again on Mystic St. Thanks for thinking it through and making it all happen

ResponseID Response

257	leave path natural not what arl center so. calked patrks are. barren. tons of \$. and almost the same. modern railings in old wrought iron. wrong and waste of money
263	I am thrilled that this is being studied. As much success we have had over 20 years creating bike (and other user) trails the future requires interconnecting trails to really come of age.
269	This is such a great project that is relatively low-hanging fruit. I commend city staff for taking the initiative on it and hope it can be implemented at extremely fast speed for govt. Please build this ASAP so folks can start enjoying it!
270	if this draws people away from the current bikepath that goes through the center of town (Pleasant ST and Mass AVE) it will be a bigger disaster for the future of center
280	Path width is very important to allow for bicycle and pedestrian traffic
282	I am very happy that this project is under consideration.
285	Could you consider preserving the connection (walking/biking path) from Kimball rd to mystic valley parkway trail, also from Davis Ave to mystic valley parkway trail?
286	Thank you for your work on this! I won't be living in the area by the time this project is done but I am excited to watch its progress even so.
292	"Connections from neighborhood streets" should ONLY be contemplated in consultation & discussion with abutters and residents along the street in question!
295	Adding wild life viewing areas/ platforms. Near the the west side of the base of lower mystic lake . There is a small area that juts out. It would be equidistant from the mouth of the river and Culvert birds gather in both of those areas.
297	I'm so excited that this is in the works!
308	I think this is a great idea. I used to bike this exact route, but I had to go on the road, which is not very fun on mystic valley parkway. I'm an experienced urban cyclist (10 years) and I still don't feel safe or comfortable on roads like Mystic Valley Parkway. The cars go fast, the roads are curvy, and there's not always a lot of road shoulder.
309	It would be great to have protected lanes for bikes along Mystic Pkwy between Mystic St and the rotaries

ResponseID Response

312	I live in West Medford and work in East Arlington; I come in contact with these paths as either a pedestrian or driver pretty much daily. I'm so excited that you are looking into connecting them to a wider path network, and that there will be safer options for crossing at (and driving through) the double rotaries.
314	It would also be nice if there was a good connection into the path in Medford just past the uhaul :)
321	It's important to assure easy and safe connections to the new Green Line station on Boston Ave and to other nearby bike paths.
323	toilets
324	I have been running around the Mystic lakes for the past 25 years and I like the fact that there are very few bikers. If paths were to extend there, I would really prefer that a dedicated lane for bikes, separated from sidewalk be implemented.
325	Will improvements happen on the Medford side as well?
326	Biker and pedestrian safety is huge here. As a biker, I've had many bad experiences with cars on Medford and Arlington roads. I think it is extremely important to have separated bike lanes anywhere there is not a full path. Connecting to the lakes would be recreation and has the potential to help out with the parking strain.
331	Good idea! Would love to see this happen. Thank you for your efforts
337	I teach environmental science at the Arlington High School and use this route and lake very regularly. I would be more than happy to give more input if requested. Contact AHS science department and ask for me!
339	thank you!
342	It is important to utilize current roads, like the Mystic Valley Parkway for this path. It is not appropriate to take part of the parks (The Mystic Reservation), pave them over and call it good. It is time to de-emphasize auto traffic on the parkways and use them for bike paths. Also, serious enforcement of the no trucks is important.
344	Snow clearing, safe street crossings, trash cans, and lighting are the most important aspects to me
346	Thank you!
348	both a bike commuter and recreational road cyclist
352	I worry that it will become another Walden Pond and taken over never to be as it once was with State involved

ResponseID Response

353	<p>I am very excited about using this in future as round trip bike loop for gentle exercise, currently I mostly using the area only to walk. I walk the alewife brook greenway path almost daily now and enjoy the sense that it offers a chance to feel more like a getaway in natural setting than most of the riverfront which is open and grassy and much nearer to noise and smell of cars. I enjoy that Alewife stretch is not lighted and feels secluded and more wild, and would hope the new path offer some stretches more like that. I feel safe at alewife now, but would not feel safe after dark, but that's OK, I just dont go there then.</p>
361	<p>This is very thorough, thank you! Just one thought: I had to use my smart phone to follow the route on the map you provided; I needed more guidance than your map gave me. Also I had no idea where Alewife Brook Greenway was, so I didn't respond to that. I'm sure I've ridden on it, just don't know it by name.</p>
365	<p>I LOVE this idea. This would be an incredible asset for our community. Please see it through.</p>
368	<p>bike lanes are often not placed well, or cared for properly. There are a lot of bike lanes that are little more than gutters with white bicycles painted on them, which is useless when they are filled with storm water detritus, or broken glass and other obstacles that cause bicyclists to get pushed out into the road. Please be mindful that if a bike lane is to be created, it be done properly.</p>
370	<p>I am concerned about the steep hill going on MVP from Medford into Arl. It would be hard for me to get up and I would worry that I might have to stop with traffic near by. I also take a right onto Hayes and Left onto Medford to avoid having to go half way around the traffic circle. Also the entry into the traffic circle from MVP is not great.</p>
373	<p>Attention to invasive plants</p>
382	<p>The key to safe access from local streets (e.g., Park Street) to MV Parkway is to slow down traffic on the parkway, which far exceeds the posted limits and often ignores pedestrians in the crosswalk near Beacon/Palmer Street</p>
385	<p>The Minuteman is a good model.</p>
387	<p>Better management of park use, including control of jet skis, illegal fires and picnics, trash. Need to manage invasives and encourage native habitat for wildlife and flood management.</p>
391	<p>I LoVe ♥ walking/riding my bike on these trails/paths. I have seen such beautiful butterfly gardens amazing birds along the way. These really enhance the experiance my enjoyment.</p>

ResponseID Response

392	Consider using some of the side streets such as Emerson rd and Victoria road to allow for better crossing away from mystic st.
395	I would explore the area on my walks if I felt the pathway was safe. Thank you for this much needed improvement for walkers and bikers, many of whom are children.
400	I use the pathways under discussion for running only, not just because they are beautiful, but because the dirt path is easier on my joints and the only dirt path to run on in Arlington other than the Res (which is not walking distance from my home). It would be ideal for me to keep the river path gravel - better for joints and the environment! I also bike for fitness and frequently bike around the Mystic Lakes - but never along Mystic Valley Parkway between the Parallel Playground rotary to Cambridge because the road is much too narrow, too much fast traffic. I might consider extending my rides around the lakes if there were safe biking lanes on the road.
404	Trees are critical.
408	The designated stretch is really mostly fine. The intersections and connectivity to the minuteman (esp between Mystic St and the Minuteman) are the places that need the most attention.
424	I explicitly do NOT want lighting added in the parks. I appreciate being able to take night walks by the river in moonlight, not electric light. However, I would appreciate improved lighting for the sidewalk at the upper end of Mystic Valley Pkwy. It can be hard to find the sidewalk in some conditions.
426	Preserving the natural habitat is very important so if improving the paths compromises the bird life or other wildlife, then it's not worth it. I do think the area around the rotary at the intersection of Mystic Valley and Medford Street is treacherous. I have almost been hit by vehicles many times in that area.
431	Not take away from other modes of transport like cars and busses
433	I haven't been following this but I think labeling the green spaces would be helpful. e.g. Is Buzzell Field Park the green space by Summer Street?
435	I don't know if the survey is considering the homeowners along the path but they most certainly should Mystic valley parkway is already experiencing issues with excessive traffic. Adding more crossing points would only cause further problems
438	Very glad this is being looked at and that public opinions are being collected

ResponseID Response

455	The pandemic forced us to connect with this neighborhood and realize how much there is to do around the lakes and how disconnected the neighborhood is from this amazing nature area. It would be a shame to not take the opportunity now to improve its use for exercise by having better paths, help the middle and high school students commute from East Arlington, create recreational programs along the river and the lakes and even create commercial opportunities.
457	Maintenance is important!
459	Safety is a primary concern especially given the terrain. I live between the two lakes so my access is not typical
494	If the path will be shared with cars between High Street and Route 3, then the road needs significantly reduced speeds.
498	This is such an important connection! I have ridden there, taking my life in my hands.
513	Bike parking at the lakes
516	Safety with other users. Many "bikers" are thoughtless as to their speed and how they could hurt people on the paths.
521	I use the Minuteman Bikeway for biking, and the Mystic River and Greenway paths for walking and cross country skiing. I would be very concerned about a plan that paved or increased bike traffic on these walking paths. Don't get me wrong, I am an avid biker, but once a path is paved it is less compatible for jogging and walking (and skiing). Also, paved paths are worse for knee and foot health for running than dirt. Please do not pave the paths along the Mystic!
530	Physical changes to the roadway are far superior to using signals. I believe the path should come at the expense of the roadway (Mystic Valley Parkway), even if there's space to accommodate the path next to it. This is the single most significant factor in making the path attractive and SAFE!
531	Good even payment with enough space for two way path traffic
537	Safety from irresponsible cyclists. Crossing streets without stopping, regardless of lights such as Lake Street. Riding too fast for pedestrians to move out of the way..
552	Cycling around Mystic lake is popular, so it is important that bike lanes be included/left on the road or that separate bike lanes be incorporated into any design, so that road riders can continue to do lake laps w/o pedestrian conflicts! :-)

ResponseID Response

554	It is very important to me that the path itself be sufficiently wide to accommodate walkers and cyclists. That includes a generous shoulder consistently cleared of invasives especially Japanese Knotweed.
559	I do really worry about erosion with much of the current path, and compacting tree roots.
564	Paved bike path would be nice. DRAINAGE. Many paths become unusable due to poor drainage and I feel this area is very prone to those issues.
568	thank you for thinking of this, very cool!
575	Create a small landing at the river (between the rotaries and River St.) for folks to use to put in their kayaks. Kayaks can be pulled on a small trolley, and a safe crossing would be needed for this. Thank you for this survey!
580	Thanks for considering this project, hope it happens.
584	Before snow thaws, can you plow only one side of bike path so people can cross country ski on the unplowed side of bike path? Not top priority, but it could be nice.
586	Great project! Can't wait to see the plans develop. Thanks for your work on this
593	Mainly just that bike infrastructure in Medford needs to be improved. Cycling around the city is very unsafe, especially when compared to Cambridge and Somerville.
597	Please consider off-road pathways, as MVPkwy is too narrow for bike lanes.
604	speeds along these roads are dangerous, traffic calming would be ideal especially considering that the speed limit is 30 mph at max in most places
608	Walking or cycling along Summer Street is not pleasant because there is so much traffic. For enjoyment I would probably skip this section and just do sections where I could get well away from the cars. When walking I use side streets as far as possible to avoid Summer. As a car driver (and I have driven this route many, many times) I would make a plea to keep cyclists really far separated from the cars. It is extremely scary to have bicycles potentially all around you. Car drivers are not bad people and there are many times when there is no good alternative but to drive (I'm old, and I simply don't have enough energy to walk or bike everywhere). I use Summer St. because Mass Ave. is now really impossible by car, there are just so many lights, low speed limits etc. There are many conflicting needs that have to be accommodated.
611	Looking forward to seeing complete

ResponseID Response

616	Thinking about the start and the ends of these routes is important, sometimes it feels like we go on some of these paths and they just end abruptly, or are not well marked as to where to continue.
618	excited you are thinking of this. As a 72 year old committed cyclist (woman) I look forward to more safe paths close to home. I live in Cambridge close to the Minuteman path.
619	It would be amazing to add a dirt/wood chip strip along the path for running.
622	Connection to the streets, the way should not be closed (no fences as in the minuteman one), networking occasions, community development opportunities
626	How will runners/bikers cross Summer St?
628	Please think about connections to Arlington Center, West Medford, etc., and how the path is/can be used for transportation (not just recreation).
634	Excited that there is going to be enhanced paths here -- the best path will be one where people walking and biking are fully separated and disentangled from motor vehicles. I think this is most important at High/Medford Sts. If there are opportunities to narrow MVP in order to achieve greater space for people walking, biking, and for plantings, please do that. MVP is generally a fast road and given the conditions seems overly fast. Slowing vehicles will also make things more pleasant with less road resistance noise from vehicles.
635	I'm interested in how a path thru the cemetery would work. It's might be a nice wayto engage people with that area of natural open space. The grade change would be challenging for bikes.
637	How about a new path closely paralleling Route 2 in Arlington: beginning at the Minute Man Trail / Route 2 tunnel, then along the edge of Thorndike Field, along the edge of the Mugar preserve paralleling the Route 2 exit, crossing Lake Street and connecting to the existing trail along Spy Pond that emerges at Pleasant Street. This would be a direct connection from the Minuteman Trail to Pleasant Street.
639	This could become a very important connection in the regional bike network. Please keep this in mind as you consider the type of facility (especially width), and the roadway crossings. Will it still work if the volume of users doubles or triples over time? Is it accessible to all ages and abilities along its entire length?

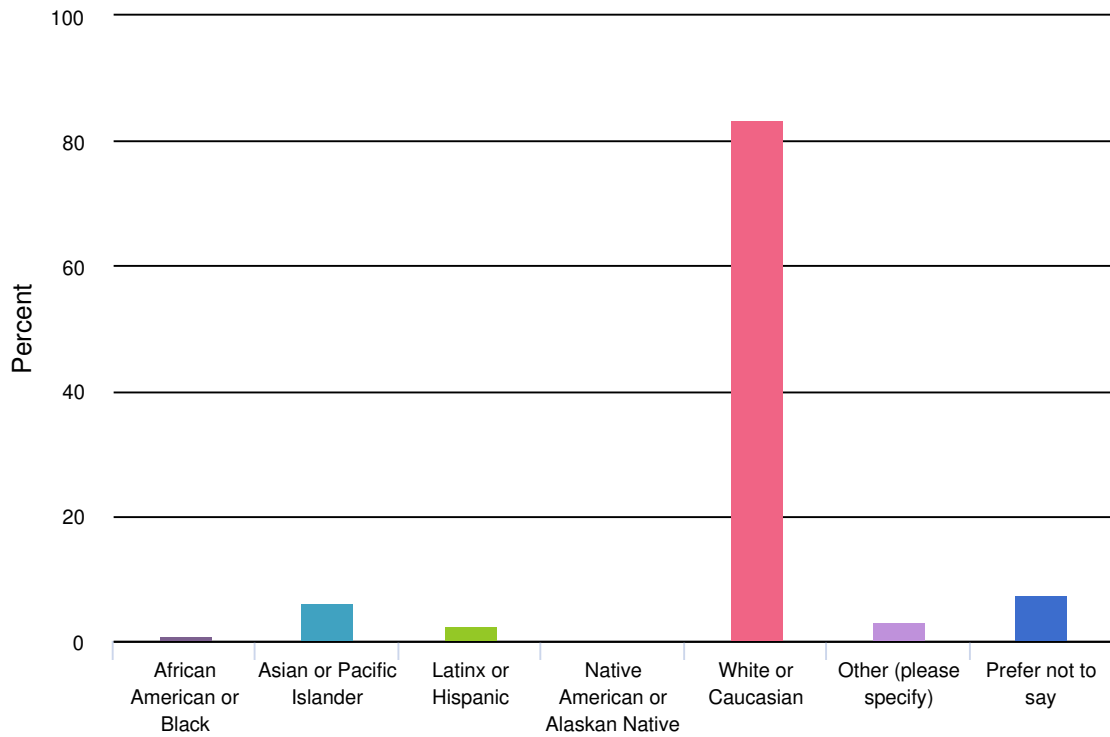
ResponseID Response

643 I bike with small children (< 7 years old). Crossing at large intersections with kids is a real challenge unless there are (at a minimum) clear crosswalks, lights or signs to stop traffic, and a place for several bikes to safely wait together. Where the Minuteman bike path crosses through Arlington center is better than it used to be (with the green painted area to wait in), it still feels pretty exposed if you have small people on bikes to shepherd through traffic. Off-street options where the bikes are physically separated from cars as much as possible are highly preferred.

649 Safety for all users is my primary concern

652 This is a very beautiful and under-used part of Arlington

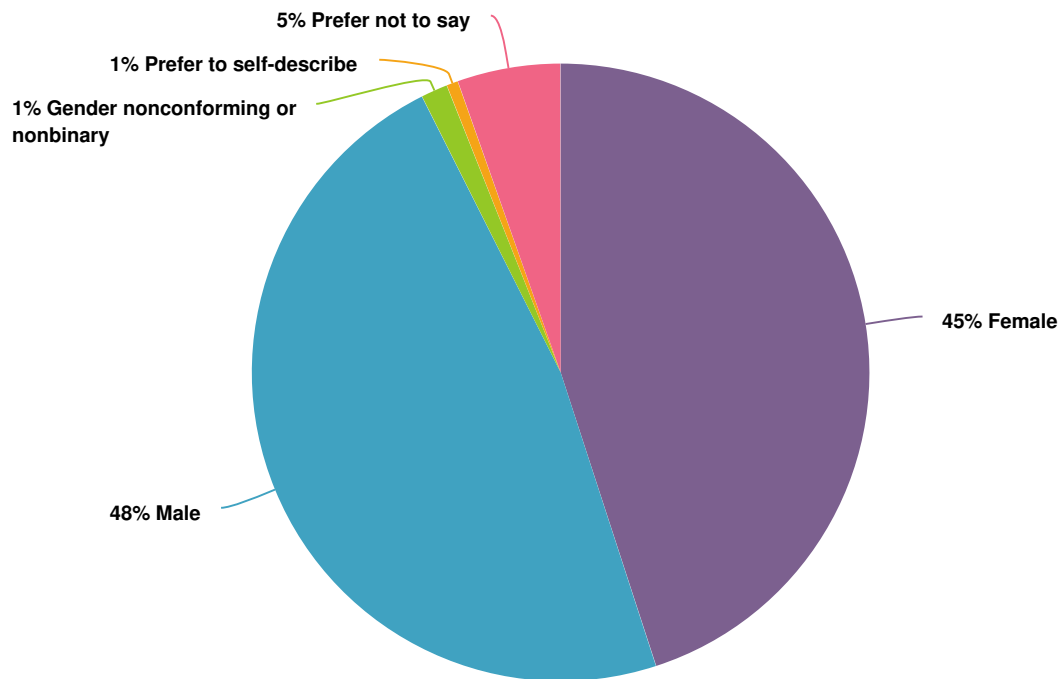
11. What race or ethnicity do you most strongly identify with?



Value	Percent	Responses
African American or Black	1.0%	5
Asian or Pacific Islander	6.2%	31
Latinx or Hispanic	2.4%	12
Native American or Alaskan Native	0.4%	2
White or Caucasian	83.3%	415
Other (please specify)	3.2%	16
Prefer not to say	7.4%	37

Other (please specify)	Count
Jewish	2
Middle Eastern	2
Ashkenazi	1
Ashkenazi Jewish	1
Ashkenazic	1
Biracial- Indian and Hispanic	1
EURO MIX	1
Eastern European Jewish	1
European	1
Franco-American	1
Mediterranean	1
Seriously?	1
What difference does it make?	1
Totals	15

12. What is your gender identity?

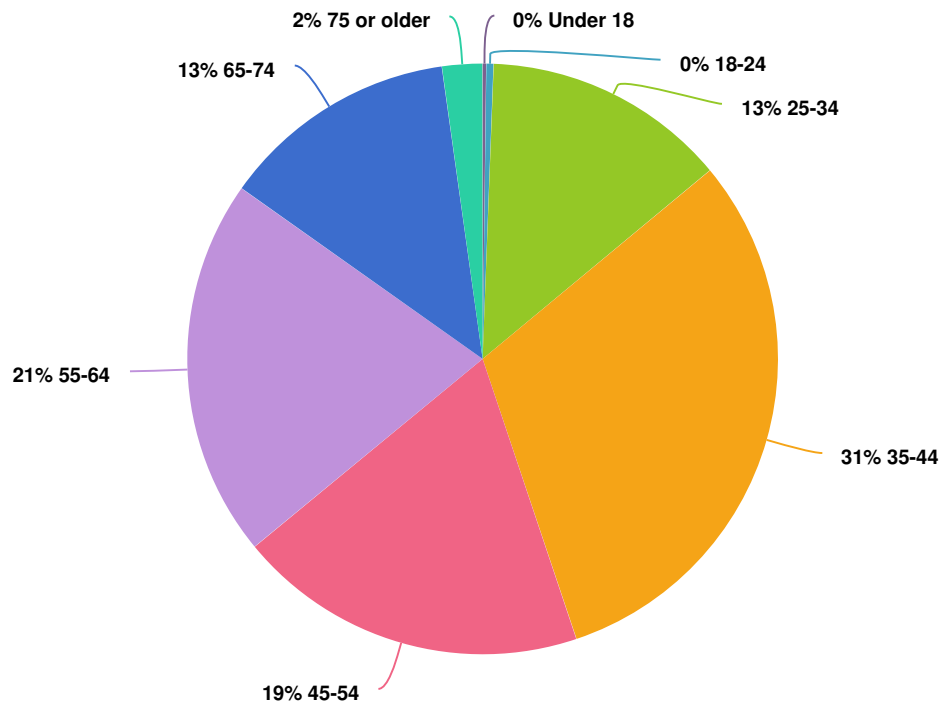


Value	Percent	Responses
Female	45.0%	224
Male	47.6%	237
Gender nonconforming or nonbinary	1.4%	7
Prefer to self-describe	0.6%	3
Prefer not to say	5.4%	27

Totals: 498

Prefer to self-describe	Count
Enby	1
What difference does it make?	1
Why is this important?	1
Totals	3

13. What is your age?



Value	Percent	Responses
Under 18	0.2%	1
18-24	0.4%	2
25-34	13.4%	67
35-44	30.9%	155
45-54	19.2%	96
55-64	20.8%	104
65-74	13.0%	65
75 or older	2.2%	11

Totals: 501

Mystic River Path Connection to the Minuteman Bikeway Feasibility Study

2ND PUBLIC MEETING + 2ND SURVEY RESULTS

2nd Public Meeting

A second virtual public meeting was held on March 30, 2022 and was attended by approximately 55 people. This meeting was used to explain the proposed trail alignment, intersection concepts, and opportunities for placemaking and trailside amenities. A question-and-answer period was held and followed by general discussion, which included use of the chat feature to ask questions. Conversation touched on many topics, but a few of the more notable or repetitively mentioned concerns included:

- Attendees were concerned about the impact of the proposed asphalt path along the river to stormwater and that having both an on-road bike lane plus path is too much pavement.
- People want vertical separation both for the proposed two-way bike lane along the river and in the constrained area along Lower Mystic Lake, where a guardrail is currently located between the lake and sidewalk users rather than between vulnerable users and motor vehicles.
- Some people are concerned that drivers will not stop at stop lines at the Harvard Ave bridge/Mystic Valley Parkway intersection and will just sit on top of the proposed wide crosswalk.
- Rotary operations for cyclists need more clarity. Attendees do not trust that the concept is safe enough.
- People want to know how the path can be accessed by neighbors along Summer Street.
- Residents of Cusack Terrace need to be contacted for their input as this path affects the entry to their building plus parking nearby. Many healthcare staff need on-street parking for access to Cusack Terrace.

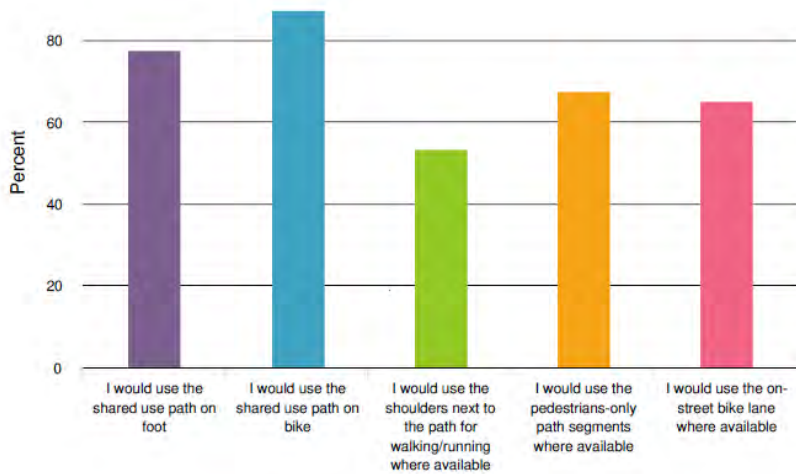
Full notes from the meeting are attached along with the chat record.

Survey Results Summary

A second survey was introduced and launched at the 2nd public meeting as well. The survey was open for two weeks and closed on Friday, April 15 having received 513 unique responses from community members in Arlington, Medford, Somerville, Cambridge, and other nearby municipalities.

Questions 1-3: Facility Types and Materials

Questions 1 and 2 asked which proposed facilities would be most used by the community, while question 3 asked about surface material for the paths along Mystic River. Question 3 yielded numerous responses regarding the appropriate types of facilities to include along the river and opinions on which user groups should be prioritized.



Question 1

“Check all the ways you expect to use the proposed path and bikeways in the future”

Summary of Responses

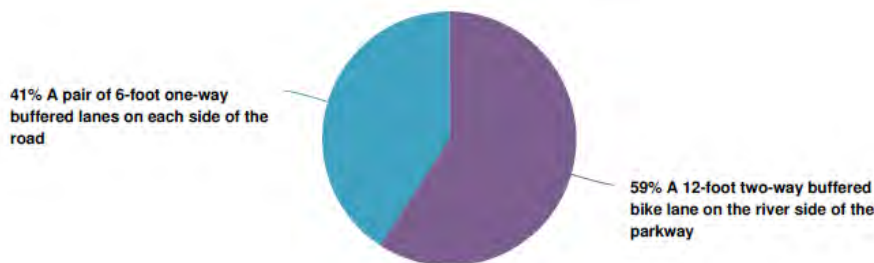
The majority, 87.1%, of respondents said they would use the shared use path on bikes, while 77.5% said they would use the shared use path on foot. All options were selected by over 50% of respondents, suggesting that all proposed facility options would be used.

Value	Percent	Responses
I would use the shared use path on foot	77.5%	386
I would use the shared use path on bike	87.1%	434
I would use the shoulders next to the path for walking/running where available	53.4%	266
I would use the pedestrians-only path segments where available	67.3%	335
I would use the on-street bike lane where available	65.1%	324

Question 2

“The project proposes buffered bike lanes along Mystic Valley Parkway south of the Medford Street rotary. If you would use the on-street bike lanes, which would you prefer:

- A 12-foot two-way buffered bike lane on the river side of the parkway
- A pair of 6-foot one-way buffered lanes on each side of the road”



Summary of Responses

Overall, respondents preferred a two-way on-street facility to one-way facilities, with 59.2% favoring the two-way facility.

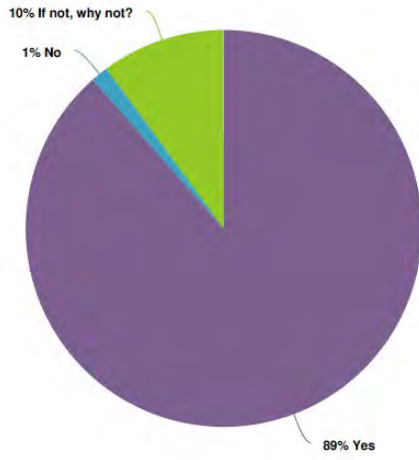
Value	Percent	Responses
A 12-foot two-way buffered bike lane on the river side of the parkway	59.2%	264
A pair of 6-foot one-way buffered lanes on each side of the road	40.8%	182

Totals: 446

Question 3

“Today, a narrow asphalt path runs south of Lower Mystic Lake, and earth and stone dust paths run along Mystic River south of the rotaries. The shared use path is proposed to be asphalt (12-14’ wide at lake, 10’

wide along river) to make the full path more comfortable, consistent, and accessible, and to prevent future maintenance issues. Pedestrian-only paths and shoulders off the main riverside path, where feasible, are proposed to be stone dust. Do you support an asphalt shared use path along the river?”



Value	Percent	Responses
Yes	88.5%	439
No	1.4%	7
If not, why not?	10.1%	50

Totals: 496

Summary of responses

The high majority, 88%, of respondents to this question support an asphalt path along the river. Approximately 10% of question respondents commented on why they would not support an asphalt path. Comments addressed four primary concerns: user group conflicts, ecological impacts of asphalt, aesthetics, and user comfort.

A. User group conflicts

- Asphalt path would allow and encourage fast biking, disturbing the peaceful atmosphere of the riverbank, which many respondents value highly
- A bike path here would divide the space and make the entire area less comfortable and safe for families, older people, people with disabilities, and groups seeking to relax and recreate
- The riverbank is perceived as a pedestrian-only zone; the majority of respondents insisted that people biking should use on-street facilities throughout this portion of the study area
- Respondents mentioned experiencing bike/pedestrian conflicts on the Minuteman Path and wanted to avoid such conditions here

B. Ecological impacts of asphalt trail

- Traditional asphalt would increase impervious surface in the floodplain, and could increase runoff volumes to Mystic River. Permeable asphalt would be preferable to traditional asphalt
- Asphalt production has negative environmental impacts
- Asphalt surface temperature was a concern
- Asphalt path construction could cause more disturbance to trees than stone dust construction

C. Aesthetic concerns

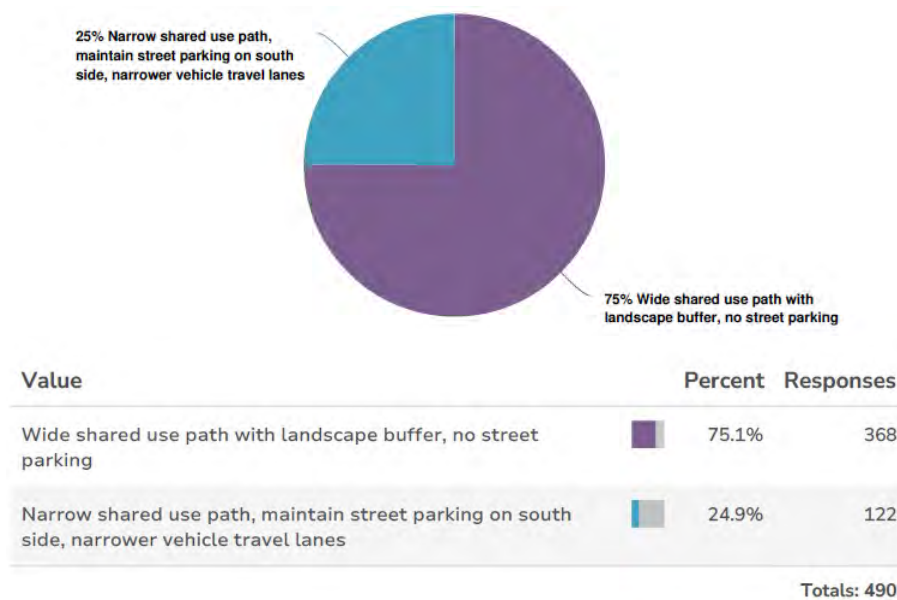
- Stone dust was seen as more aesthetically appropriate for the natural landscape along the river

D. User comfort

- Runners/joggers and some older and/or disabled trail users prefer stone dust or other softer materials
- Respondents sought assurance that a stone dust path would be accessible

Questions 4-5: Summer Street

Questions 4 and 5 assessed preferences for Summer Street design with or without parking.



use path, while 25% preferred to maintain street parking.

Question 4

“Which concept for Summer Street do you prefer:

- Wide shared use path with landscape buffer, no street parking
- Narrow shared use path, maintain street parking on south side, narrower vehicle travel lanes”

Summary of responses

Approximately 75% of respondents preferred removing street parking and providing a landscape buffer for the shared

Question 5

Regarding question four: “Let us know more about your preference and concerns here”

Summary of responses

While the majority of respondents favored removing parking and providing a wider shared use path and landscape buffer, approximately a third of respondents who supported parking removal also saw it as a contentious issue and were willing to keep parking if that compromise would prevent project delays. Responses to question five also show that traffic speed was a major concern, and there was interest in narrowing travel lanes regardless of the parking decision. Respondents’ assessment of Summer Street parking utilization varied widely.

Many respondents expressed confusion over the wider lanes in the option with no street parking. Presentation of this could have been clearer: namely that 11’ is standard but can be reduced to 10’ to keep parking. Many respondents advocated for 10’ lanes regardless of parking for traffic calming and to have a wider shared use path.

Street Parking

Comments on street parking reflect four main categories of respondent preference: unqualified preference for removing street parking, preference for parking removal but willingness to keep it, preference for keeping street parking, and interest in seeking alternative parking solutions.

A. Remove street parking (92 responses)

- Safer for people walking and biking
- More climate-friendly and forward-looking
- Extends the parkway character and supports a more aesthetically cohesive trail corridor

B. Prefer no parking, but content to keep it if debate threatens to delay the project (32 responses)

C. Keep street parking (40 responses)

- To avoid negative impacts on neighborhoods where people will park if prohibited from parking on Summer Street (*note: some respondents cite ample side street parking as a viable alternative to Summer Street parking*)
- For accessing the Mystic Valley Parkway trail
- As a buffer to the shared use path

D. Seek alternative parking solution (16 responses)

- Dedicated new parking lot for athletic fields
- Timed use of local commercial lots or Russell Common Municipal Lot

Shared use path user conflicts

- Maximize width to reduce potential for conflicts between people walking and people biking

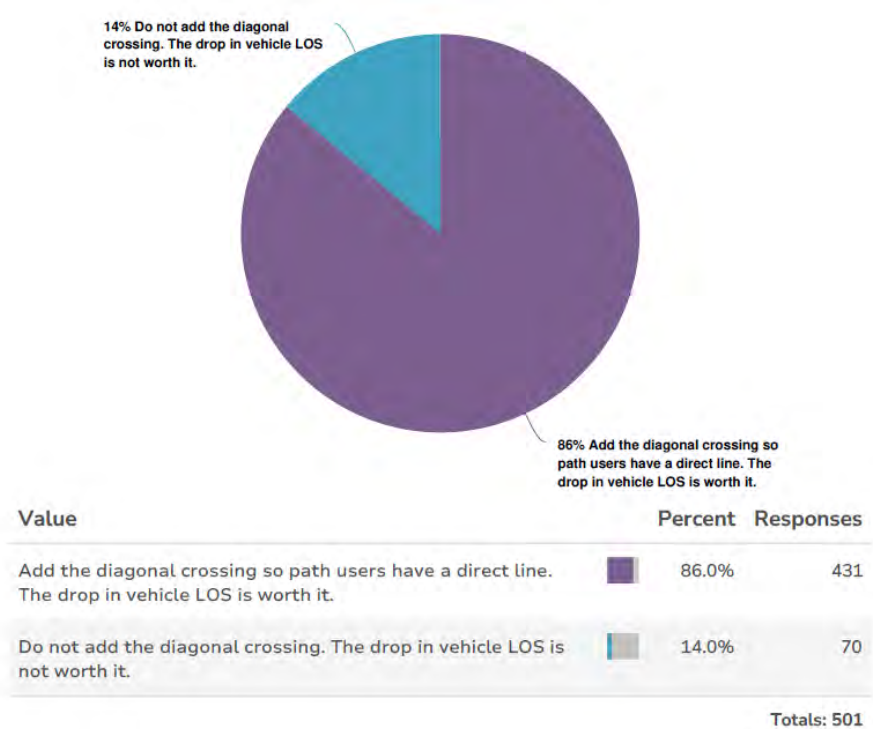
Traffic calming and lane widths

- Snow removal and storage problems are feared if lanes are narrowed
- Vehicular cyclists seek assurance that on-street biking conditions would not be negatively impacted

Benefits of landscape buffer

- Stormwater infiltration
- Opportunity for new street trees
- Greater comfort for shared use path users

Question 6: Intersection of Summer Street/Mystic Street/Mystic Valley Parkway



“What is your preference:

- Add the diagonal crossing so path users have a direct line. The drop in vehicle LOS is worth it.
- Do not add the diagonal crossing. The drop in vehicle LOS is not worth it.”

Summary of responses

Most survey takers responded to this question, and 86% of respondents favored the diagonal crossing.

Questions 7-8: High Street Bridge and Rotaries

Questions 7 and 8 asked people how they would feel using the proposed High Street bridge and rotaries design.

	Strongly disagree	Disagree	Unsure	Agree	Strongly Agree	Responses
Walking						
Count	17	11	73	195	197	493
Row %	3.4%	2.2%	14.8%	39.6%	40.0%	
Biking						
Count	19	8	94	192	176	489
Row %	3.9%	1.6%	19.2%	39.3%	36.0%	
Driving						
Count	14	10	77	207	179	487
Row %	2.9%	2.1%	15.8%	42.5%	36.8%	
Totals						
Total Responses						493

Question 7

“This concept would make me feel safe and comfortable when:

- **Walking**
- **Biking**
- **Driving”**

Summary of responses

For all modes, over 75% of respondents either agreed or strongly agreed that the concept would make them feel safe and comfortable. A slightly higher percentage (19.2%) of cyclists

versus pedestrians and drivers were unsure how they would feel.

Question 8

Regarding question seven: “If you disagreed or are unsure for any user category, please tell us why”

Summary of responses

Respondents noted that dangerous or confusing conditions for people biking and walking make this area a barrier to use of the trail. Responses to question eight also reflect concern over drivers’ behavior in the rotaries.

High Street Bridge

- Crossings must be signalized
- Provide vertical separation or barriers for bike lanes for protection and visibility
- Raise crosswalks to further calm traffic
- Two-way bike lanes on both sides of the bridge were seen as excessive and the intent of this design component not well understood

Rotaries

- More detailed information is needed on proposed bike movements at rotaries
- Crossings at all legs of rotary may cause confusion and frustration for drivers who will have to pause and check for people walking/biking as they enter and leave the rotary
- Crossings may cause traffic backups within the rotary

Question 9: Additional Comments on Project Intersections

Question nine provided the opportunity to further comment on intersections throughout the study area.

Summary of responses

Respondents commented on several project intersections, including some not specifically addressed by other questions in the survey. The greatest proportion of responses addressed the High Street bridge and rotaries.

General comments

- Include rectangular rapid-flashing beacons at crosswalks
- Raise crosswalks wherever possible
- Tighten turning radii and reduce roadway widths for traffic calming
- DCR should facilitate and incentivize biking and walking, even at expense of vehicle LOS
- Separate biking and walking facilities, including crossings, wherever possible

Mill Street/Summer Street

- Removal of right turn will cause backups on Mill Street
- Minuteman Path crossing should be signalized (as it is at Lake Street, Arlington)

Summer Street/Mystic Street/Mystic Valley Parkway

- Diagonal crossing must be exclusive phase for accessibility and safety
- Concerns that shorter vehicle signal phases will exacerbate backups on Mystic Valley Parkway (Mystic Valley Parkway backups are reported to stretch all the way to Hayes Street at times)
- Could some traffic move with the diagonal bike/ped movement, to reduce potential for traffic backups?

Kimball Road and Davis Avenue trail connections

- Snowplowing often blocks these connections to the path; adjust maintenance routine
- Formalize connection to trail from Kimball Road

High Street bridge and rotaries

- Powderhouse Square rotary was cited numerous times as both a positive and negative precedent
- Convert rotaries to signalized intersections
- Drivers' bad behavior is attributed to both confusion (the rotaries are hard to understand, so drivers operate incorrectly by accident) and frustration (drivers dislike the rotary and deliberately ignore rules)
- There is interest in short term safety improvements
- Ensure that cycling in roadway is not made more difficult by redesign. Add shared lane markings. There is a popular cycling time trial conducted on roads through this area.
- Bike/pedestrian conflict points need further study
- Crossing islands: ensure the width is sufficient as refuge space for cargo bikes or bikes with trailers

Harvard Avenue bridge

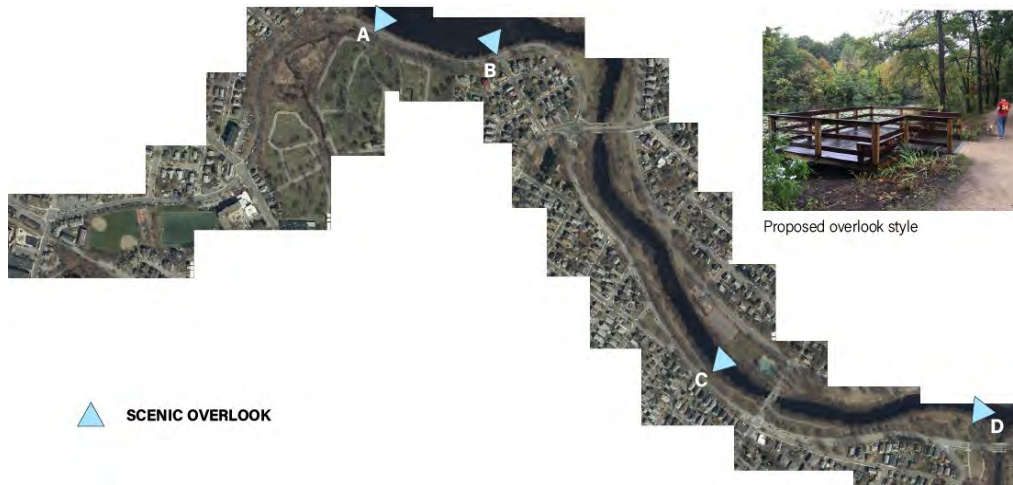
- Provide automatic bike/pedestrian phase every cycle

Questions 10-13: Placemaking

Questions 10 through 13 address placemaking enhancements proposed for the trail corridor.

Question 10: Scenic Overlook Locations

Respondents ranked four proposed overlook locations and provided additional information about the sites. The proposed locations were:

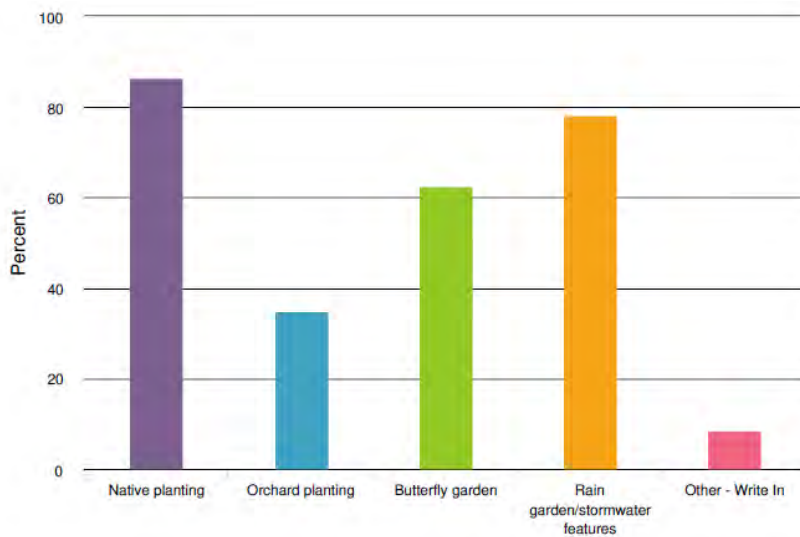


- **Site A:** southwest side of Lower Mystic Lake
- **Site B:** south-central side of lake
- **Site C:** between High Street Bridge and Harvard Avenue Bridge
- **Site D:** near the confluence of the Mystic River and Alewife Brook

Summary of Responses

- Site B was ranked highest, followed by Site A, then D, then C.
- Some comments suggest Sites A and B are not ideal because they are too close to a busy road.
- Sites A and C both have informal boat launches that people would like to see maintained and improved.
- A couple people noted that a swan nesting site exists at Site D and should not be disturbed.
- Several people prefer to locate overlooks away from the roadway for more peaceful atmosphere
- Suggestions to integrate overlooks into proposed nature opportunity areas, such as at the mouth of Mystic River (southeast corner of Lower Mystic Lake), where there is a lot of bird activity
- One respondent noted an opportunity to make a crossing or just interpret the connection between the lake and Meadow Brook Park at the west edge of the cemetery
- A few people asked for overlooks on bridges

Question 12: Features for Nature Opportunity Areas



Value	Percent	Responses
Native planting	86.6%	387
Orchard planting	35.1%	157
Butterfly garden	62.6%	280
Rain garden/stormwater features	78.3%	350
Other - Write In	8.5%	38

“What kinds of features would you like to see in the proposed nature opportunity areas:

- Native planting
- Orchard planting
- Butterfly garden
- Rain garden/stormwater features
- Other (write in)”

Summary of Responses

As shown in the report graphic, native plantings are the most highly favored (86.6%), followed by stormwater treatment areas such as rain gardens (78.3%).

Write-in responses included:

Question 13: Additional Placemaking Comments

This question gave respondents the opportunity to further comment on the desired character and features of the proposed trail.

Summary of Responses

Ecological Preservation

- Protect aquatic ecosystems and enhance Mystic River water quality via runoff reduction and rain gardens
- Prioritize protection and preservation of existing mature trees
- Replace some lawn area with native plantings
- Landscape maintenance should be guided by knowledge of local ecology, e.g. preserving shrubs and undergrowth for bird habitat
- Celebrate unique local ecology, such as the annual alewife herring run in Mystic River
- Interpretive signage on the watershed, native wildlife, etc.
- Boardwalk instead of paved path where possible

Cultural and Historic Materials

- Interpretive signage on local history, especially emphasizing Indigenous and Black histories

Accessibility and Amenities

- Plenty of benches
- Picnic tables
- Bike parking at multiple locations so people can bike to the trail and then walk
- Public restrooms
- Drinking fountains
- Multilingual interpretive and wayfinding signage
- Pedestrian/bike bridge between the two existing road bridges
- Direct access to the river
- Dog park or off-leash area
- Small parking area north of High Street bridge to access trail and natural areas
- Public art installations

Construction and Maintenance

- If asphalt trail is chosen, construct a sufficiently thick subbase to minimize cracking and heaving
- Ensure snow clearance from trail(s)

NOTES: PUBLIC MEETING 2

March 30, 2022

Parking

Parking on Summer Street being removed - what other options exist or is that just a necessary compromise?

- To be determined. People might park on side streets which might be tough but needs to be determined through further analysis. Trying to get feedback on whether or not that is worth it or if people prefer keeping parking. Conversation to have with Parks and Recreation Commission and other departments.

Can Fresh Pond Seafood Market accommodate parking on game days?

- They do have a large area and we would have to explore that. Not guaranteed.

Path/Sidewalk Materials

Will the increased paved area impact stormwater and water quality etc.?

- Paved path should help mitigate erosion. Need to coordinate with Conservation Commission if there are such impacts. Do not foresee major impacts but to be determined.
- As design moves forward, more thought will be given about how the path will interact with vegetation and how added plantings can mitigate runoff.

Cost considerations and maintenance for stone dust materials?

- Asphalt is cheaper to maintain though not necessarily to install. Stone dust is not a cheap install material, though, and needs more regular maintenance than asphalt.

Having on street bike lane and a paved path – isn't that too much pavement and will be taking up too much grass?

- We are trying to improve the existing path and make it accessible, and we heard about cyclists wanting to go faster on the path so we are proposing bike lanes on the road
- The bike lanes fit within existing roadway so we are using existing pavement and not adding more
- We want to make sure that users of all ages and abilities can use the facility – adds comfort to improve the path
- Can provide extra comments on material type on the survey

Will sidewalks be replaced?

- Yes, sidewalk will be built out as a part of trail construction. Public Works is planning to replace sidewalks on Summer Street near Buzzell Field/Arlington Catholic field, which requires coordination

Vertical Barriers

Two-way bike lane – will they have a physical barrier?

- Yes, but to be coordinated with DCR who will need to maintain the barrier.

Concerned about guard rails. South side of river - worried about having a raised cement versus a guard rail as barrier. Concept plan shows just added pavement marking buffer but better example is what has been done behind the edge of town. There is a guardrail between parking and path and it may be made of wood with openings that allows for access for path users. Would recommend some type of guard rail as it feels much safer with guardrail as buffer.

Run along Lower Mystic Lake – shocked that the guardrail next to the lake is protecting cars from going into lake but people could get plowed by cars. Would like to get the guardrail moved to protect pedestrians.

Mystic/Summer/Mystic Valley Intersection

Why diagonal crossing instead of the crosswalk treatment in center of town? Any work in coordination with center of town where the bike path crosses Mass Ave and Route 60/Pleasant?

- Diagonal crossing prevents issues with gas station on the NW corner
- Wanted to provide that direct path on the desire line
- Mystic/Mass Ave/Pleasant – Dan has been looking at the older concepts and a diagonal crossing was considered but to do that, you need an exclusive ped/bike phase and maybe that might have been too much of a delay at that intersection. Likely was made concurrent to reduce delay.
- Others in the meeting, who were around during the Safe Travel Project development, noted also that there was concern about children and pedestrians being able to cross diagonally safely all the way from one side to the other during the walk cycle.

Gas station driveway on Mystic/Summer still will be there?

- Yes, but the plan is for it to be narrowed. Complicated to close it entirely.

Slip turn lane is dangerous on Mystic/Summer so removal of it looks good!

Mystic/Summer – do we have turning counts off of the slip lane? Was that considered in its removal?

- It was considered and a right turn lane was kept as a result without the slip lane being needed

Trees and Topography

Are you prioritizing preservation of mature trees? Especially along the river and existing green space on both sides of the road.

- Preserving tree canopy is one of the project goals. We are thinking about path configuration around existing trees at intersections.

Concerned/curious about how a path can fit in sloped areas in the cross-sections shown? Along Lower Mystic Lake, from a nature perspective, suggest a boardwalk at the lake level.

- We are not showing all intersections/cross-sections here. We are using the cross-section to show the widest and most constrained locations. We would not fit a specific pedestrian path everywhere if the cross section doesn't allow – some will be shared use path only.

What does the design look like between Mystic Valley Parkway and Davis/Mystic Bank? People bike on Route 3 and connecting Mystic Valley Parkway and avoiding tricky intersections should also be a priority.

- We know that those paths are eroded and there is debris but trying to mitigate that
- Need to flesh out and give it more thought for next stage

Lighting

It gets really dark between gas station and High Street. Light posts have been going out along the Lower Mystic Lake. Town of Arlington and DCR have not been interested. Have we looked at improving lighting?

- Cross-sections show existing street lighting as kept or moved with curb but specific lighting improvements are out of scope for this project

Would the path have lighting?

- Received a lot of comments on this from prior meeting. Proposed to keep existing but we need to talk to DCR if there will be lighting in park space versus where it exists on the roadway. Need to consider if we would be harming animals by adding more lighting or if we should add lights for nighttime and winter riding.

Access Areas

Some people bike out from Edgehill Rd/Brookdale Rd to Summer St to Mill St. Path being on the far side of Summer Street, is there easy access to connect and get into path?

- Right now, we funnel the access through Victoria Road but we would need to consider an official crossing. We can create a slope that allows you to bike up there from an accessibility standpoint.
- Dan: sees people going the wrong way on Victoria Road because that was the easiest access to Buzzell Field to the Minuteman. Victoria Road is wide so we can see if having space to make that access more safe. Brookdale Rd/Edgehill Rd are currently not easy places to maneuver.

How will people riding bikes from perpendicular street on parkway access the path?

- Cannot be done everywhere but where the flat areas are, we can think about bike exclusive crossings and we can add high visibility crosswalks and signage etc. there. Sloped areas will require more thought.

Why was 108 Summer Street/Food Link access point not considered?

- Not considered because it isn't the fastest route to getting on the pathway and Mill St was the next best. Having a midblock crossing there is less comfortable.

Are bikes not able to use a bike lane between Route 3 and rotaries?

- You can bike on the roadway but not providing bike lanes there. The constraints don't make it possible. We are narrowing the roadway a lot to be able to slow down vehicles, and it will be better than the existing "sea of pavement"

Engagement

Who is a part of stakeholders and focus groups?

- We have a project team made up for DCR, MassDOT, Solomon Foundation, MAPC, City of Medford, Town of Arlington, and Mystic River Watershed Association.
- Focus group: members of bike advisory, residents of Medford and East Arlington, complete streets committee and Walk Medford, environmental planner.

Level of involvement by Medford and Somerville?

- Medford staff are represented in focus group and are excited but there is not as much direct coordination with Somerville. Medford connection has been more important.

Traffic and Signal Impacts

Will there be a separate phase for bikes and pedestrians on Harvard/River/Mystic Valley?

- Have not gotten far enough to discuss signal phasing but certainly we would be considering that
- Lucy: bike crossings have limits with turns. We may need exclusive phasing for that. Width of crosswalk does not matter when considering time for crosswalks.

Vehicle LOS on Summer/Mystic with diagonal crossing?

- Lucy: existing condition is LOS D at afternoon peak. The scale is A-F. With this change, the LOS goes down to E. LOS depends on vehicle delay. Would be noticeable but not extreme. The survey asks question about that as well. The tradeoff is having better crossing facilities.

Summer/Mystic intersection – parent with kids. Single phase (diagonal crossing) has to be the way to do it. Cannot have children using a box like in the middle of town.

Harvard/Mystic Valley Parkway – people will queue up and not stop at stop lines (so cross the crosswalk)

Rotaries

Crosswalks were pushed back on rotary. You said because this increases visibility as cars enter rotaries, but cars exiting the rotary might run into pedestrians.

- Rotary as shown will have a lot narrower path and will make vehicles slow down. Vehicle approaching the roadway will be out of the way for crosswalks.

How to envision bikes using rotary? Do they use crosswalks or merge with traffic?

- Both is possible. Those who are more comfortable will travel with traffic but there will be an accessible route for bikes who can share the crosswalk with peds.

Chat Record

19:31:28 From Amber Christoffersen (she/her) Mystic River Watershed Assoc to Waiting Room Participants:

We'll be opening the meeting shortly!

20:02:12 From Sneha Adhikari (Toole Design) to Everyone:

<https://tinyurl.com/MystictoBikewaySurvey2>

20:02:30 From Sneha Adhikari (Toole Design) to Everyone:

^link to the survey!

20:03:56 From Carley Przystac to Stephanie Weyer, Toole Design(Direct Message):

how do you anticipate the increased paved areas will impact water quality / erosion from stormwater runoff?

20:04:19 From Christopher Logan to Stephanie Weyer, Toole Design(Direct Message):

How will bikers from perpendicular streets along Mystic Valley Parkway access the off-road path?

20:07:48 From Juan Ramos to Stephanie Weyer, Toole Design(Direct Message):

As for the issue of parking during games in the park on Summer Street.... could an accomodation perhaps be worked out with the Fresh Pond Seasood Market?

20:16:37 From Rosemary Broome-Bingham to Stephanie Weyer, Toole Design(Direct Message):

A comment, not a question. I'm a senior who likes to walk along the Mystic River and Lower Mystic Lake. I love the many benches -- this is why I choose this walk. I also appreciate the 4 parking spots at Alewife Brook Parkway x Mystic Valley Parkway. However, the rotaries at High Street and Medford St are a nightmare to cross -- I'm not nimble enough to dash with my walker through the fast-moving traffic to get from one walking path to the other.

20:17:22 From Rosemary Broome-Bingham to Stephanie Weyer, Toole Design(Direct Message):

Another comment, not a question is about the connection between Arlington and Somerville.

20:19:13 From Cathleen Hoelscher to Stephanie Weyer, Toole Design(Direct Message):

Would the path have lighting?

20:21:43 From Beth Melofchik to Stephanie Weyer, Toole Design(Direct Message):

I hope you have included Arlington Housing Authority for the Cusack Terrace residence on Summer St and Menotomy Manor near MVP. Essential to take into considerations safety concerns for Cusack Terrace and concerns of accessibility for Menotomy Manor. Beth

20:34:27 From Daniel Amstutz, Town of Arlington to Everyone:

Ann asks if the path will be pervious or not. We are not proposing this at the time, as it is not something DCR can maintain.

20:37:59 From Donald Gillies to Stephanie Weyer, Toole Design(Direct Message):

Even though the Gulf station entrance on Summer St/Mystic St is one way in, often cars do use it to exit the gas station. It would be safer to close this entrance.

20:39:07 From Daniel Amstutz, Town of Arlington to Everyone:

Amy raises a concern about eliminating the turn lanes at Summer/Mill Streets. Yes, we considered going through Buzzell Field but we heard at the previous meeting from comments that this was not preferred and it would be challenging to route through the busy park.

20:42:14 From Beth Melofchik to Stephanie Weyer, Toole Design(Direct Message):

Left turns going into gas station at Summer and Pleasant. All 3 or those egris points are utilized. Beth

20:43:31 From Jared Powell to Stephanie Weyer, Toole Design(Direct Message):

Your comment about providing a farther-from-the-road option for a wider type of cyclists and letting faster ones be on the road makes perfect sense. Projects like this should induce new ridership, so that "casual paced" space is really important.

20:52:51 From Beth Melofchik to Stephanie Weyer, Toole Design(Direct Message):

Why was the convergence of bikeway at Summer St at Food Link 108 Summer St never considered as an access point from to bikeway in this plan? Beth

20:54:52 From Christopher Logan to Stephanie Weyer, Toole Design(Direct Message):

Is the vision that bikes won't be able to use the parkway on lower Mystic Lake from Route 3 to Route 60? You can bike much faster on this section than would be appropriate for a shared path.

20:56:33 From Beth Melofchik to Stephanie Weyer, Toole Design(Direct Message):

Please consider residents of Cusack Terrace stakeholders. Many utilize wheelchairs to navigate the neighborhood. You propose a commuting spur in front of their building.

21:00:21 From Beth Melofchik to Stephanie Weyer, Toole Design(Direct Message):

Access points crossing from neighborhood directly across from lower mystic lake. Forgot street name. Extremely dangerous to get to lake side

21:00:34 From Stephanie Weyer, Toole Design to Everyone:

<https://tinyurl.com/MystictoBikewaySurvey2>

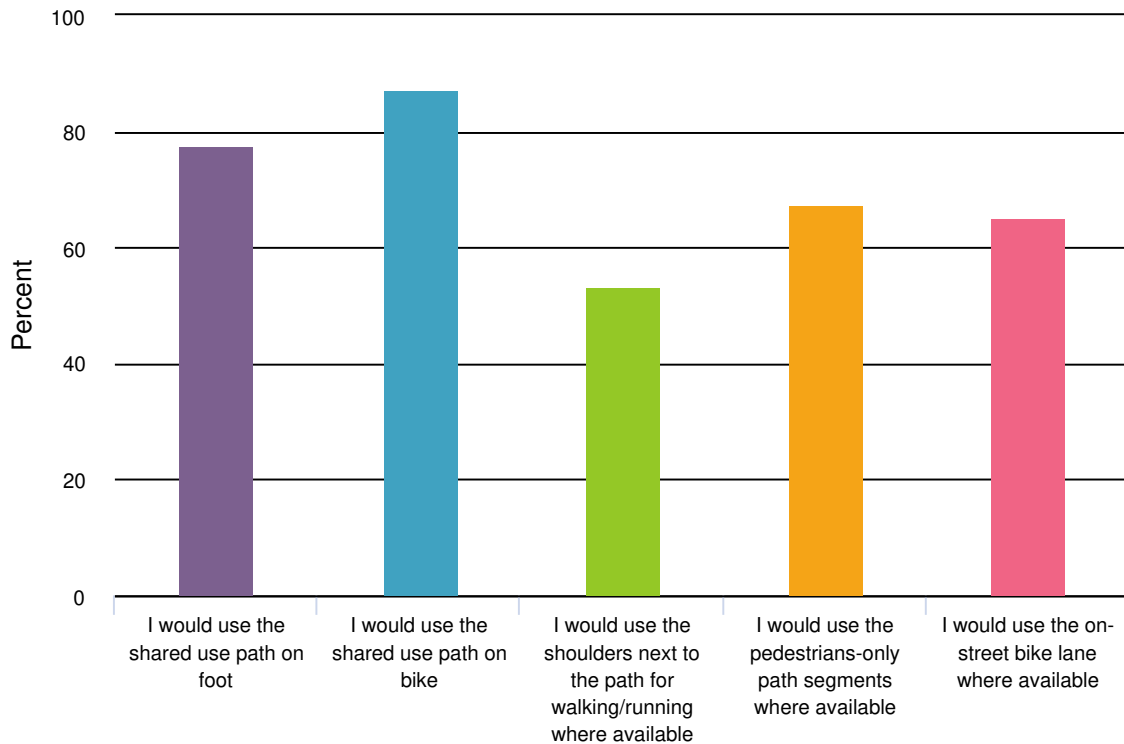
Report for Survey #2: Mystic River Path Connection to the Minuteman Bikeway Study

Response Counts



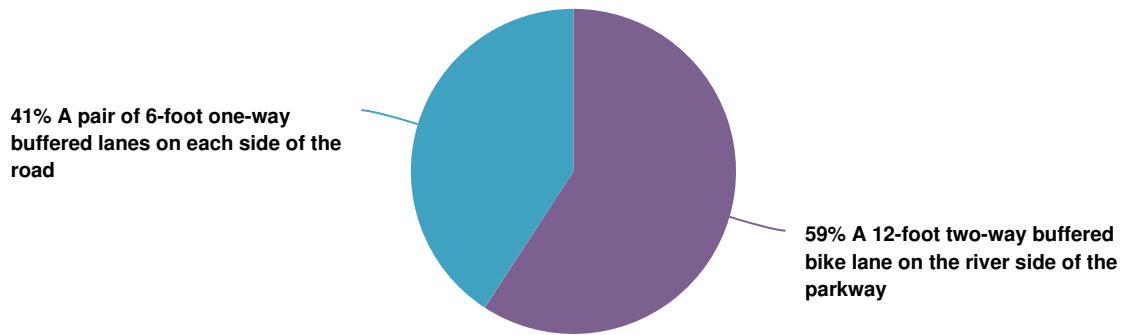
Totals: 513

1. Check all the ways you expect to use the proposed path and bikeways in the future:



Value	Percent	Responses
I would use the shared use path on foot	77.5%	386
I would use the shared use path on bike	87.1%	434
I would use the shoulders next to the path for walking/running where available	53.4%	266
I would use the pedestrians-only path segments where available	67.3%	335
I would use the on-street bike lane where available	65.1%	324

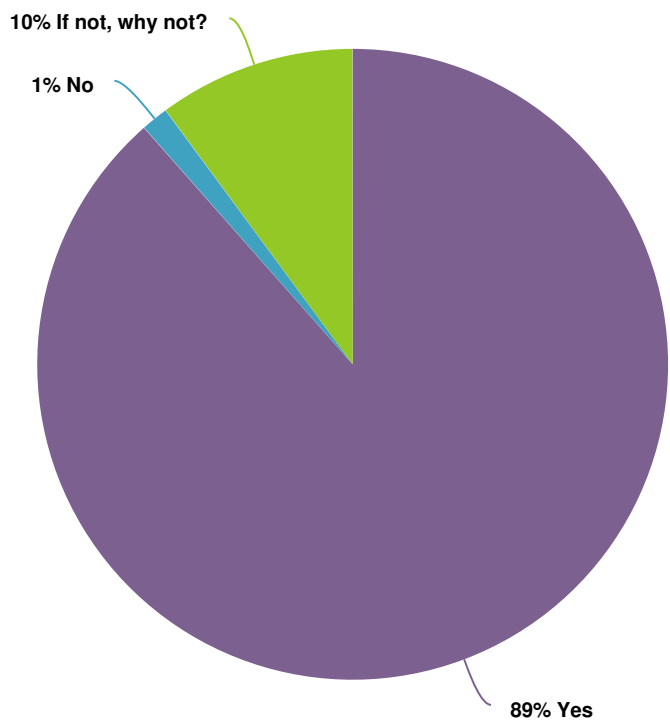
2. The project proposes buffered bike lanes along Mystic Valley Parkway south of the Medford Street rotary. If you would use the on-street bike lanes, which would you prefer?



Value	Percent	Responses
A 12-foot two-way buffered bike lane on the river side of the parkway	59.2%	264
A pair of 6-foot one-way buffered lanes on each side of the road	40.8%	182

Totals: 446

3. Today, a narrow asphalt path runs south of Lower Mystic Lake, and earth and stone dust paths run along Mystic River south of the rotaries. The shared use path is proposed to be asphalt (12-14' wide at lake, 10' wide along river) to make the full path more comfortable, consistent, and accessible, and to prevent future maintenance issues. Pedestrian-only paths and shoulders off the main riverside path, where feasible, are proposed to be stonedust. Do you support an asphalt shared use path along the river?



Value	Percent	Responses
Yes	88.5%	439
No	1.4%	7
If not, why not?	10.1%	50

Totals: 496

If not, why not?	Count
Asphalt cracks terribly and is often unmaintained (see Mem Drive path), but if it were maintained that would be awesome.	1
Asphalt is bad for the environment	1
Totals	50

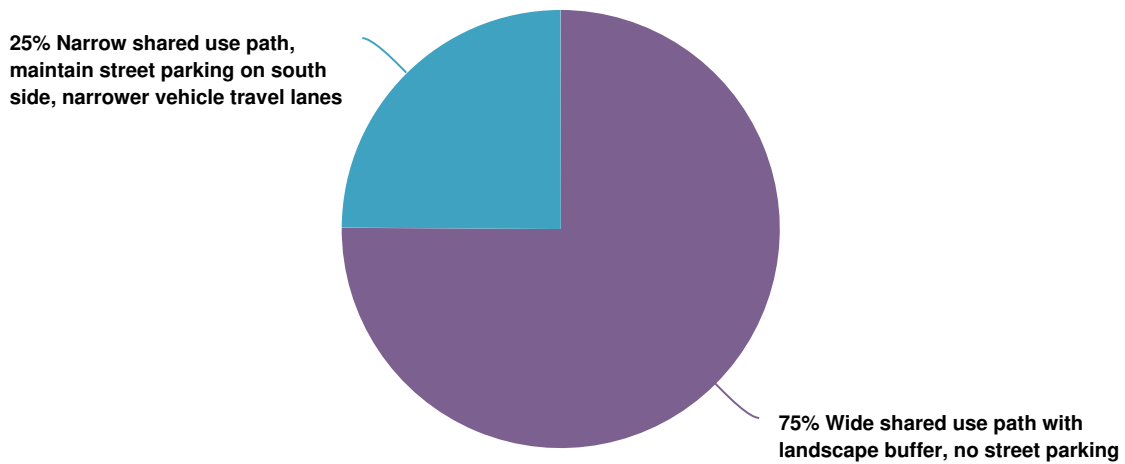
If not, why not?	Count
Asphalt is not good for drainage and would be potentially harmful to the natural habitat.	1
Asphalt may increase the run-off to the river	1
Asphalt, bad!!	1
Better for cooling - paved surfaces get sooooo hot.	1
Bikes go too fast	1
Can it be made permeable?	1
I do definitely support the shared use path, but 12'-14' seems unnecessarily wide and would represent too much loss of grass/plantings.	1
I find cyclists on our bike paths are annoyed by walkers, don't announce themselves and ride right up on walkers. In Virginia, cyclists must ring a bell or announce passing on left...	1
I like the option to walk on more natural surface next to the River.	1
I like the soft path for running, although I do like the idea of making the path more accessible for everyone	1
I love running along this path and prefer softer surfaces to asphalt. This is a place I have sought out to run because it is not paved. I am also a biker but would prefer just a bike lane on the road.	1
I primarily run along the Mystic River and stone dust is much, much better on joints. I am also concerned with additional run off due to asphalt vs an absorbant surface	1
I really like having an earth and stone dust path for pedestrians - I don't want an asphalt path here and I don't want to have to deal with bikers in the place that I walk and run.	1
I support a hard-top path so it's usable by wheelchairs, strollers, folks uncertain of their footing, etc - but asphalt is environmentally terrible, if there's a good alternative let's use that instead.	1
I'm not sure I completely understand the plan--but if the asphalt shared use path is for bikers, I think that will really change the calm feel of the existing path along the river. People love to walk their dogs along the river, and kids like to run free there. Having a bike path along the river would feel stressful. I also worry about protecting the roots of the majestic Oaks that line the river.	1
Totals	50

If not, why not?	Count
If bike lanes on Mystic Valley, no need for an asphalt path as well. Prefer stone dust only.	1
It doesn't need to be asphalt	1
Keep bikes on the bikeway	1
Let's keep the stone dust paths. They are more in line with the natural setting	1
Like natural terrain	1
More likely to become broken and impassable in time, less environmentally friendly	1
No more impervious surface near waterway	1
No opinion, all good	1
Non asphalt paths ensure bikers proceed at a reasonable speed	1
OMG pretty confusing. So bike lanes in the road and a shared use path south of Medford st rotary... I like how nature you the dirt foot path is along the river. If bikes can be directed safely to bike lanes than keep it dirt. If not asphalt makes sense. It's too bad how making things more user friendly is often at the expense of the "wildness" of nature. It often makes the green spaces feel to managed and "fake".	1
Packed gravel or dirt is easier on the legs for running for both my dog and I	1
Prefer fine stone pathways for aesthetic	1
Ruin the indigenous peoples pathway.	1
Stonedust is fine there. It's park-y.	1
There is too much asphalt everywhere. Thinks about the animals! Earth and stone path is sufficient for biking and pedestrians. Please come up with an eco-friendly solution.	1
This area of Arlington already has very few green, non-paved spaces. The earthen section of the path is easier on my joints when I'm walking/jogging (I am disabled, and asphalt is hard on my joints). I'm also concerned about stormwater impacts to the Mystic River (stormwater quantity / water quality) from additional impervious area in a watershed that is already overwhelmingly impervious. Regarding maintenance, the earthen path already experiences erosion issues under existing conditions, and I imagine freeze/thaw and erosion will damage the pavement and require frequent maintenance.	1
Totals	50

If not, why not?	Count
This should be all gravel and only for pedestrians; many older people and families with children sit on the grass and walk down to the water. Putting a cement path that allows speeding bikes bifurcates the space and takes away from the park like atmosphere . It's similar to when highways were built separating one part of town from the other. Unnecessary if there is to be a bike path on the street.	1
We should leave the natural surroundings alone I bike here all the time with no problem putting in more asphalt will take beauty away from this area	1
We'll because if there is a bike path on the road I'd use that, and I'd use the pedestrian path that I'm good with being gravel for a softer impact on the green space	1
While stone dust isn't really natural, it feels more natural than asphalt. Bikes, strollers and wheelchairs should all be able to use stone dust without issue.	1
asphalt is not the answer to erosion	1
closer to the river should be for walking only	1
confused by the wording of this question, but both asphalt AND earth/stonedust path is preferable. I prefer erth/stonedust for running compared to hard asphalt	1
don't like impervious surfaces	1
https://megamanual.geosyntec.com/npsmanual/porouspavement.aspx ; porous pavement at the water's edge is my preference, although it is expensive it is also more ecologically appropriate in this location. https://www.epa.gov/soakuptherain/soak-rain-permeable-pavement#ma	1
i guess i am ambivalent. It sounds nice but since i live in the neighborhood abutting that section, unless there were very frequent access points to the shared use path, i would probably opt to use the on-street lanes for most biking. I would run along the river, but for running i would prefer stonedust if anything.	1
impervious to water	1
no bikes please this is a pedestrian walkway - the bikes already have the bikepath	1
not clear what this means	1
not porous, asphalt is ugly not natural looking like stone dust, too busy like minuteman path. if I wanted to be mowed down by a bike I would use the Minuteman path.	1
not sure - can it be built without damage to existing trees?	1
Totals	50

If not, why not?	Count
pedestrian only paths next to river to prevent accidents btwn people and bikes	1
prefer natural	1
Totals	50

4. Which concept for Summer Street do you prefer?



Value	Percent	Responses
Wide shared use path with landscape buffer, no street parking	75.1%	368
Narrow shared use path, maintain street parking on south side, narrower vehicle travel lanes	24.9%	122

Totals: 490

5. Let us know more about your preference and concerns here: (100 word maximum)



ResponseID Response

10 Lots of people park on the side streets during games at AC Turf. This would exacerbate the situation and be intolerable to the residents especially all day Saturdays during the soccer seasons.

11 I don't often use this area (in my car or otherwise) and could not care less about whether there's street parking here. If there are people who care more, please value their opinion over mine!

13 Very conflicted here. Wider path seems to work better at avoiding conflicts BUT loss of parking will have a significant detrimental effect on park users and surrounding neighborhoods including Russell and Water

15 There needs to be a master plan for the athletic area. Offstreet parking lot needs to be provided.

16 I actually prefer the alternative A but think that families going to games would want the Alternative B.

17 Cars regularly speed through Mystic Valley parkway due to current layout. I'd prefer a path that isolates me as much as possible from traffic.

21 I prefer the wide path with no parking, but I believe that there would be so much push back that it could reduce community support significantly. I guess I'm trying to be a realist!

23 Our roads are public land. Parking private cars there makes little sense. Having public benefits is way better. Thank you!

ResponseID Response

24	I would love to work out an accomodation for parking with the Fresh Pond Seafood Market during game days.
26	I would prefer to cycle to this area most of the time, rather than drive and park.
27	Far more people drive down Summer St than those who park on it. Parking can be found elsewhere and the wider travel lane is a better use of the space allocated to cars.
28	In general I'm always in favor of less parking and more trees, but in this case if opposition to parking removal would be a significant obstacle to the project as a whole I wouldn't fight too hard about it.
29	I'm guessing that the playing fields on this section of Summer St need parking facilities. If there is another place for this field use parking, then my preference would be for the wider path and buffer.
30	Without parking on Summer St. hazardous situations will occur as people park elsewhere.
31	Parking is mostly used for sports events on the weekends; maintaining parking on summer would be therefore a "waste" of the very limited space on that section during the non-sports event time (~90% of the time)
32	Removing parking is safer for all users of Summer Street.
33	As a biker who occasionally travels that section of Summer St. and a driver who uses that section of Summer St to get to stores in Arlington, I prefer the wider, more protected option A. This option would reduce the cross traffic of pedestrians along the shared use path who would be going to and from their parked cars in option B. My concern for option A is where parking would be shifted for those who use the baseball fields. This is an important consideration that could shift my preference to option B if there is not a good alternative.
34	Narrow paths are difficult to use.
35	I am concerned about parking when events are happening at the fields. Not usually much parking at other times. I hope a solution could be found to accommodate the parking when events are occurring. Russell Place/ Water St area... Russel Common Municipal Lot?
39	Seems parking is needed

ResponseID Response

- 41 I dislike how crowded and unsafe things currently feel with the parking along Summer Street, and so I think it makes sense to eliminate it completely. However, alternative parking areas do need to be considered (although also maybe more people will be encouraged to walk/bike to games?)
- 43 In this era of climate and health emergency we should always prioritize pedestrians over gas powered vehicles.
- 47 Generally prefer more plant matter and fewer vehicles, but not sure of parking impact in that area so don't feel strongly re A v B
- 49 Nice to have wide space separated from cars.
- 51 I never bike in the street even if there is a bike lane. Death wish.
- 57 Either of these options would be a great improvement
- 58 Prioritize people! There is plenty of parking elsewhere.
- 59 With 40% of climate emissions in MA from cars, pedestrian and cyclists deaths, and traffic violence on the rise - I am a firm believer that we need to move away from car centric infrastructure and towards more transit, bikeways and walking paths. Parking does not need to be taken for granted except perhaps for some all-accessibility access. But again, with more transit, this would become less important.
- 61 This segment can extend the parkway feeling, and should, with the buffer.
- 63 While I prefer the option for wider path, I would still like to see the travel lanes narrowed to reduce vehicle speeds, and I would prefer that there be some type of protective barrier besides the planted buffer strip.
- 67 I prefer no parking. Landscape buffer is nice and creates open feel. However, there's a lot of parking on game days. Where will those people park? I think this will be a big fight.
- 70 Alternative B has no relief from paving! Stormwater infiltration is not addressed, no street trees, this stretch will be hot and inhospitable. Much preferred for bike lanes at the road level to avoid ramps at driveways and intersections. A protected 4' lane for bikes in each direction with a 1' raised buffer (similar to what was shown on previous page) would allow for a wider landscape buffer for shade trees and a standard 5' sidewalk. The landscape buffer could function as stormwater filtration either at sidewalk or road elevation.
- 72 I worry if parking was eliminated on Summer St that lots of cars would park on the side streets for games at Buzzell Field.

ResponseID Response

73 Better to accommodate a wider path.

75 Parking for Buzzell and Arlington Catholic is needed. These are heavy use fields with active pickup and drop off. The side streets can't support the volume of pedestrians crossing summer with bike traffic added.

77 Neither - alt A elimination of parking is undesirable; alt B narrowed travel lanes and elimination of landscaped buffer undesirable

80 Need restrooms, restrooms, restrooms!!

82 A. I like the consistency and the signal sent to the community of having similar car/travel lanes and shared use path from the parkway through to Summer St., rather than privileging drivers/parkers in the Summer St. section. B. It's already cumbersome to navigate around parked cars along that stretch of Summer St. C. There isn't enough parking along that stretch of Summer St. to accommodate all who currently drive to the adjacent fields, so eliminating parking will make using those fields more consistent and equitable and may also encourage more users not to travel to the fields by car.

83 I think that accommodating existing parking may make the plan for feasible and will reduce acrimony about the project.

84 You should be specifying 10' travel lanes throughout the study area. This is a PARKWAY with NO TRUCKS OR BUSES. Can't you do Alternative-A with two 10' travel lanes, a 7' parking lane, a 1' shoulder on each side, a 3' utility/light pole buffer with landscaping, and an 11' shared use path?

91 Do not get rid of the right turn lane from Summer St onto Mill St. Summer St backs up enough as it is. Also change the flashers on Mill St. to be pedestrian activated. Bikes run the stop sign on the Minuteman Trail all the time. Are we going to treat this hazard like Appleton St. and wait for someone to get killed?

95 Concerns about removing parking. Parking is needed in the area for customers. Would prefer some greenery, and worry that the shared path may be over run with bicycles and not allow enough space for walkers.

96 .

100 I don't really walk or ride on Summer St much, so don't have any skin in the game for this stretch of the plan. My use of the path is closer to Decatur St.

104 The lane of parking would create an extra buffer for travelers on the path, which is a more-than-fair tradeoff for one foot less of asphalt path. Also, people may like to park in order to exercise on the path.

ResponseID Response

105	wider shared use path and wider car lanes feel like a safer choice, however, do keep street parking at whatever spaces possible.
107	I honestly don't have a strong opinion here, just had to choose one.
108	Concerned that maintaining parking while narrowing travel lanes will result in very narrow roadway. Already, road is fairly narrow when cars park at curb. Also, the westbound lanes (through lane and turn lane) at Mill Street intersection are already very narrow - if this would further narrow those lanes that would not be good.
115	Need a physical buffer between the parking and the path : need signs saying that elderly are off balance and cannot always move to the right as fast as bicyclists think they can ; therefore bicyclists should slow down and not rush older people
117	The easier and safer it is to use your feet to travel, the more people will do it. So many folks are afraid to ride a bike near cars (parked or moving). Let's make it super safe and accessible.
121	Could plants be incorporated? The wider lane is more attractive and pleasant for walking, but I'm also aware of parking issues in the area being a concern. The parking lane also provides wider buffer for the path.
124	cambridge did rapid build in north cambridge and eliminated parking on mass ave. It has had a disastrous effect.
127	Parking seems important to park users (like baseball games). I support park access for people who drive (even though I am biking)
128	On one hand I like eliminating the parking but then I wonder if I wanted to drive there and unload to bike where would I park?
129	However beefy the bike and pedestrian scale of the project is, please include more space for bikers and pedestrians! In 50 or so years, they should be making up more than 50 percent of all users on this corridor, so build the infrastructure for them!
130	Alternative A would be more environmentally friendly - more green space and better active transportation facilities. Please further this alternative!
135	Given the mode interference on the MCB, a wider path is preferable to lessen this.
138	Remove the parking but also reduce the width of the car travel lanes to calm traffic.
139	parking is hard enough. please keep some parking

ResponseID Response

140	There's a park there and the crowds using it will want to park. Plus parked cars slow traffic.
141	My biggest concern is sharing a bike path with pedestrians. I used bike paths both to commute to work and for exercise. My worst bicycle accidents have been due to pedestrians and runners not being aware of cyclists. The wider the bike path the better; or keep pedestrians and cyclists on separate paths.
142	I think Plan A is more aesthetic. A question I would have is: who normally parks along that segment, and where will they park if the spaces are lost?
145	There has never been street parking here let's encourage people to come on foot or bike
147	I strongly support alternative B. I think it's important to both have a separated multi-use path and preserve parking; I think reducing each lane by 1 foot is reasonable to support both uses.
148	Alternative A provides a better travel experience for both path users and automobiles
155	Parking seems to be for local business or athletic fields but dunkin and the seafood market have plenty of unused parking. We should not hesitate to improve the path on concerns about parking for some events. A much improved path would incentivize folks to bike to events. There is parking on mill and town lots not far away
158	narrower lanes restrict driving speed.
161	There should be parking in the development - so soccer games, etc. can still take place.
163	I'm so excited for these improvements!!
165	While stone dust paths are in some ways nicer to walk on, the existing stone dust path is a muddy mess for much of the year. An asphalt path with good drainage would be a huge improvement. I would prefer totally separate pedestrian path where there is sufficient space, but recognize that strollers, wheelchair users, etc. may prefer the asphalt path at all times (as would I at muddy times of year).
167	Along the river, I'm not sure why we need extra bike lanes if there are already bike lanes in the road. How are bikes going to make the left turn off Summer onto Mill?
169	Without further info on where parking would be allowed of taken away, it's best to keep parking available

ResponseID Response

172	Parking here is not important to me. But its probably useful to others?
174	The narrow lanes with parking (B) can cause dangerous conditions for motorists who open their doors into traffic. (B) allocates 27' of road space to motor vehicles and reduces the buffer between cars and motorists such that people entering and exiting cars could abruptly enter the shared use path, creating hazards for cyclists. Most businesses on Summer Street have parking lots so there would be little impact if parking spaces are lost. (A) leaves room for additional greenery and tree canopy, which improves health and safety, as does a wider shared use path.
175	Parking is limited for the playing fields so street parking should be preserved.
176	Limited parking for playing fields, so street parking should be preserved, especially on fields side. They would be safer for those using fields with less crossing from neighborhood streets.
179	I walk this entire route on a constant basis and the existing sidewalks are sufficient for foot traffic. I live in this area and know that Summer and Mill Streets already carry too much traffic. Removing any space/lanes from this area will create a traffic nightmare.
180	I use this area as runner, walker and bicyclist. It seems that there is plenty of parking on side streets.
181	The landscape buffer will make a huge difference and is worth sacrificing the on-street parking.
186	While alternative A is atheistically pleasing, drivers tend to race down the parkway leading to safety issues for shared path users. Thus I prefer the road diet approach - narrower lanes to slow drivers down, and also maintain parking for existing users.
187	The landscape buffer offers more green space and presumably would help with stormwater management. Losing parking is always an issue in a city though.
189	Neither - as a resident in this area anything that will make traffic worse is a non starter and will increase cut through traffic in the neighborhoods north of Summer St.
191	On the Minuteman, there are a lot of conflicts between people biking and people walking, due to the limited space. Having a wide path is an excellent way to reduce conflicts. Also, the buffer will make it far more pleasant. I do like the narrower travel lanes shown in Option B. I would support a modified Option A that reduces the width of the travel lanes to 10' each, and uses the extra width for a wider buffer and/or bike lanes.

ResponseID Response

198 I voted for wide shared use path, because I never use the street parking, but I know there are people who use the street parking because they are often games int the fields. If street parking did get removed, it would nice to allocate a new area for parking.

199 Additional trees and greenery are needed more than parking. Also cheaper to build and maintain.

206 Very few parking alternatives in this area, unfortunately. If there were other parking options, would prefer alternative A.

207 Prefer option for planting, there is enough parking in the area.

212 If you're willing to have 10' travel lanes, and the full right of way can be re-allocated arbitrarily, I'd prefer to have 10' travel lanes, no street parking, and a 15' wide path. The path width is important to facilitate safe passing, especially when the path starts to get congested.

214 I don't have a preference

218 I think a two way bike lane is a poor idea and will be poorly utilized, especially by people having to cross two lanes of traffic to ride the wrong way on the street. In addition I would encourage careful thought about how much parking is really necessary.

221 it looks like only a foot differences in width, so i'd be happy either way - if the loss of parking is a major obstacle a narrower path would be a fine alternative.

226 Narrower vehicle travel lanes are not practical when there is snow.

229 Wider lanes landscaped barrier>>>street parking. Street parking is nice but overrated, and not frequently used there in my anecdotal observations

234 I chose Alternative A, but it should also include 10-foot car travel lanes. Wider lanes just encourage speeding.

239 looking for maximum flexibility of use even though this may be a bit more crowded on busy times.

241 People in the area should have a place to park as not everyone has off street parking

242 I like the traffic calming aspect of alt B and I think its important to still allow parking in this area

243 Eliminating parking here will just push it up into the side streets

ResponseID Response

246	Like the idea of removal of utility poles. I feel that there will be too much opposition to the plan in all parking is removed.
247	I prefer the wider path with landscaping, but realize that parking for ACHS and Buzzell fields is also important for those users. Where would parking be moved to? Legal Seafood lot? There must be some clear alternative instead of just the side streets nearby ... otherwise I think we would have to keep some street parking in that area, unfortunately.
248	A 6' buffer with landscaping will help to reduce the amount of run-off that ends up in the waterways from dirty, polluting vehicles. This option also provides slightly more room for the pathway, making both pedestrians and cyclists more secure. If possible, narrow roadway more!
252	Street parking should be trimmed. The "people served per square foot consumed" for on street parking is awful. We'll get so much more, for so many more people, out of alternative B.
254	It's time to make pedestrian and bicycle traffic equal in importance to cars. There is no compelling reason for this arterial connector to have on-street parking to the detriment of pedestrians and bicyclists. I support removing the parking and giving more space and a larger buffer to the more vulnerable users of this throughway.
255	I love to ride and walk, so the parking is not important to me. However it will be to lots of other people. Will alternative parking be provided somewhere nearby? Otherwise I fear drivers will demand they retain the on-sreet parking.
257	I like the idea of the plan with no parking, but it will be easier to get the plan with parking through the community process.
260	I would certainly prefer a buffer but I have never had to go and park a car to access the playing fields
261	I actually prefer the wider path but realize that car zealots will want to keep parking. Please note - my family owns two cars and use these areas by car, running, and bike. It's not like I am anti-car zealot. I drive whenever it makes sense.
262	I don't believe there is parking there now, so why go to minimum widths to add it?
267	The planted buffer strip would make the area feel more pleasant to walk/bike through, as it's not currently very green.
268	Barrier should be able to stop uncontrolled cars Street should have major traffic calming

ResponseID Response

270	I have a strong preference for wider travel lanes (e.g. easier for larger vehicles and newer drivers to maneuver) and I believe there is already abundant off-street parking available where necessary, so I favor eliminating on-street parking on Summer Street.
271	Narrowing the travel lanes to 10 feet and including parking is a huge benefit that will help limit speeding on Summer Street, which is endemic now. 11' travel lanes aren't necessary for such an urban area
272	If safety and mobility can be maintained by keeping the parking spaces, then keeping parking seems ideal.
274	Torn. I am not familiar enough with this section of Summer St to understand parking needs. But I know other sections of summer st are too fast and I do appreciate that narrower roads could reduce vehicle speeds which might enhance safety, as would "buffer" of parked cars.
276	I am optimistic that parking solutions can be found for people that want to drive to Buzzell Park. If Arlington is serious about being a leader in climate responsibility and alternative transport, it will need to reduce (ie. reclaim) street parking someday. Why not now? This project is an opportunity for Arlington to show where its priorities lie. Also, there is already ample parking a 10 minute walk away in the Russell Common municipal lot (an easy walk along the Minuteman).
283	A 12 foot wide path feels so much nicer when being passed by a bicyclist. Also, more space for vegetation is aesthetically preferable. Wild flowers and other plants that help with bee populations would be ideal.
285	Both seem acceptable for biking but the grass buffer will look a lot better.
286	I am very worried about eliminating any parking on Summer St because that area is extremely busy with the athletic fields. Why did you not include questions about the Summer/Mill intersection in this survey? I am EXTREMELY concerned about eliminating the turning lanes at that intersection and that traffic (which is already bad in that area) would get significantly worse. I also hope that you are working with the Arlington Traffic Advisory Committee to discuss and get their input and buy-in from any intersections. They would have a lot to say about the Summer/Mill intersection I'm sure.
289	On street parking is not as important as comfortable and safe biking in this specific. A wider buffer will provide for a more pleasant and enjoyable experience on the path.
290	Street side parking doesn't provide as much value or safety as a wider shared area as well as more green space.

ResponseID Response

294	I don't know much about the parking needs on that block, but prefer more greenery.
296	I would like narrowed travel lanes on the road no matter which plan is chosen. Narrower lanes are great traffic calming measures so even if we eliminate parking the lanes should be narrowed
298	I support pedestrian access over car access.
299	This is a tough one. The parking creates visibility issues at the pedestrian crossings. Also the narrowed travel lanes may lead to congestion with left turns.
302	Biking space along with discouraging car use is most important
303	Parking is needed where there are small businesses without parking lots.
304	I want an option that has no parking **and** has 10' travel lanes. 11' travel lanes encourage drivers to operate at unsafe speed, which we do not want in our parks.
305	Street parking may mean less safety due to more traffic, blockages due to cars trying to park and car door opening/closing.
308	I find parking to be a nice barrier from the moving cars on the road
309	This public space is too good to be used for privately owned vehicle storage
318	I'd prefer the landscape buffer option, but it would be harder to get installed because of the proposed parking restrictions.
321	Designers should ensure that they visit the site during the spring sport's season in order to understand traffic, pedestrian crossing, parking issues during peak-use time.
324	More greenspace!
328	The better compromise
331	consider additional road improvements to slow down car traffic
335	A wider path encourages active / eco friendly travel. The wider path with greenspace divided provides an attractive public space in addition to its better utility. Removing parking spaces provides a further push for the adoption of active mobility on the path
336	If street parking actually needed try to maintain it, otherwise get rid of it.

ResponseID Response

340	Would need some sort of drop off area for kids playing at AC Turf or Buzzell
341	I think the wider shared path would get great use in this area and there is plenty of alternative parking in the surrounding area.
342	The area is quite popular already, the added traffic from the connected paths will make it so the path is crowded. To minimize the conflicts between pedestrians and bikes A wider path is safer
345	I am concerned about safety crossing summer street if parking is maintained on summer street. We live near buzzell field and are fine with people parking on our side street, and would prefer side street parking to parking on summer street. Thank you.
349	The path and/or buffer should be even wider and the travel lanes should be 10' not 11'
350	The current parking along Summer Street is dangerous for all users, and I would prefer to see no parking and a really good facility. I know that the field users will complain, but I think the safety of cyclists and pedestrians is more important.
363	My current route (from Somerville to the Lakes) bypasses this section, but if build and more pleasant to ride than Bates street, I'd obviously rather have 12 feet of shared space than 11. That it comes with trees is only an extra reason to prefer the wider path.
364	Could road be single lane one way
367	How will the businesses be affected by reduction od parking? Please provide alternative parking solution for their clients. We need to support small local businesses as their life is hard as is.
372	I know parking is necessary, but we need to be planning our cities for less car travel so we can meet our climate goals!
373	Really looking forward to this project becoming reality, don't listen to the haters who will champion parking and car access.
376	Removing the parking to allow for space between the cars and the shared use path would make the span feel safer and be more enjoyable to walk/run/bike along. I have a car, but we prioritize parking at the expense of good green spaces way too much
381	The wider buffer is great and would make me feel safer, but so would narrowing travel lanes which would reduce car speeds. I'm leaning toward a wider buffer, but not sure which one would make me feel safer in practice.

ResponseID Response

383	We don't need parking, it is bad for the environment. Plants and trees will have way more benefit for the community, and this project should have maximum long-term community benefit.
387	Sections are fine but its a bit confusing to understand where these conditions would be along Summer St. A plan diagram would have been helpful.
391	I will never need parking there. I will use it as a path, and 6ft buffer is nicer. Don't forget, if no one is parked there, that street will be wide, and the cars will go fast. Careless actions could take them right into the shared path, esp with a 3ft buffer.
395	I'm torn. As a cyclist, I LOVE the big multi-use lanes and the addition of greenery. I also am all for making it less convenient for people to drive so that other transportation modes benefit. But I also drive certain places and have a disabled child, so I value parking and I know that not everyone can use public transit all the time.
396	I do not think there's street parking there now, so why start?
397	Narrower vehicle travel lanes would encourage slower speeds and be safer.
398	The buffer improves the park and the parking is unnecessary. The Mystic River Path is a linear park and there isn't a need to park along every foot of it.
400	No preference between the two options.
409	On-street parking is essential for playing fields along Summer Street.
425	Why does the concept without parking have wider lanes? I like this concept, but would like to see the lane width reduced to 10 feet, as that will make the road safer.
428	I live at the intersection of Summer and Mystic street. The current informal parking situation on summer st near Buzzell Field is fairly dangerous, limiting visibility and making pedestrian/bike crossing very difficult. I frequently try to cross the street with a stroller to get to the bike path and have to contend with drivers that can't see me and cars swinging around cars that do stop for the crosswalk. Parking is available on the adjoining neighborhood streets.
431	A wider shared use path with a landscape buffer will have a much safer and pleasant look and feel for families. There is plenty of parking along side streets and at area businesses.
440	There's minimal need for parking along here.

ResponseID Response

443 Narrower road makes driving more dangerous, especially in the winter when streets narrow more with snow build-up. I am also in favor of prioritizing walkers/runners/cyclists over drivers/cars/parking.

447 although we need to swtch away from cars, if no parking then it will become a fight or people will feel their needs not important. let's retain some parking.

452 Both the wider path and the narrow vehicle lanes would be ideal. Narrower lanes would translate to less speeding and make the road safer for users of all travel modes.

453 Wider path is always preferable to minimize issues with bikes and pedestrians.

455 While I would like to maintain parking (slows traffic, enables modal shift), keeping some geenspace is more important (breaks up impermeable surface to allow infiltration and temper heat island).

460 A LOT of people park on Summer St. for use of the park & playing fields. I don't think it would be wise to completely remove parking in the area. I'm guessing that with this proposal there will be parking on only 1 side of the street, which is already a reduction.

461 Summer Street draws many users to the sports fields and a no-parking design would push lots of parking to the neighborhoods.

462 If 10' lanes are possible in Alt B, I would like to see them in Alt A. While I don't drive or want to see or encourage more driving, I like narrowed lanes as it slows traffic and parked cars are also better barriers for cyclists, runners, walkers. Alt A would be better for with green drainage swales, at 8' wide, with 10' travel lanes

463 I prefer the wider path and buffer, but I suspect maintaining parking for the field users is a more practical option, and I don't really object

466 It is dangerous to have cars and bikes share the same road. I was almost killed going east on Mass AVE in Arlington, when a car, going west, made a left turn between two stopped cars during rush hour going east in East Arlington, when I was the "bike lane" Bike lanes on the same street as cars are dangerous for bikes. Go to Montreal, Canada to see how to set up bike lanes safe for bikers.

476 my preference is based on the assumption that Summer St is quite busy and maintaining street parking would be dangerous/a bottle neck. However, if Summer St is not busy (would love to have the map present to refresh reference), I do not have a strong preference 1 vs the other. I do like the image of maintaining a small amount of green space where possible.

ResponseID Response

486	I strongly support alternative A to enable a wider path and more comfortable streetscape. Additionally, all businesses and residences in this area already have off street parking and there is significant additional street parking in the surrounding neighborhoods.
487	Option A works best as that provides extra space for biking however that street is used for parking during games at the fields, that could be an issue
490	So many plans do away with parking, but people still have to drive and not being able to park is a problem. Elderly people might not be biking or walking long distances, and need to drive and park
495	Parking is already so challenging so I think we shouldn't eliminate parking entirely
499	Buffered path for bikes and pedestrians is needed on summer street as the existing infrastructure is extremely unfriendly for anyone other than motorists and there are lots of parks and businesses that could be better served.
504	I recommended burying the utilities. Parked cars making crossing Summer St on game evenings a challenge, so consider parking along a limited segment adjacent to the Buzzell field where there is room to keep the travel & parking lanes standard widths and negotiate after-hours parking at FreshPondSeafood; no parking at the much narrower Arlington Catholic segment. Improve crossing safety to neighborhood streets and shared parking lot - visibility, lighting, striping, and median signage. (Moving the crosswalk at Victoria Rd helps if SUV's are not parked up to the crosswalk.)
510	Assuming that there is space on nearby side streets for families to drive to Buzzell Park
511	Maintaining parking will reduce neighborhood opposition, hopefully.
513	Parking here is heavily used for sporting events at the fields. I probably prefer Alternative A for myself as a biker, but I think B makes more sense for broader usefulness of the area.
515	Always prioritize use of space for pedestrians over storage of private vehicles in parking spaces.
521	Parking in this area seems unnecessary, and the green buffer seems much more attractive.
522	The sports field users are going to need guidance about locations for safe & convenient parking. Please don't keep parking here just for occasional usage and if you do, please find a way to install hardscaped daylighting around the Victoria Rd crosswalk.

ResponseID Response

525	I'm tired of wasting time and fuel on Pleasant St and Mass Ave at Swan Place due to narrowing and calming traffic lanes. Bike path should be on on Cusack housing Buzzell Field side of Summer St. Do it right the first time.
527	I do personally prefer the wider shared use path, but recognize that continuing to allow parking makes this plan more palatable to all.
530	We should prioritize walking and biking over parking.
532	Prefer more green, but recognize need for parking in the area so no strong preference. Narrowing to slow traffic is good, too
533	A wider path and more green space is always preferable, but if the car-heads go ballistic because of the parking removal (as they're likely to do), I'd rather have some path than have the whole plan be held up over the parking issue.
540	Unless clearly demarcated, shared use is problematic for bikes. Our choice is to go at a walkers pace or "buzz" people who are not walking in the right are or are walking four abreast, etc. So the wider the better to avoid conflicts with differing and non considerate or attentive people.
542	Hello, I support a landscape buffer because I think it's safer for bikers and walkers. I like the idea of no parking on that part of Summer Street, but where will spectators park who want to watch games on the AC field? There needs to be a good solution.... dual use of Fresh Pond Market parking lot? I don't know where you put all those cars if they can't park on Summer but I like the idea of no parking. Useful, right? Sorry
545	Parking makes cities be designed for cars and not for pedestrians and cyclists.
547	I can't recall exactly but I don't think there is much existing parking and I always prefer to add a bit of green space, it makes a huge difference
553	Unless our cars are getting smaller- which doesn't seem to be happening reduced lane size makes no sense to me. I commute daily and am not seeing bike volume to justify this. New England weather is NEVER going to make me interested in biking to work or to any of our public transit spots.
555	Was there even parking here originally? I feel like mystic lake has plenty of parking options for people who want to enjoy the parks. I can't speak on the housing in the area though, i live in somerville.
559	Summer Street is very crowded now with cars when the fields are used in the warmer weather. Mill Street is very slow and at times impassible also for cars. It is even worse for pedestrians trying to cross the bikeway on the sidewalk on busy days.

ResponseID Response

563	Too narrow already, very narrow existing sidewalk on south side. Please, stakeholders/planners need to take the long walk to familiarize themselves with the roadway, originally indigenous peoples pathways!
568	I think a buffer would look nice in this area. There's a lot of local pedestrians so parking shouldn't be a major concern if people live in. The area
569	As a vehicular cyclist, I'd likely be riding on the road in this section.
575	It would be good to open up the side streets to street parking in alternative A. But I still like Alt A better in spite of the parking loss.
580	1) Cars parking/unparking along Summer St *already* clog traffic and make driving there fraught. With a narrower street, this seems unlikely to get better, and would probably be worse. 2) Better pedestrian access means parking further away should work a bit better. 3) It creates a clear division of "car transit space" and "not" - no ambiguous middle ground for accidents. 4) We should be looking to modestly reduce parking where that's reasonable and creates opportunity: short-term to encourage alternate forms of transit, medium-term because self-driving cars will allow for lower parking demand.
584	I'd prefer the landscape buffer; at the very least, it can provide an option for a raingarden/stormwater management facilities.
585	I prefer having the wider buffer and find the parking in that area dangerous anyway. I do acknowledge that parking may be a necessity.
587	I see cars parked here all the time. Where else would they park? I assume these are people who use the field.
591	We need to make it easier and safer for bikers and pedestrians.
598	A wider path invites more usage. Parking is not severely restricted in that part of Arlington so it shouldn't be a great loss.
600	It is not my neighborhood, but I have parked there many times when my children played sports. The parking is useful. I expect to use the shared-use path, and am happy to have a three-foot buffer.
603	Narrow shared use paths create more opportunities for problem encounters between fast moving bikes and runners vs slower pedestrians. Also plants are nicer than concrete for separation. Additionally, narrow lanes for vehicles with a narrow parking lane could create unsafe conditions for people entering and exiting their vehicles. This is not an ideal place to parallel park.

ResponseID Response

612	We need parking here for the sports field where my kids play and others have team sports activities. It is already difficult to park here as the side streets all park up as well. If we took the parking on Summer Street away it would be impossible.
621	Path should be prioritized over car parking. Car parking is less necessary and makes inefficient use of public space.
622	Failure to provide street parking makes it necessary for delivery vehicles, Ubers, etc to stop in travel lanes. This creates an unsafe situation.
623	I prefer the plan that prioritizes alternatives to car transportation and increases green space.
624	There is currently no designated space for street parking on Summer St. Will the second option create parking spaces?
629	All I care about is a buffered bike lane! In theory I want to remove street parking because cars are a (necessary) evil, but I suspect maintaining street parking possibilities will garner wider support.
630	Parking is the main issue. Currently parking occurs on both sides during games. If you ban parking it will go into neighborhood.
631	With Arlington residents and a robust walking and bike path, modestly reduced parking on the main street is a reasonable tradeoff and the landscaped space is another amenity to town.
633	Wider traffic lanes are just safer. Many's greets around Boston/Cambridge are too narrow and it's dangerous and hard to see around corners.
634	Summer street is too narrow to accommodate parking safely now - this would only exacerbate that.
641	I'd prefer the wide, shared use path, although I know that parking along summer street is essential for the use of the soccer and baseball fields located there. Is there a plan to create designated parking for events at those fields?
643	I think the priority should be to keep as much green space as possible. I also don't think parking should be as much of a priority if you are hoping this design will increase the use of more sustainable transportation options.
650	There is concern of parked cars opening their doors into bike lane but with proper signage and design this can be mitigated.

ResponseID Response

653	I like option A with a wide shared use path. But I would like to see parking added to Mystic River Road on the other side of the River so residents can drive down and park and then use the path. We like to use our car to transport the bikes to a bike path to keep the family safe.
654	I don't think I would bike in this section. there is already a sidewalk.
655	Please take snow removal into consideration. Where will plows put the piles of snow after moving it off the road and bikeway? Need a buffer! Take snow removal into consideration for the one 12ft vs two 6 ft paths on MVP as well.
658	I'm concerned about how the path will effect the natural landscape.
659	no more stone dust!!! it's terrible when it rains and gets stuck in my shoes.
664	A wider path is better for everyone to use comfortably. The landscape buffer will make it look nice and create a better space for people to enjoy.
667	I would prefer a wider path but people should be able to park so I'm going with the second choice.
669	As a bike commuter, Alternative A actually sounds like a much nicer option. However, as I do not live in this neighborhood, I'm unsure of what parking options are available for those using the public fields other than the parking on Summer Street/ how removing Summer Street parking would impact this neighborhood. If Alternative A has support within the neighborhood community, then I am absolutely all for it!
675	How to accomidate parking for events at Buzzell Field? However, as-is, the situation is not great when cars park on both sides.
676	Either will make me happy, but I imagine there will be less conflict if we choose the concept that preserves some parking.
677	The playing fields on summer street require street parking, otherwise cars will be forced to park on residential streets which already can get quite crowded.
686	I'm being selfish choosing green buffer. I always favor more plants and bigger dividers between cars and bikes. But this is not a place I ever park and don't often drive, so don't feel I know much about how hard parking is here or should have a say in it.
688	Travel for everyone is more important than parking.
690	I hate parking, so probably biased. But, what I do know, is that if you build it, they will come. On a nice day spend a few minutes on Minuteman. Or any other path in the Greater Boston Area.

ResponseID Response

692 There's a lot of truck traffic through that area, so 10' travel lanes, along with people getting in and out of parked cars, would make an already congested segment of the roadway into a nightmare. That said, be sure to preserve the right-turn only lane at Summer and Mystic, by the police station. Losing that would make traffic backup to Mill St worse than it is today.

693 While I would prefer to completely remove the parking, I don't think that is practical unless you have robust plan for replacing the lost parking. Otherwise, there will be strong community opposition to the parking removal. There will likely be strong opposition to any reduction of parking.

694 Aesthetically and environmentally I would prefer the landscape option; however, I don't know what amount of parking is currently used in that area and when. If parking studies indicate that this parking is currently used and other options aren't provided as part of the proposed alternatives, then the parking and narrower path may be a better choice.

698 While I prefer the wider path, I understand that parking on Summer St. is very valuable, so I'd be happy with the narrower option if necessary.

699 Either would be a huge improvement. However, bikes need access to the rest of the street, for turns.

700 More space

701 Open to both: Short term need for parking for the area; a separate lot might help. Long term transport is in doubt for the need to maintain parking when our car/transport is autonomous.

703 Narrower travel lanes are scary as a driver.

705 landscaping in the first set up is often overgrown (as seen on Comm Ave in Boston) and has lead to car accidents or near accidents when cars have to turn and can not see on coming bikers or walkers.

709 traffic safety is an important consideration

710 As a driver, I prefer wider lanes and safer parking (public lots away from moving traffic, cyclists, pedestrians and children, etc.). As a cyclist, I definitely prefer a larger buffer from cars. Keep in mind, open parking spots are not only dangerous because drivers and passengers are opening doors or not looking out for cyclists and kids, but also because ride-share (Lyft, Uber) will use the spots as temporary pickup and drop off spots. Ride-share users are far less likely to be aware of cyclists and children, in my opinion. Please consider adding nearby public parking areas elsewhere in Arlington.

ResponseID Response

714 This is a route that I bike and run on but not drive, so I don't care about parking personally, but obviously people who have to live there or go to work near would need to park

716 People do park on summer street especially near the Arlington Catholic field. I feel like that can stay.

717 While I understand the value of parking in the area, I'm nervous that it would lead to more accidents and living in the area I know that many of the poles are hit by cars where they are in other areas to make the community safer. Having a larger buffer feels safer

726 This option will have wider community support. Parking is essential during events on the ball fields.

729 Walking along Summer Street at the moment is unpleasant because of the speed and volume of car traffic. As far as I imagine, some of that unpleasantness might be mitigated by having a wider buffer - especially if there is vegetation. But what would happen to existing street trees in either plan? Would hate to lose any.

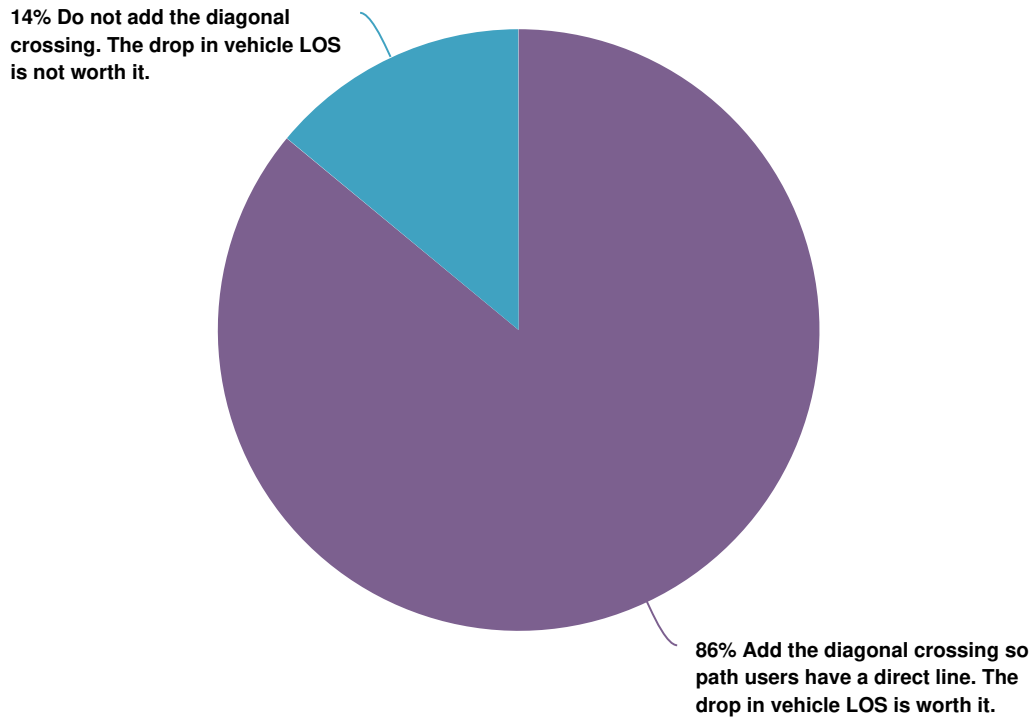
731 Parking is needed for sports events, so this is a tough call, but I believe in going big on becoming a city where the bike is the go-to option. It's how to adapt for a better future.

736 Only concern is 11' travel lanes are too wide and will result in speeding traffic.

741 Pedestrians and bike paths are intended to reduce cars in urban settings. Adding parking spaces nearby goes against this and invites more cars.

742 Street parking and bikes often don't mix well

6. What is your preference?



Value

Percent Responses

Add the diagonal crossing so path users have a direct line.
The drop in vehicle LOS is worth it.



86.0%

431

Do not add the diagonal crossing. The drop in vehicle LOS is
not worth it.



14.0%

70

Totals: 501

7. This concept would make me feel safe and comfortable when:

	Strongly disagree	Disagree	Unsure	Agree	Strongly Agree	Responses
Walking						
Count	17	11	73	195	197	493
Row %	3.4%	2.2%	14.8%	39.6%	40.0%	
Biking						
Count	19	8	94	192	176	489
Row %	3.9%	1.6%	19.2%	39.3%	36.0%	
Driving						
Count	14	10	77	207	179	487
Row %	2.9%	2.1%	15.8%	42.5%	36.8%	
Totals						
Total Responses						493

8. If you disagreed or are unsure for any user category, please tell us why: (100 word maximum)



ResponseID	Response
17	Driving through any rotary in the greater Boston area is always requires a quick prayer.
18	The crossings may still be too close to the rotaries. Maybe a wide one in the middle of the bridge. If you keep the current design, maybe you should make the crossings wider
20	This is the most important part of the whole project from my perspective. It would make an enormous positive difference for everyone involved, in my opinion. The Medford rotary, in particular is extremely dangerous for cars, pedestrians, and walkers.
25	It isn't clear to my whether bikes are meant to use the crosswalks or take the lane with vehicles.
26	It seems like this would be an improvement over existing conditions at this intersection. I am not sure how cyclists are meant to navigate this intersection (take the lane vs. separated bike lane over bridge). Cars frequently ignore the existing crosswalks at the roundabouts, and i'm not sure if anything in this proposed design would make them stop.
28	It's hard to analyze all the individual intersections and crosswalks of such a complex design. It's definitely a big improvement over the current state, but I'm not sure that it will always be clear to each type of user where they should be looking for other users.

ResponseID Response

- 29 The right of way ambiguity for cyclists using crosswalks is tricky in complicated intersections. I'm not sure how comfortable this would feel in practice.
- 39 I wonder if traffic lights in lieu of the rotaries would be safer for all involved, rather than having ones head on a swivel watching for two legged, four legged, two wheeled and 4 wheeled movement when crossing the street. With lights (with pressure plates, to reduce wait times for autos if road is clear), distractions seemingly would be reduced and bikes and pedestrians would have a clear and safer path when traffic is stopped for them.
- 47 With some other rotary designs (eg, powder house) the level of separation between bikes and cars makes it scary as a cyclist to re-enter the flow of traffic. It's a little hard to tell if there would be barriers between bike lane/cars that might contribute to this.
- 51 Automobiles have blind spots. Do not trust riding, walking at those two rotaries. Poor visibility.
- 52 The main problem is biking from Arlington turning left at the bridge then north up Mystic Valley parkway you must go around 2 circle in a vulnerable way? If there was a bikeway that avoided the circles altogether it would be better
- 58 I'm having trouble understanding the image well enough to have an opinion (particularly re: what's bike/pedestrian only).
- 61 It would be good to know how car speeds will be managed on the approach to each rotary. It appears there may be there may be tables at each crosswalk, is that correct? Also, I presume this sketch does not accurately show the geometries, and I'd be curious to know how directly or obliquely cars will approach the rotaries in order to reduce their speeds. It would be good to provide provide direct crossings for pedestrians strands to the mystic river Greenway as much as possible. Right now, the rotaries rotaries are somewhat uncontrolled, difficult to cross.
- 63 I am just having a hard time visualizing what use of the rotaries and bridge would look like in practice, so I put unsure.
- 67 will drivers pay attention to see and stop for pedestrians?
- 70 not sure multi-direction bike lanes both sides are needed, tho they are nice and narrowed drive lanes will slow traffic
- 71 I don't bike in that area
- 75 As a driver it seems like too many crosswalks where you might encounter pedestrians/ bikers.

ResponseID Response

77	Encouraging pedestrian crossings at these high volume commuter rotaries will be dangerous - many bad behaviors (especially by trucks/buses) encountered here already. Frustration levels will increase
85	it will all depend on how wide the lanes are (not shown) and how easy the connections at the end are. If cumbersome or if difficult to navigate pedestrians (e.g. old BU bridge) bikes likely to end up going on the general traffic lanes.
96	I feel I'm taking my life in my hands walking this area now. I'm not certain this includes the walkway under the bridge at Whole Foods, but it's treacherous w motorists jockeying for very narrow lanes, going 30 mph and not even a guard rail to protect you.
102	Not yet clear how visible people walking would be in this scenario.
107	I don't bike.
108	This is a big change, and key! Pedestrian/bike crossing of the bridge/rotaries is pretty sketchy right now. Good to slow down traffic too and some cowboy driving around these rotaries.
110	Not sure drivers would stop for crosswalks.
121	There are a LOT of crosswalks which seem like they would be difficult and slow to navigate as a driver. There is also another crosswalk nearby on High St, just up from Jerome St.
124	Its going to impede traffic. Should only have bike lane on one side of the street, not 2 way on each side. That is too much.
133	The roads are so wide it is hard for me to imagine feeling safe crossing from high st to the bridge on foot. Are those green triangles pedestrian islands midway across the street?
138	Rotaries are safer for vehicular collisions, but not always safer for pedestrians.
141	For those cyclists that commute and stay within the traffic speed, I would want to make sure that the car lanes are also accessible to bicyclists with bicycle markings on the ground where cars use these lanes.
142	This is not good. Drivers entering the rotary from MV Parkway north are looking to their left, not to the right where path cross walk will be. Folks crossing High St bridge on the path will be at great risk.
147	This makes sense to me.

ResponseID Response

161 This is treacherous now and will still be. It feels now like it's very dangerous to cross. We need a light that a biker or pedestrian can push for so that traffic stops .

165 It's not clear to me how bicycles cross Medford St/High St. Do they dismount and cross with pedestrians? Do they ride across the crosswalks?

167 I can't see any reason to have 2-way bike lanes on BOTH sides of the bridge. 2-way bike lanes suck. You could have wide bike lanes on either side, but make them one way.

168 I don't understand the need for 2-way bike lanes on both sides of the bridge.

172 It looks from the drawing like I wouldn't have to bike around the circles and instead would use a bike path and crosswalk. This seems much safer for biking. Driving through this seems fine too but improvement to biking safety looks great.

179 Again - why do we need a separate bike route when we already have one that is heavily and effectively used? Keep this space for pedestrians.

183 I don't have a car so am not familiar with driving in these areas

186 I like the approach, but for this to be successful cars really need to/be induced to slow down or stop before entering the rotary, the rotary to be narrowed to enforce a single lane of traffic, and crossing lights prioritized for non car users.

187 Not clear how safe biking through the rotary will be, but the bridge seems good.

189 no bikes! they have the bikepath and almost no bikes ever use the Alewife Greenway. So you are connecting to something no one bikes on. Lots of people run and walk along there though.

191 I don't drive, so not sure how to answer that line.

192 With the current design, I feel most safe crossing in the middle of the bridge because traffic has time to see me and react. I am not sure if locating the crosswalks so close to the rotaries will be good for pedestrian safety.

206 Drivers using the rotaries to take right turns are looking left (for traffic), not right (for bikes/pedestrians). Narrower approaches won't curb this behavior.

237 I am unsure pedestrian crossing next to a rotary is safe.

ResponseID Response

241 As a pedestrian I really want cross walks on the bridge side of the rotaries...that said, as a driver, two cross walks could make it difficult to get across the bridge as that area can get busy, especially on weekends. Perhaps a single area to cross or a pedestrian/bicycle light as was done on Lake Street in Arlington

247 I still worry that cars/trucks drive too fast in general... hopefully these changes really will slow them down.

252 Drivers are maniacs here, especially when leaving the commuter rail station in Medford. You'd need cops ticketing people for a solid month to change driver behavior. I'd want sturdy barriers stopping drivers from crossing into the bike lines, and raised speed tables at each crosswalk across the rotary.

268 Drivers frequently don't yield at rotaries, especially a problem with disabled pedestrians

276 One of these crossings already exists - the one on the north side of the mystic valley pkwy rotary. I use it very regularly on walks and runs. Vehicles block it all the time. Vehicles move very fast through these rotaries. I think there need to be flashing lights or a raised crossing. For the crossings on the high street bridge, if it was just a painted crosswalk, I can't imagine I'd feel safe crossing these with children, especially children on bikes. I'm sorry this isn't more constructive or helpful. I'd love to be proven wrong.

285 walking across the rotary entrances, the crossing looks a bit long. providing an island in the middle would shorten the crossing distance and make it safer.

290 The rotaries are already unsafe for driving, so I don't think they will be worse here. I worry about lane changes - whether and how well drivers adjust to them.

298 Don't drive in this area

299 Biking standpoint: getting though the rotaries involve several ped crossings, rather than just flowing with traffic. Driving standpoint: while making the rotaries more organized is great, there are many potential conflict points with bikes, who may sometimes be coming from an unexpected direction.

310 I bike through here from arlington to get to the West medford train stop. I just need more clarification on how the bike path would go through here and connect to that street

328 Will traffic actually stop for pedestrians here, i feel that the giveaway <<< signs havent done much to make me feel safer when crossing Powderhouse Sq, i see the same problem happening here. How about a button to flash stop to oncoming traffic at the crossings?

ResponseID Response

342 Totally agree. Very safe design.

357 Need marked crosswalks now, not later.

363 I can't really tell what's going on here. To make a left turn at from the bridge to the parkway would I ride around a much much wider circumference of the eastern roundabout? I'd probably just stay in the street.

377 Unclear how safe the crosswalks at the rotaries will be, cars regularly enter and leave without looking for pedestrians, hopefully safe solutions are used here

387 There is way too much ped/bike infrastructure IMO and hard to know where to expect bicycles or not when walking in the area. The solution needs to be simpler.

395 That double-rotary area is a MESS. Even driving is dangerous because people act like it's not a rotary and just barrel through. Adding clearer markings would make me feel a little safer as a driver, but as a pedestrian and cyclist I would be nervous going through that area unless I was able to stay on the sidewalk 99% of the time. I'm just not convinced that ANY additions, aside from making the rotary a lot thinner, would improve driver behavior.

411 Crossing at a rotary without traffic signal

423 Biking is my primary mode of transit through this area. This proposal looks a lot like what has been done in powder house circle in Somerville. The designated bike route actually feels much more dangerous now, because bikes now have to cross each road intersection instead of having the right-of-way like vehicles once in the circle.

428 As a driver, I would be somewhat worried about keeping track of the new crosswalks while also managing entering and exiting the rotaries. As a pedestrian and bicyclist, I would worry about cars swinging in and out of the rotaries too fast. Also, the eastern rotary is too small and cars "straight line" through it without stopping.

455 Tightening the roadway is the right call. But no doubt, there are those that will not slow down as expected.

458 I'm less in favor of bidirectional bike lanes on both sides of the bridge. I would propose bikers need to ride in the direction of vehicle traffic in both directions. Too confusing for all involved.

ResponseID Response

460	I have never walked this area before, but I have driven a car and ridden a bike through it many many times. It seems like a much safer option than what we currently have, especially preventing cars from barely acknowledging it's a rotary and travelling straight through.
466	This survey is pretty useless. It has only closed ended questions. I don't know what a "buffered" lane is. Don't use such weird jargon. And the survey has only yes or no to choices, when other choices should be added. The maps are not clear.
468	General driving on rotaries is a problem in the US. Drivers don't know what to do. I like the way Sommerville dealt with the Powderhouse rotary. It's not pretty but at least it functions. Thinking about clear instructional signs.
476	I would feel safer if the bike paths were protected, both as a biker and driver.
490	I don't understand this! I am familiar with the intersection.
491	They are hard rotaries to navigate while driving since many drivers do not yield when they are supposed to. This makes it hard to also be on the lookout for pedestrians. It would be safest to install flashing pedestrian signs as used around Tufts University to help drivers take notice. They can be initiated by a pedestrian and therefore only impede traffic when a pedestrian is actively crossing.
493	Unclear if crosswalks are elevated/what the signage is, what the sight line is. Too many drivers totally ignore crosswalks. I'm sure it will be better than what we have now but would like more details.
495	I'm sorry I think I don't understand that intersection well enough to comment
499	The current situation is extremely busy with high speed motorists who do not look for bikes or pedestrians. The redesign needs to make it impossible for vehicles to speed and easy for them to see and yield to pedestrians, bicycles, and other users.
504	Cycling clubs race around the lake using the street,Recreational cyclists & bike commuters seem to jump on/off the pedestrian/shared path, increasing conflicting travel & crossings. Pedestrians xing High Street have to look for two-way bike traffic, cars, before reaching traffic-island! I raised concern about the setback ped-xings, understanding that traffic is being slowed & you leave room for one car to stop for pedestrians before entering a spoke. Will that car be rear-ended? What about the cyclists using the rotary? Please give an example where this concept exists with a double rotary, truck/bus traffic, pedestrians and cyclists of all levels?
508	Because no drivers pay attention ever in that area

ResponseID Response

- 525 I cross MVP about 30 yards BEYOND ond Winchester Saving Bank, due to drivers speed thru rotary and distractions from competing vehicular traffic. Also I cross in MIDDLE of bridge. Keep is Simple. Keep Crosswalks far from rotary.
- 528 This is a very, very tricky and dangerous rotary that sees quite a bit of traffic. Making this rotary more complicated and with more traffic will certainly result in accidents. Many people don't know how to navigate this rotary already.
- 529 It seems that the bridge would be unsafe for pedestrians with bikes zipping by on either side. How about making a bike lane on one side and a pedestrian walk on the other?
- 530 Bike lane path has several turns. Seems possible this will cause some bikers to take their chances with the rotary.
- 531 I've seen 3 accidents in the Medford street rotary and it's hard for me to imagine feeling safe there, but I'm hopeful that the new design would improve things.
- 547 This change is better than what it is today and I already bike and bike this pace. This would be an improvement
- 559 I think the rotary is unsafe in general. people go around it at high speeds. Drivers do not realize that those in the rotary have the right of way and do not wait to enter it. I am not sure painting paths will change much of what goes on. Remove the rotary and put in lights.
- 563 These are the improved 20th century updated roadways. Dangerous to place crosswalks on rotary entries driving over/downward off of bridge in both directions. State police need to enforce speed of oil/gas tankers, trucks, buses, etc. Do not delete right turn lane from Summer/Mystic Sts.
- 569 I am often riding through this rotary on route 60 and am worried that the bike lanes would make it harder, not easier, to take the travel lane and proceed through the rotary
- 570 I'd rather have a separate pedestrian/bike bridge over one side of the river. This double roundabout scenario is already pretty scary to drive, I can't imagine how much more complicated it would driving this route with so many more lanes of foot and bike traffic.
- 574 If it's going to be like the one on Broadway near Tufts. No. That's a disaster

ResponseID Response

575 It's hard to judge what it will be like to bike through this. I bike a fair amount. These rotaries are super dangerous now with aggressive driving and "rotary bombing" a big feature of them. If all you did was tightly narrow all the lanes, so the cars _have to_ slow down, this'd be a big deal. But I can't tell from the pictures whether that happens here. Also, not sure the bike crossing in front of rotary is going to be safe -- unless it's a speed table. This rotary brings out the worst in drivers.

580 Walking: the crosswalk at each end of the bridge won't be very visible to cars coming from the other rotary due to the bridge's arc. At current car speeds this seems dangerous. If the redesign promotes cars going much more slowly over the bridge (via narrower lanes, painted arrows, those poles that make the street feel more crowded, islands, median curbs, etc) then it seems good.

587 As a cyclist or pedestrian, I'd still be highly vigilant, not sure that cars would not hit me. As a driver, I see that I would need to be cautious about cyclists and walkers before I enter the rotary; next I need to be cautious of drivers so that I can get around the rotary, but then immediately after making through the rotary I have to again be cautious about cyclists and walkers -- it is enough to put me on high alert three times successively! Rotaries are already a bit confusing for drivers. This is good, but also nerve-wracking.

589 I would feel safer

591 This is currently a death trap and as a driver and pedestrian I hate it. It is so important for there to be safer pedestrian crossings with clear signs for cars.

603 As a cyclist, I often would rather join the vehicle flow in a rotary because it is more efficient than crossing at each spoke. I'm also concerned that vehicles exiting the rotary are less interested in yielding to peds/bikes crossing a spoke because the vehicle just entered the circle and their objective is to exit quickly. Vehicles do not want to stop in a traffic circle. As a driver exiting a traffic circle it is difficult to see cyclists and pedestrians waiting to cross at a spoke because my line of sight to them is obstructed by the A-pillar

612 This area is already congested and the cars sitting there waiting to enter the rotaries are killing trees with their emissions if you narrow this roadway they'll be sitting there longer

614 I have no idea how this would work in actual conceptualization

617 I do not drive

622 Vehicles often proceed at high speed along high street into Medford. Without a change to traffic flow, or pedestrian warning lights, I would not feel safe crossing rt. 60 when there is traffic.

ResponseID Response

623	Walking and biking through rotaries almost never feels safe, but I really appreciate the thought you are putting into this. Some way of ensuring calm/slow vehicle speeds (maybe speed bumps?) would help with safety. Or, flashing lights to warn cars that pedestrians are in the crosswalks.
631	Slowing traffic on those rotaries is not desirable. It already gets backed up during rush hour and the train station in medford is another bottleneck.
634	Drivers are concentrating on the traffic coming into the rotary from the left to see pedestrians in the crosswalk to the right. Crosswalk should be at center of bridge where drivers from each side are looking forward.
641	I have crossed through these intersections as a pedestrian MANY times, and I simply cannot imagine how crosswalks at either end of the bridge will be safe for pedestrians without extra signaling to cars in the rotaries. It certainly is not safe to cross any of these intersections currently, so perhaps extra crosswalks would be an improvement, but the only safe pedestrian crossing I can imagine is in the middle of the bridge, with a well marked zebra and a yellow/red pedestrian light.
644	Are these crossings signalized? If not, I'm not sure it will feel much different than current conditions which are not comfortable to me in any mode but my car.
652	Biking tends to be a little hybrid largely out of necessity - some using sidewalks/crosswalk lights as if a pedestrian, sometimes using the road. I think unless clearly marked, bikers will take both options and it'll be hard to determine who yields to whom.
659	people go very fast through these rotaries, some people do not even realize they are going through a rotary until they are mostly through it. crosswalks are a good start, would love to see push to flash pedestrian crossing signs or yield/stop lights to draw more attention to crossing
664	The distances for walkers seem very far apart, and people might just decide to cross where they want to... like they do now.
668	I am not certain the crosswalks will sufficiently slow cars who blow through the entrances at his speed. Currently these areas are extremely dangerous to pedestrians. I have been nearly hit by vehicles in the crosswalk here.
670	Would like to have raised crossings for pedestrians and plenty of visible, flashing signals to inform cars about the passage of bikes and pedestrians. Without signage and raised crossing, cars just don't care.

ResponseID Response

675	Cars (going straight eg over the bridge from Medford or High Sts. go at a pretty high rate of speed. Their view forward is obstructed and their attention is to the right so they may not see people in the crosswalk. I experience this now crossing even further toward the center of the bridge.
676	That has always been a particularly difficult spot for pedestrians.
690	I don't make decisions based on driving.
692	If this drawing is accurate to represent rotary entrance points, then I see a problem where the MV Parkway south bound enters the Medford rotary. With the stopping point that far back, cars entering from MV Parkway will have very low visibility to the traffic entering from High St, making it harder to gain entry to the rotary during high traffic times, and increasing the likelihood of accidents, especially at night. There is a large house with several trees at the corner of MVP and High St that makes it impossible to see oncoming traffic from that far back.
693	I think the proposal is a great improvement over existing conditions, but this is a complicated, busy area and I think it will continue to be challenging and stressful for all users because of the multiple multi-modal mixing areas and large number of intersection approaches.
694	Placement of crosswalks is slightly concerning since cars making essentially a right turn may not recognize pedestrians in that crosswalk until making the turn. If the rotary is narrowed to limit speeds, or once people are used to the concept, I'd probably feel more comfortable.
696	It's unclear if there's a barrier between cyclists, pedestrians and cars, and what kind of barrier.
699	There are too many street crossings by bike, eg from MVP eastbound to MVP northbound crossings at Rt 60, MVP, Arl St, Rt 60. Drivers must contend with bike traffic on sidewalks at intersections; I do not trust them to pay attention.
702	The diagram is not clear to me
703	As a driver I don't really think about this intersection. But when I am biking there, especially with kids, it is very scary to navigate. I would love better bike access!!
705	As long as there is significant signage for drivers to alert them that they might have to slow down at the crosswalk immediately after exiting the rotary, this option should be safe.

ResponseID Response

707 Unsure of what changes are occurring? More shared access on the bridge? Feel unsafe with current state, vehicles too reckless in this intersection. How are the pedestrian crosswalks Updated? Bridge doesn't seem have an issue currentlh

709 I do not bike in this area.

713 Unsure of the need of two way bike lanes on both sides?

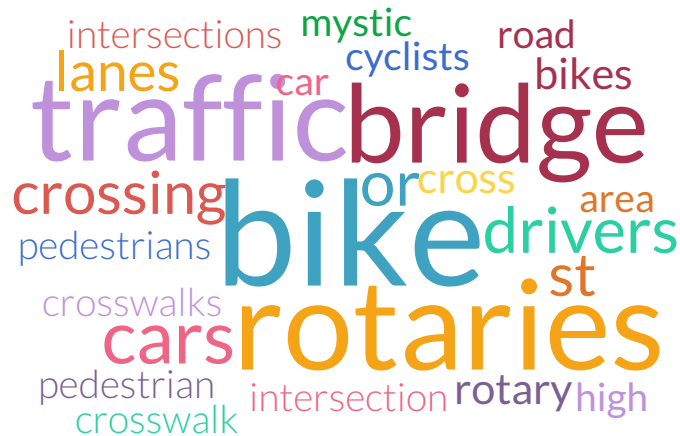
722 I'm unsure about whether this would make cars really angry and make me feel unsafe biking!

726 My hesitation is that only traffic signals (or persistent enforcement) will make it truly safe to cross High Street.

729 I drive through here frequently and my perception is that there is not much traffic generally, either vehicles or pedestrian. If there were more pedestrian traffic, I would find it more worrying to negotiate.

736 Two way bike paths on the wrong side of the road or going the wrong way around the rotary seem a little weird and could lead to conflicts with cars since they wouldn't expect bikes to be coming from the wrong direction.

9. What other comments, concerns, or questions would you like to share about project intersections? (100 word maximum)



ResponseID	Response
15	A vast improvement over the existing condition.
17	I Avoid crossing a road whenever possible.
18	We would like to see flashing yellow lights when people are in the crosswalks.
20	In general, I really would love to see the diagonal cross at Mystic St. in Arlington, but the traffic backups coming up Mystic Valley Parkway would get simply too long with a shorter vehicle light there. Could the whole signal cycle be made longer to avoid the downgrade from D to E? I don't think I would mind waiting a bit longer to cross diagonally as a biker/walker.
21	I think that bikes should somehow be encouraged to use the pedestrian crossings and not merge with traffic on the roundabout. Just feels too dangerous to have bikes in the road there.
23	Narrowing streets and giving cars better direction is working well locally. For example, the Powderhouse rotary in Somerville, in my opinion, is a smashing success.
25	I got hit by a car in one of these roundabouts while biking last year; now I avoid the roundabouts during high traffic times, despite the fact that they are the only access to my favorite bike route. Finding a safer way to bike through these roundabouts (without too much starting and stopping) is the single most important part of this project to me.

ResponseID Response

- 27 Summer/Mystic/Mystic MUST be a single phase crossing to support the important goal of enabling all abilities and ages of users. Arlington Center went with two phases due to external constraints on LOS and I think it was a big mistake. It's unsafe and very uncomfortable for kids or novice riders. The ends of Kimball Rd and Davis is where snowplows dump all their snow. Offsetting the path will minimize damage to the path and obstructions from huge snow banks. The Mill St bike path crossing should have a red/yellow/green signal coordinated with Summer intersection, like Lake St.
- 28 For Summer and Mystic, the diagonal is great, much better than the horrendous double-phase crossing of Mass Ave eastbound on the Minuteman. At Harvard Ave, I would advocate for a pedestrian/bike phase every signal cycle -- buttons break frequently, and are usually placed poorly for cyclists. The eastern end of the project, at the crosswalk by Alewife Brook, currently has very badly placed buttons, that signal should just be put on regular cycle as well.
- 29 I'm curious if it would be possible to allow certain traffic movements through the Summer & Mystic intersection during the diagonal signal to reduce the adverse impact on traffic delays.
- 30 I like the option of cyclists being able to use either the crosswalk or the traffic lane.
- 33 The Powder House rotary in Somerville is a good example of how a large, complex rotary was made safer for peds, bikes, and cars. Similar concepts seem to apply to these rotaries. Is it feasible to remove the Arlington St/MVP rotary and reconfigure it to be more regular intersection? Arlington St. is not highly trafficked and this might improve flow along High St in both directions while allowing more space for bike/ped path.
- 34 Traffic moves way too quickly through these rotaries. I drive, walk, and bike through them, traffic needs to slow.
- 37 We're a nearby resident on Mystic Lake Drive, strongly support this proposal and experience daily how the current traffic flow is dangerously unsafe. However, the area serves as a primary commuting route for a high volume of vehicles, so we are also concerned about the secondary effects of slowing vehicle traffic and the potential traffic backups comparable to Lake St and Pleasant St between Rt 2 and Mass Ave. We would appreciate additional discussion and consideration of additional vehicle traffic along and around Mystic Valley Pkwy and Summer St.
- 41 I'm really happy these changes are being considered; as the rotaries currently stand I avoid them when walking or biking when possible.
- 43 I don't see the need for 2 two way bike lanes over the bridge.

ResponseID Response

- 45 A change like this is badly needed regardless of the rest of the project. Even when I *drive* over this bridge I am currently concerned.
- 49 Thanks for your work on this. Great to see improved biking infrastructure.
- 51 Automobiles will not be eliminated and they pay taxes to maintain roads. I do not see any senior biking in the winter months.
- 57 These rotaries are currently very dangerous for pedestrians and cyclists, so slowing down car traffic and shortening crossing distances / adding bike lanes will be a very welcome improvement.
- 59 Narrowing the lanes at the entrance of the rotaries so there is only one lane of entrance and passing will not be possible, will be amazing. This change will be so welcome from the car-hell-escape that it is, to a place where people can walk and bike to and from work and feel safe in a car as well.
- 63 I am excited about this project of it will help to bring down vehicle speeds and make the roads safe for all vulnerable road users.
- 70 It is unclear in the diagram if proposed bike lanes are above the curb or below at road level. Recommend that the crosswalks (especially on Rte 60, bridge, MV Pkwy and Alrington St) are tabled, elevated to sidewalk level, to slow cars and increase safety and accessibility
- 71 The summer Street, mystic Street, mystic valley parkway intersection is currently a nightmare for pedestrians. I strongly support the proposed changes there.
- 82 I think that narrowed lanes at the rotaries and more prominent crosswalks will make using the rotaries much clearer for drivers.
- 84 Please include physical grade separation for the on-street bike lanes on the bridge. As we've seen with the other Charles River bridges, even flex posts will be mauled by drivers and snowplows.
- 85 need easy way to merge into traffic on the Medford side. If it requires stopping or unsafe merging, bikes may end up going on the general traffic lane
- 96 Please fix the While Foods area. It's a fatality waiting to happen.
- 100 I don't know what a truck apron is! Additionally, if you take a look at the redesigned Powerhouse rotary in Somerville, THAT is great. So anything close to how that has been re-imagined would be good in my book. Clear signals and street markings are key.

ResponseID Response

102	Flashing lights at crosswalks seem to be the most effective at alerting people driving cars to the presence of people on foot, especially when vehicle traffic can be fast-moving
113	Mill St onto Summer St. would really backup at rush hour without the right turn lane
114	Please do not eliminate the right turn lane from Mill Street onto Summer Street
117	When it's safe for the least mobile among us, it's safest for the most mobile among us.
128	Appreciate your efforts... high st bridge and rotaries need to be slowed for vehicles
130	It looks like the two-way bike lanes would be just paint markings. I wouldn't feel safe using this without vertical separation, especially around High St since that's where there's a lot of reckless driving. Can you include separation to improve the design? I don't see people biking there with their kids without it, so please don't make this without doing it right.
133	This is such a scary intersection for me on foot and on bike. Thank you for improving it!!! It's hard to envision feeling safe but slower traffic and narrower roads would go a long way. Traffic in this area can be awful so if we could keep two lanes on the bridge that would be nice to facilitate rotary right hand turns.
138	Crossings should be raised to ensure vehicles don't speed out of the rotary.
140	I have been complaining to the DCR for years that you can't continue on either side of the river here and cross at crosswalks without going way out of your way, of course to no avail. This is so sorely needed. I would trade the whole rest of the project for this.
141	Marked, separate bicycle lanes in Powder House Sq, Somerville, are unsafe for cyclists, poorly designed. Please do not replicate this model!! Cars coming out of Rotary don't give way to cyclists and pedestrians the current way it is designed, forcing cyclists to become "pedestrians" walking their bikes. There is no "seamless" way for cyclists to cross back into flow of traffic once back on the street from the Rotary. Lastly, the design of car/bike sharing on College Avenue is extremely unsafe as the road suddenly narrows at some street intersections making it impossible for cars and bikes to share space.
142	I think serious consideration should go into routing the path UNDER the bridge, adjacent to the river. If this is deemed impossible, then the rotary should be eliminated and changed to a signalized intersection. Rotaries are a bad idea in any case, especially if pedestrians/cyclists are involved.

ResponseID Response

145	Always scared crossing on foot there
155	Folks in Boston tend not to respect rotary rules of the road, creating more active guidance through markings and barriers like the recent redesign of powder house square is well received
158	use raised continuous sidewalks to require drivers to slow and acknowledge pedestrians and bikers
161	This last intersection is really awful and the plan doesn't help
163	Thank you for being so thoughtful
165	Crosswalks at either end of the bridge would be a huge game changer. I would no longer truncate my walks to avoid crossing at the rotaries.
168	1-way bike lanes are better.
169	A single way bike lane on each side would be a great alternative to 2 two-way bike lanes
173	Tighten turns on rotary entry to limit full speed car entry.
175	Pedestrian crossing lights would make me strongly agree about feeling safe and comfortable in above situations
176	Pedestrian crossing lights would make me feel even safer
179	Cross walks and flashing lights to stop traffic are needed. Crossing now is a dangerous challenge!
180	Amazing! This circle and bridge have way to much pavement for the amount of traffic and everyone, cars included, is confused and dangerous. This seems like a great improvement.
186	Vehicle speed is a major concern
189	if you focus on pedestrian traffic only the cross walks are sufficient. there is a lot of traffic that moves smoothly through there now. if you compromise that it will become a traffic headache.
191	At unsignalized intersections, please make sure that people walking and biking never have to cross more than 11' or so of car lanes at a time. I appreciate the median refuge islands shown on this proposal; please make sure that they are wide enough to provide actual refuge to bikes, especially longtail cargo bikes, or bikes with a trailer that somebody might use to transport their kids.

ResponseID Response

192	I think the crosswalk at the bridge should be raised so that cars have to slow down and pedestrians can walk straight across.
193	These designs would be a huge improvement over the current free-for-all. I'm surprised I haven't seen more incidents here as it is now.
198	Could you also add signals for Pedestrian crossings in addition to the lines on the road? Like when a pedestrian hit some button, the drivers can be signaled that there are pedestrian trying to pass.
218	Slowing vehicular speeds here is critical as I feel most unsafe when motorists move extremely rapidly through these intersections without looking carefully. This behavior is currently encouraged by the wide and swooping design of the drivable surface.
223	So glad you're adding pedestrian crossings. For me, this intersection is the most dangerous part of my walk. I am somewhat disabled and cannot run and dodging high speed traffic currently is a nightmare.
239	It will be a challenge to make everyone happy with the outcome given the very busy nature of these areas; but this seems reasonable.
241	I am happy to see that changes are coming.
246	I have no issues with the layouts and like the Euro style roundabouts. They work well to slow traffic. I have used many of them there.
247	On the Summer St. diagonal safe crossing, would that be set on an automatic cycle or just be shown when a user pushed the crossing button? If it has to be triggered by a user, that is better and would not affect vehicle delays as often.
254	Hallelujah. This pair of intersections has been SO pedestrian and bicycle unfriendly for so long. It's such a breath of fresh air to see these designs. It's a bit hard to tell from the drawings, but how far are the cycle path intersections pulled back from the roundabout? Can the truck apron be the bumpy textured concrete? This seems to work well to deter drivers who are traveling straight through from "flattenting" out the turn.
255	I love this design. It too is bike centric, which is fine by me, but I fear that some drivers will think otherwise.
260	Dealing with the rotaries is the single most important part of this project in my mind, I would be really happy if some of the work here was able to be prioritized ahead of other portions of the project
261	You may need lights and even enforcement to make vehicles respect these traffic circle crossings.

ResponseID Response

269 Please improve the rotaries! The area is so unsafe right now for pedestrians and cyclists. In an area with a lot of recreational users, it doesn't seem like any planning has been done other than for cars.

270 My family lives very near the proposed bike path extension. We currently drive frequently on the roads that would be impacted, and anticipate that we would also use the bike path frequently for walking and biking For these intersections -- and for other aspects of the project generally -- we strongly favor options/alternatives that would be convenient/safe for walkers and bikers, even if that might inconvenience drivers and other vehicle users.

271 THIS IS FANTASTIC and so so much better than the current situation. Please implement this ASAP

272 Would be much easier to comment if we had a drawing of the current configuration and the number of cars/bike/pedestrians at the busiest times of day.

274 will be thrilled to see this. I have ruled out buying a home in many medford & arlington neighborhoods because of these rotaries!

276 I think slowing down the traffic here has to be a priority before moving forward with crossings. Cars are just too fast and frequent.

278 Thanks for sharing the public space across all modes of travel

283 As someone who walks, bikes, and pushes a stroller through these rotaries, I would LOVE to see these changes implemented. Although, I am also wondering why these are not converted to standard intersections. Usually rotaries are used when 5 roads come together, but in these cases, its only 4, so a standard junction seems like it would work.

285 wayfinding signs for bicycles would be great.

290 I strongly believe in bicycle use and look forward to any improvements to the existing infrastructure.

297 Will the pedestrian crossings include stop signs? I would not recommend doing this, as a cyclist and pedestrian. The rotary at Powderhouse Square has become very confusing and tricky to navigate, in large part due to having stopped cars at various sections of the rotary.

298 N/A

299 Putting two-way sidepaths near the intersections makes their operations more complicated. Would definitely like to see how they would work from a signal phasing, timing and LoS perspective (for all users) before settling on a design.

ResponseID Response

302	Lowering car volumes and speeds is safer for bikes pedestrians and drivers
304	Narrower lanes for driving are always better. Lower "level of service" for motorists on parkways is always better.
314	This is a much needed improvement in this area.
318	Consider raised crosswalks/crossbikes to force drivers to yield. Consider green markings to fit inside the ladder crosswalk to show a formal shared use path crossing with green and white crosswalk markings.
320	This looks awesome! So much better than what we have now.
330	Intersections should have fast signals to incentivize walking and biking, the core of what DCR has a mission to increase, even at the cost of car level of service, a metric that doesn't concern DCR's mission
331	this is a really nice design!
342	Ensure that the sight lines allow for vehicles to see cyclists crossing and know to yield
345	I think this project is terrific. It might allow me to bike to the west medford train station for commuting into Boston as well as for accessing the mystic lakes. Thank you!
347	Any specific accommodations for bikes moving around the rotaries?
350	In general, anything that slows speeds on MVP will be good.
353	The High Street intersection is currently terrible to use as a pedestrian or cyclist.
359	Slowing down and limiting vehicles is worth every drop of safety
363	This diagram would be better with colors.
367	Provide as much green space as possible. We should not cover everything in asphalt. There are alternatives!
381	Seems like there are lots of conflict points between cyclists and pedestrians
385	Arlington Street should be two-way for bikes the whole way south of here
387	Would love to see a short term option come out of this project that can be built this year or next simply to allow walkers to cross the bridge (either near the rotaries or mid-bridge)

ResponseID Response

394	I tow a bicycle trailer and it does not fit well in the new protected bike lanes in the powderhouse rotary. I'd prefer to just ride in the road, but now drivers get upset because they expect me to be in the bike lane where I don't fit. Please consider this when deciding on how to handle the rotaries in this project.
397	The new rotaries in Powderhouse Square in Somerville are a good design and show the success of separating bikes cars and removing traffic signals.
398	Consider raised pedestrian/bike crossings. Too many rotaries are designed like highway offramps, encouraging fast exits from the rotary.
400	I can't understand how people are expected to cross Medford St. / High St. as it exists currently. There are no crosswalks anywhere.
409	Trail should connect to Kimball Road. This gives pedestrian and bicycle access to Mystic Street north of Summer Street, and a much safer crossing toward Bishop School.
412	Trucks arent allowed on 4 of the legs of the circles, do not design for them to make those turns
414	This is absolutely essential for safety for all modes of transit in this corridor
423	Not clear to me why a two-way bike lane is proposed for both sides of the bridge. Seems like a one-way on each side with the additional crossing points is sufficient.
425	This is INCREDIBLE!! Currently when I bike through these roundabouts, its a gamble with my life every time. Only change I would suggest is to make separate crosswalks and crossbikes, it makes it easier to use and understand. Would also like to see separate sidewalks whenever possible as well.
428	Currently, there is essentially no way to cross these rotaries safely as a pedestrian, so any change is better than the current situation. I'd love to be able to easily go from the MVP path to the Arlington St path (though going south there's no sidewalk). Perhaps consider a crosswalk in the middle of the bridge with flashing lights? Pedestrians seem less likely to get hit than with crosswalks at the ends or in the rotaries.
440	Raised crosswalks would be great to make it even safer.
448	Pedestrian wait times are too long at the River St. intersection.

ResponseID Response

- 453 Enforcement is key. So many great projects have no mechanism for enforcement and while I support all the excellent engineering incorporated into this project, each project I've seen in Camberville, Boston, etc always lack enforcement. Advocacy for red light cameras or speeding cameras at the State level would be ideal. But, at the least, ticketing the egregious driving habits would be a start.
- 455 Is the x-walk really needed on the bridge, on the east side of the river?
- 458 I imagine this will include crossing lights for pedestrians and cyclists? What about eliminating one/both rotaries in favor of traffic lights? The rotary that is hardest to navigate (by car, bike & on foot) is Medford St/Mystic Valley Parkway.
- 460 I am wondering, for bikes travelling straight from Medford St. & across the High St. bridge (and beyond & vice versa), are they expected to join the car traffic in the circle, or follow the pedestrian crosswalks?
- 463 This would be an amazing improvement for all users! I drive through here several times a day, and its a horrific free-for-all. I would use this area for recreation much more often with safer connections across the bridge and roadways.
- 466 Crossing diagonal is OK when all traffic is stopped. I can do this at Mass Avenue and Rt 16 at the Arlington Cambridge border. This is OK.
- 468 Make sure all pedestrian and bike intersections are well lit!
- 470 This would be a huge and welcome improvement!
- 483 Currently bridge and rotaries are wide enough that I've had drivers in cars try to overtake me to the left/right, both on my bike and when driving a car. I'd really want the rotaries to prevent this sort of dangerous driving in addition to reduce driving speed wherever possible.
- 486 I fully support these designs which mark a huge improvement in safety for all users. Please ensure seamless transition from shared use paths to on-road bike lanes on the bridge. As drawn, this transition does to appear to be intuitive. Additionally, please consider painting dashed center lines on all shared use paths throughout the project corridor so that the function of these paths is clear to both bikes and pedestrians.
- 487 Better enforcement about drivers not obeying right of way laws around these rotaries will be useful to curb speeds

ResponseID Response

491	Drivers are particularly aggressive when exiting the high street bridge on both rotaries. Perhaps prominent yield signs or something else could be helpful to signal the driver to slow down and yield to those already in the circle.
498	The rotaries as existing encourage fast driving, this will be great to slow down drivers to safer speeds.
499	These improvements are long overdue! Hopefully they will make walking along the river--an important, pleasant, and popular walking path--less hazardous.
504	Summer/Mystic/MVP intersection - longer walk phase for diagonal and 4 corners in the same phase, right? Is this automatic at every sequence or activated? Bike Boxes at each end of diagonal with consistent pathway not to conflict with pedestrians - Too many pathways in design sketch at Safety Bldg corner, which has a more-than-generous bump-out, IMHO. Yes keep the turning lane (not the current bypass) and provide a long queuing space for cars on Summer St going to Mystic. Provide a formal turning lane at the "top" of MVP to alleviate some rush hour back-up.
510	Please allow enough space for cyclists to be able to easily turn onto and off of any crosswalks they are expected to use. Please work to amend state law to clarify that cyclists are allowed to use crosswalks and will not be blamed if a vehicle hits them while a cyclist is riding across.
515	Signage for rotaries is minimal to none. Approaches should be clearly stating vehicles are entering a rotary and should give way.
519	Will the crosswalk at Hayes street have a blinking light? Otherwise, crosswalk will not be able to be used. No driver will stop for pedestrians.
521	Please, please, please do add the pictured crosswalks. I cross there frequently, cars rarely slow for pedestrians, and it currently does not feel safe.
522	Some of the islands have lower plantings/structures. I've seen guidance that taller structures decrease visibility but I'm curious if visibility results in higher speeds due to driver comfort. Would be interesting to utilize targeted obstructions, for example, restricting visibility directly across the intersection.
525	I pick up plastic from car crashes often on Winchester Saving Banks grass, The utility poles on Medford St get clobbered often. Tells you something.
530	This is a tough pair of intersections. Glad to see some improvement and that the concern is pedestrian and cycling. Hopefully it will slow down the oil trucks.

ResponseID Response

- 533 YES. These rotaries have a tremendous need for a diet, as right now people will blaze through from the bridge without hardly slowing down.
- 540 ANY time you can create a divide (curb) between autos and bicycles is Much safer. Cars really don't pay attention to painted BL lines. Particularly so when in a tight oncoming traffic situations
- 547 I'm concerned that the bike path will slow traffic a lot at the rotary. We'd like it to still be quick like rotaries
- 553 What are the statistics of autos vs commuting by bikes? I'm just not seeing it and I am tired of spending "federal" money just to spend money following ideas that places with temperate weather have found successful.
- 563 See above. Well-intended, but safety of adding preferred biking/pedestrians to the area, Rte. 60 trucking route, is dangerous, enforcing the speed limits on Rte. 60 is overdue!
- 575 Thanks for working on this. Lots of room to make it better for bicycles and pedestrians. It's been nuts to me that we have this very nice river, which volunteers spent years cleaning up, and it's made intimidating for any non-car traveler to get there and enjoy it by sacrificing all easy access to high speed drivers. There aren't even good crosswalks here now. It's like Arlington is saying "go pound sand, walkers!".
- 579 My biggest current complaint about this area is when walking the path on the Medford side of the Mystic R between High St Bridge and Harvard St Bridge, toward High St, there is no way to safely cross the road on the Medford side of the bridge, to continue walking on the dirt path, even though the path continues. This appears to address that with many more crosswalks than currently exist, including one at that spot.
- 580 I would LOVE this redesign or something similarly pedestrian / bike-oriented. I live nearby, and frequently take my life into my hands crossing without a crosswalk because the existing crosswalks / pedestrian options are inadequate.
- 584 I cycle in this area with some regularity. This seems like a substantial improvement over existing conditions.
- 585 Question 6 - I am actually okay with the lower LOS for drivers. My concern is the length of the pedestrian crossing when diagonal. It is a very distance to cover.
- 591 Regarding the high st bridge. I've seen many near accidents with cars going towards Somerville stopped for pedestrians on MV Pkwy. Cars in the rotary are trying to navigate it and they can't anticipate the cars stopping for pedestrians. I hope this will be alleviated with clear pedestrian walkways.

ResponseID Response

598	It's about time there were lanes in this spot!
600	This is in neighborhood and I pass through it in all modes and through both rotaries. I think that better definition will help. Acknowledging where pedestrians cross will help.
603	Make sure intersections are very well lit in the direct and immediately adjacent areas so drivers can see unlit pedestrians and cyclists. Find ways to slow vehicle traffic as much as possible. Anticipate that cyclists will often try to act like a car in an intersection, please give them an opportunity to rejoin the path safely.
621	These paths would need to get dedicated snow removal, deicing, and sweeping to maintain year-round access. Thanks for proposing these changes! Need to also have sharrows in the road lanes because some cyclists may need to use the roadway sections as well. There is a popular cycling time trial on these roads, and the cyclists go faster than what would be supported by the side paths.
629	Right now I commute via bike through those intersections and would welcome any changes that increase bicycle safety
632	If nothing else, please add crosswalks and signals to this intersection! It is so difficult to cross on foot right now.
638	Thanks for putting in the crosswalks! These are sorely needed as right now you just have to wait for a break in the fast traffic
641	Is it possible to install some sort of signaling in the rotaries like the Powder House Square in Somerville?
643	FINALLY! These intersections are in desperate need of ways for pedestrians and bikers to safely cross. Thank you for addressing these areas to make them safer for everyone.
645	I would like to have a crossing light. Cars fly through the rotaries particularly on the Medford side. Having the cross walks will help but I fear cars won't actually stop unless there are crossing lights.
648	A need for crosswalks on that bridge must happen no matter what
653	I like it, the more crosswalks helps driver pay attention. Could the crosswalk be raised on either side of the bridge to slow down traffic?
654	I don't like two way bike lanes on a bridge. seems dangerous because have you ever had a group come towards you? either one behind the other or two abreast. you have no way to get out of the way.






ResponseID Response


655	Please convince Medford to do the rotary on their side as well.
664	The bike circulation overall looks good. Some more rounded edges will avoid desire lines with bikes clicking the edges right angles.
676	Is there a chance for a walk light?
677	The summer Street intersection already backs very far up mystic valley parkway during rush hours, at times All the way past Hayes St (or did during normal pre-COVID traffic which will presumably resume at some point). Degrading the LoS would only exacerbate that problem. Degrading the LoS ONLY during non-rush hours could be a mitigation.
686	Would a pedestrian walk light be feasible. This is such a hard intersection and trying to cross right where a rotary ends is hard and not perfect. Light in middle of bridge or cross walk there. That's where I cross because you have time to see what cars are doing and not have them unexpected or unknown as they go around the circle.
690	More shared paths, away from the road is better for everyone.
692	Continuing my comments from above: the natural stopping point for cars entering the Medford rotary from MVP south bound (for best visibility of oncoming traffic from High St.), is roughly 20 feet past where you have indicated the crosswalk will be placed. While I agree the crosswalk placement makes sense, you need to bring the median and the stopping point closer in to the rotary itself, as you did with the north bound lane of the MVP where it enters the rotary on the Arlington side, to improve visibility for drivers. The rest all looks fine to me.
693	The River St intersection needs better crossings. There are desire lines to access the riverside paths on both sides of either end of the bridge.
694	Definitely pleased that this bridge is being looked at. On a bike and even in a car I find myself apprehensive about these rotaries, especially the connection w/Mystic, since the roads appear to be excessively wide and unclear if they are 1 or 2 lanes.
699	The rotaries are for sure places that need better pedestrian options.
703	Any changes that make this area more accessible by bikes for families (especially with young kids) would be amazing! We are drivers too and happily accept the trade offs of small inconvenience while in cars if it means greater safety and when when we are in bikes.

ResponseID Response

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| 719 | I understand there may be a crosswalk at Hayes street to get to this bike lane I would like that crosswalk to have a blinking light that riders/walkers can push to operate like they have in cambridge...drivers on mystic valley parkway don't tend to see the crosswalks. |
| 725 | Currently, cars are pretty speedy between the rotaries. The speed needs to be reduced substantially to feel safe. |
| 726 | There is some potential for confusion about the 2-way lanes on both sides of the bridge. And it's still hard to turn north on MV Parkway from going east on High Street. |
| 729 | I'm also having difficulty imagining how the Gulf station intersection would be for drivers. I find some of the new road layouts in other towns extremely confusing, with so much road paint and poles and etc. etc. that I have no idea what I am supposed to do. (thinking about Powderhouse Rotary as one example, Mass Ave. between Alewife Brook and Porter another.) |
| 731 | This is so necessary! |
| 736 | Ensure that the layout of the paths isn't difficult for cyclists who like to go faster. Too many sharp turns or circuitous routing could lead to bikes (especially those out for longer fitness rides) to just enter traffic, defeating the safety improvements. |
| 742 | When possible, have dedicated bike green lights at intersections! |

10. Rank the following locations from most preferred (1) to least preferred (4) for new overlooks onto Mystic River/Lakes:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
B – South central side of Lower Mystic Lake	1		1,225	314
A – Southwestern side of Lower Mystic Lake	2		1,134	315
D – Near the confluence of the Mystic River and Alewife Brook Greenway	3		1,074	316
C – Between the High Street bridge and Harvard Avenue bridge	4		981	311
Other [add location in "Comments" box below]	5		46	17



 Lowest Rank Highest Rank

11. Rank the following locations from most preferred (1) to least preferred (4) for new overlooks onto Mystic River/Lakes: - comments



ResponseID Response

Google Street View is a disaster around everything except Scenic Outlook A. Like, the camera must've been knocked down or something. I'm not exceptionally familiar with the area, but option A was visible and looked nice.

No opinion

No preference.

propose access for kayaks and canoes from the scenic overlooks. Alewife is too polluted to have a scenic overlook.

A couple of scenic overlooks on the Medford side of the mouth of the Lower Lake as it narrows to the river would be wonderful!

The D area is a nesting area for swans, I would prefer to leaving that area as undisturbed as possible.

There is a path to the lake by location A that we currently use to get our canoe into the water, I would not want to lose this access (but would love to see the access improved in this area by moving the guard rail to between the road and shared path).

ResponseID Response

Other: the middle green dot that is currently designated as a nature opportunity area. Location B has pluses - good view of lake and mouth of river. The minuses - close to traffic noise, feels rather exposed. I prefer the scenic overlooks to be as far from roadways as possible since the scenery should be to focus on nature, not vehicles (including the noise from them).

A&B equally

D

No strong preference

Seems good. But, I don't know enough to say. I live in Brookline, so I don't get over there much. But, 'if you build it, they will come.'

There is an opportunity for connection to Meadow Brook Park at the west edge of the cemetery. It would be valuable to make this a pedestrian crossing or, at a minimum, make a visual/interpretive connection to the Mill Brook which feeds into Lower Mystic at this point.

No preference

At the confluence of Lower Mystic Lake and Mystic river (currently marked as a nature opportunity) would be a good overlook spot as there is great bird activity there.

While I had to rank them, none of them are "least preferred." They are all great!

Do not pave -,use wooden boardwalk boards or platforms; pavement disturbs the park like nature

Between the red star and green dot south of rt 60 is a lovely peaceful stretch of the river with lots of wildlife.

not sure this is really needed. why is this added?

This is really not important to me compared to the safety issues!

No comment here; any and all would be great!

Isn't A where it always floods?

Managing the scrub brush along the path would take away the need for most of these.

A and B are quite old with lots of traffic and I don't think that would be an enjoyable place to stop.

ResponseID Response

No real preference, except D since I more frequently bike along the Alewife Brook Parkway.

d, c, a, b

Instead of B, combine that overlook with the nature area nearby. Move site A to the east slightly. Maybe also combine overlooks and nature areas for C and D also.

"C" (or near there) is currently used as an informal canoe/kayak launch for the river. It would be a shame to lose this access point if an overlook went in. Alternatively, maybe an official launch or at least stabilization of the riverside with crushed stone could be considered for this project as well?

Preference for locations that are closer to residential uses for maximum walkability.

Again, it strikes me that the two points on south edge of Lower Mystic have little other space to linger (and entire west edge of lower mystic is not publicly accessible) whereas C and D have larger green spaces for informal access/ lingering?

No strong preferences other than A being #1

No real preference

Don't have a strong opinion

I would opt for optimal nature views first but followed by a convenience of access second.

No strong opinion

View of the lake in nicest in A. but I'm not sure any overlooks are needed or would be well used given the vehicle traffic. Please consider using the budget for something else.

No strong feelings about these

A fishing pier or amenities for fishing (trash barrels so people don't litter, etc.) would be great.

doesn't matter to me

No interest in these features.

no preference

ResponseID Response

The Lower Mystic Lake is a missed opportunity especially from the Arlington side and overlooks would help create a space for people to reflect on its beauty.

this is ridiculous map. I can't understand it.

The bridge/culvert (which needs serious maintenance) over the Mill Brook is a natural place to pause and your marker places overlook "A" at the "beach" adjacent to it which is used by local residents to get down to the water's edge (go fishing, see the alewives, take photos, kayak) although one has to jump the guardrail which should be between the zipping cars and the path-users! SO - would this be a raised platform or a spot at the water's edge?

No preferencd

As a teen in 1970s, I came upon a 2 car crash MVP at Hayes St with 4 people injured and unconscious. Move B west away from Hayes St.

C: 1930s beach at end of Palmer St. 1960s- swing sets MDC erected, too dangerous to cross MVPkwy. 1950s- banks of Mystic R. raised, reconfigured by Army CofE to reduce flooding of Pkwy. in Arl., Med., Som.

Between Harvard Avenue bridge and Alewife Brook Greenway

Other: Near the Wayside on Rt 60.

Not a big priority for me.

I ranked higher the ones closest to me.

My rankings heavily influenced by my opinion about locations that under appreciated simply because people are less likely to go there now because they less accessible.

At Harvard Ave. bridge.

this map is confusing, some landmarks would really help situation you in what theses locations are.

I know there's probably not anything that can be done, but the bridges are a wonderful chance to look over the river. The sides of the bridges are extremely high and young people are not able to see without assistance. I appreciate the architecture and history of the bridges, so some creative thinking would need to be done to make the view from the top of the bridge more accessible.

Family of swans had a nest and live near scenic overlook D.

ResponseID Response

Don't care

Not sure, unfamiliar with these descriptions

I don't understand this question. All of these options are good.

I want all the overlooks.

Not too familiar with the area to have a preference.

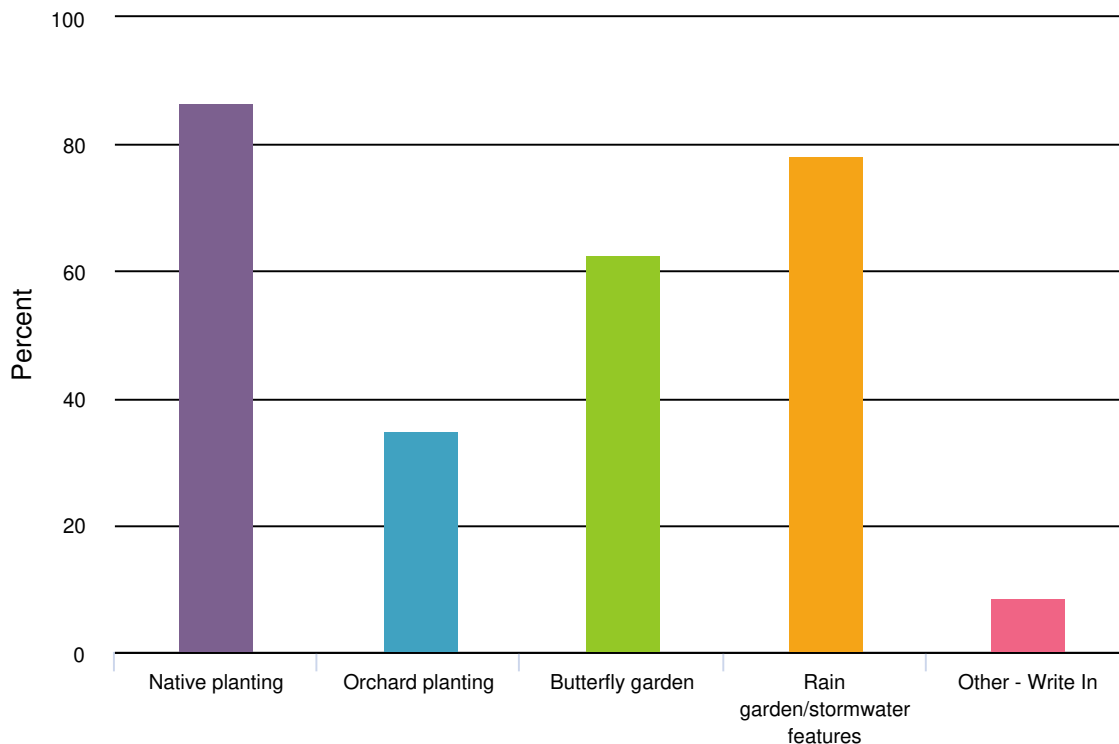
i actually don't really care but I like this idea.

Any of these are fine.

No preference!

Not sure this is a high priority for me.

12. What kinds of features would you like to see in the proposed nature opportunity areas? [check all that apply]



Value	Percent	Responses
Native planting	86.6%	387
Orchard planting	35.1%	157
Butterfly garden	62.6%	280
Rain garden/stormwater features	78.3%	350
Other - Write In	8.5%	38

Other - Write In	Count
benches	3
Anything that reduces erosion; the grassy areas along the Mystic are in really tough shape.	1
Benches for resting in quieter places.	1
Benches!	1
Totals	34

Other - Write In	Count
Bird and aquatic animal friendly habitat/structures; art installations	1
Bird houses	1
Compositing sites	1
Covered bicycle racks	1
Drinking fountain	1
Grassland/Meadow	1
Historical notes about the river: the Missituk, shipping corridor. Oh and a spot for watching the alewife jump each spring!	1
I believe the habit along the Mystic Valley Parkway by the cemetery should not be disturbed or should be left as undisturbed as possible. There are coyotes and other animals who depend upon this land.	1
I don't know the difference between native and orchard plantings.	1
Kayak or canoe put in.	1
Not native plants because their is a small amount of native plants which would survive, and non native is not inherently bad	1
Places to sit and lock bikes	1
Removal of invasive species. There is a LOT of Black swallow wort that keeps spreading	1
Small dog park	1
Some sort of tree canopy, orchard or otherwise	1
Trees planted on the lawns	1
What kind of budget and maintenance plan will this include?	1
Whatever is best for environment	1
Wild / shrubs / natives / wooded areas	1
benches, water fountain	1
Totals	34

Other - Write In	Count
insect hotels, wildlife lean-to	1
no idea what you are talking about	1
plants to help reduce bank erosion	1
pollinator corridor!	1
pollinators are needed	1
public art, shade trees	1
seating; map	1
spots to sit briefly	1
Totals	34

ResponseID Response

- 28 Can the overlooks also have river access with docks? It would be great to provide more places for people to put in canoes and kayaks. Not placemaking but I don't know where else to put it: paved paths need some sort of markers along the sides so they can be plowed properly in winter. On many other paths the plows are unable to follow the path and wind up plowing the earth on one side.
- 29 The most important things are close contact with the water and opportunities to observe wildlife.
- 32 This is not about placemaking, but just wanted to say I agree with other comments about placing a guard rail between the road and the path, particularly along the narrow section along the lake.
- 39 Seem like it would be nice to have a small pull off for a handful of cars near the southern point of the Mystic lakes or across route 60 near the bridge. I like to visit Sandy Beach and the Dam area, and there are other pull offs, but nothing at the southern tip. It's nice for a short visit to nature.
- 45 I have no opinion/preference
- 49 Great to native planting and build resilience.
- 57 Lots of good green space along the river that's currently not doing much as just grass. I love the idea of adding native plants, and slowing down cars along the parkway will make the area much more pleasant.
- 59 Benches and places to rest and enjoy being outside are good, especially looking at water. Might be nice to include bike racks so folks can bike to these places and then go for a walk.
- 67 Are there places to go from River St that warrant a Wayfinder? Maybe Spray Park/Thompson School? Gibbs School? Or pointers towards Medford along Harvard Ave?
- 70 Interpretive signage and maps that identify the watersheds and tributaries to raise awareness about the impacts of our stormwater on the Mystic River. Birding is important here so overlooks that provide space for birders/photographers to set up and watch water birds. In the large open areas, picnic tables and opportunities to pause under shade trees, co-located with bike racks and shared bike tools (thinking of location D in particular).
- 71 Adding greenery would be great. Especially native plants that support wildlife and encourage a healthy ecosystem
- 75 Public sculpture art would also be nice.

ResponseID Response

- 82 Would be great to have information/graphics about fascinating hidden histories of this area, for example: A. Indigenous peoples who used and inhabited this area (e.g.: <https://storymaps.arcgis.com/stories/c9b50f8c6d49440a968129fee7845403>) B. the ways the river has been used in the last 350 years by residents and by industry as well as associated ecological changes. For example, at the confluence with Alewife, could inform people about historical and present day heavy metal pollution and CSOs and their impact on local neighborhoods (see also: <https://savethealewifebrook.org>). C. the historic African-American community just across the river in West Medford (<https://www.bostonglobe.com/magazine/2013/02/10/west-medford-historically-black-community-crossroads/aiGJYLMNo5TjnJmzSrJ9bK/story.html>).
- 84 Please include historical data about demographics of the area, including the thriving Black neighborhoods that once existed along the Mystic in Medford. Please include the residents today that border the Mystic. Be sure to reach out in languages other than English and include culturally competent people in your outreach! Let's not do another "rich white people think you should appreciate this" project!
- 85 informational displays on nature/history, including plants, wild life, native american historic use, colonial times, industrial times, water cycle and sewer discharge
- 96 We need more spaces for dogs to safely be off leash and there are multiple areas along this route that would be ideal for a small park
- 100 These are my favorite parts of the whole project! I am not a biker, so perhaps a bit biased towards the walk-oriented aspects of this survey.
- 115 Why can't bikes be diverted to arlington street side in Medford; that is a very wide road and could accommodate a bike path on the street ; putting a bike path on mystic Rd seems dangerous and on the riverbank ruins the entire area
- 133 Inviting artists to add projects along the corridor would be lovely, similar to what has been done on the Minuteman in Arlington
- 139 keep it simple
- 140 Put in informative panels on the natural and human history of the river. And when they become illegible, replace them.

ResponseID Response

147	I think it's critical that the sub-base of the multi-use path be up to road standard. this will maintain an even surface and prevent root bumps, etc showing up in a relatively short time that will cause bikers to bike on the road anyway due to the bumpy ride. I've seen innumerable bike paths that were "done on the cheap" with only a 6-12" sub-base and quickly became so bumpy that they were useless.
148	is there space for a community garden anywhere?
155	Consider fitness equipment
158	bicycle repair stands with pumps
165	All of the nature opportunity areas could benefit from some love.
173	Fishing walkout pier
174	There are already wild apple, cherry, and mulberry trees here that provide great forage for both people and wildlife -- so this is an excellent environment for these fruiting trees. An orchard would be a wonderful way to use this land.
175	Nature opportunities should leave access to view the water because this corridor is a fantastic birding area; but shrubs draw warblers and other birds so the lining of trees and shrubs needs to be thoughtfully preserved
179	Similar to Alewife Brook Reservations plantings - awesome!
183	Whatever is best for native wildlife
189	look at what was done at the Alewife Reservations. That area is spectacular in the Fall!
191	Cars are very unpleasant to be around, so please make sure that scenic overlooks are a good distance from the road, and buffered by vegetation.
192	While I understand the locus for the project is Arlington, it seems a little silly to be planning only one side of the river
198	I like all the features. But if there is budget constraint, probably just native planting and butterfly garden? I often see ducks/swans/birds on the lake. That's why I would like to see other creatures, like butterfly.
203	Restrooms or Porta-potties along the trail would be very helpful to bikers as well as walkers/runners.
206	Water drainage and erosion problems in this area need to be addressed.

ResponseID Response

223 Glad to see benches!

246 Not to get hung up about specific existing trees. There are lots in New England and new ones grow well.

255 Excellent plan

262 Preference for locations that are closer to residential uses for maximum walkability. Consider blue bikes locations along corridor for better access.

270 We hope that the project can partner with local arts organizations (e.g. the recent painted doors exhibition around Dugger Park in West Medford) for placemaking opportunities.

274 love to see it!

276 n/a

320 I think good wayfinding will go a long way to making this path as useful as possible. In particular, providing information about neighboring path connections will help stitch together the regional path network.

332 Canoe (hand carry) boat launch.

340 Would love to see some public art. The Medford installation last year for Go Out Doors along the Mystic River was a major enhancement.

350 I would be interested in seeing what is possible in the triangular space on the west side of MVP between Park Street and Beacon Street (currently being used for MWRA construction).

387 #11 needs definition and/or photos. That question seems best answered by landscape architects

391 Seating please! I'd love picnic tables, but only if we're not breathing in the car exhaust while we eat.

394 Canoe launch?

397 signs talking about the history of the area

409 Again, connector between Kimball Road and the trail seems to be an essential element of this project that shouldn't be omitted.

425 Would be great to see bike repair stations! Also good movable seating, and lighting

ResponseID Response

428	Stormwater features would be great — the mystic lakes still struggle with water quality in the summer. I'd love to be able to swim and boat more confidently in them.
455	Tie educational signage on native landscapes and ecological balance to personal impact (e.g. native plants that support bird habitat in early spring, grow the population of mosquito predators for the summer)
460	Orchards seem like a nice idea, but I'm afraid that if not maintained, the fruit will be nasty/buggy & end up on the ground, attracting bees & ants. Those "guests" could make the area less useable.
462	Community- or student-managed gardens and sculpture places
466	Survey is useless
487	Any signposts or plaques honoring or providing information towards inclusion - especially pertaining to Indigenous/Black culture or history is worth considering
490	There should be benches all along the path, so people of all abilities can use it.
504	There is quite a lot of wildlife in this corridor - some coming back after many years; so human access should be balanced with other living things. Commuters can have the streets - pavement, lighting, additional safety; but placemaking should take a backseat to the natural world.
513	It would be great to actually be able to go down to the water, not just overlook it from above.
521	A place to easily launch a kayak or paddleboard on the Arlington side of the Mystic River would be much appreciated. Medford residents currently have a good entry spot near 46 Mystic River Road, but Arlington residents have no good options.
525	recognize Alewife herring run each May.
530	ACAC might have thoughts and public art resources.
545	Wooden overlook areas
553	Benches and seating at regular intervals.
563	Please review previous 1955-60s-70s improvements projects, including original MVPkwy. plans; original indigenous peoples pathways!

ResponseID Response

566 would orchards lead to fallen fruit that people might trip over walking or biking?

580 Probably out of scope, but I'd love to see a pedestrian or pedestrian-and-bike bridge halfway between the High St and Harvard Ave bridges, linking the residential neighborhoods on each side of the Mystic in a much more organic way than the major roads. The Medford side has a playground - a natural place for families to meet - but getting there often requires walking a quarter-mile on each side of the river. (Not a big deal for the average adult, moreso for a kid or with a baby-carrier.) Maintenance costs would need to be considered, though.

591 Thank you for all of the time and effort you are putting into this. I know how difficult it is to pour so much of yourself into these plans to make our city better only to have constant road blocks and obstacles thrown at you. You've got this! We support you!

594 Please plant local plants and use this opportunity to protect the environment

598 Can you put in a kiosk for retail, perhaps like for Del's Frozen Lemonade? Otherwise, this project looks phenomenal.

603 Please provide adequate recycling and trash bins

610 The current walkway along the edge of Mystic Lake is used by more than 100 people on a good day. This includes many families with baby carriages, and young toddlers in hand and dogs. These people come to enjoy the beauty of the lake. Bicycles would have to negotiate around families who have stopped to view the beauty. This would be dangerous for all concerned. There are at least 50 large trucks that use the parkway everyday which is dangerous to all. Mystic St and High St and Summer St are major truck routes and state highways. This is dangerous

614 Just respect for residential housing and owners on path

621 Bicycle racks should be covered.

622 The Mystic lakes are lovely, and simply providing some comfortable chairs where people can sit and enjoy the lake would be a great addition to the south side of Lower Mystic lake along the trail

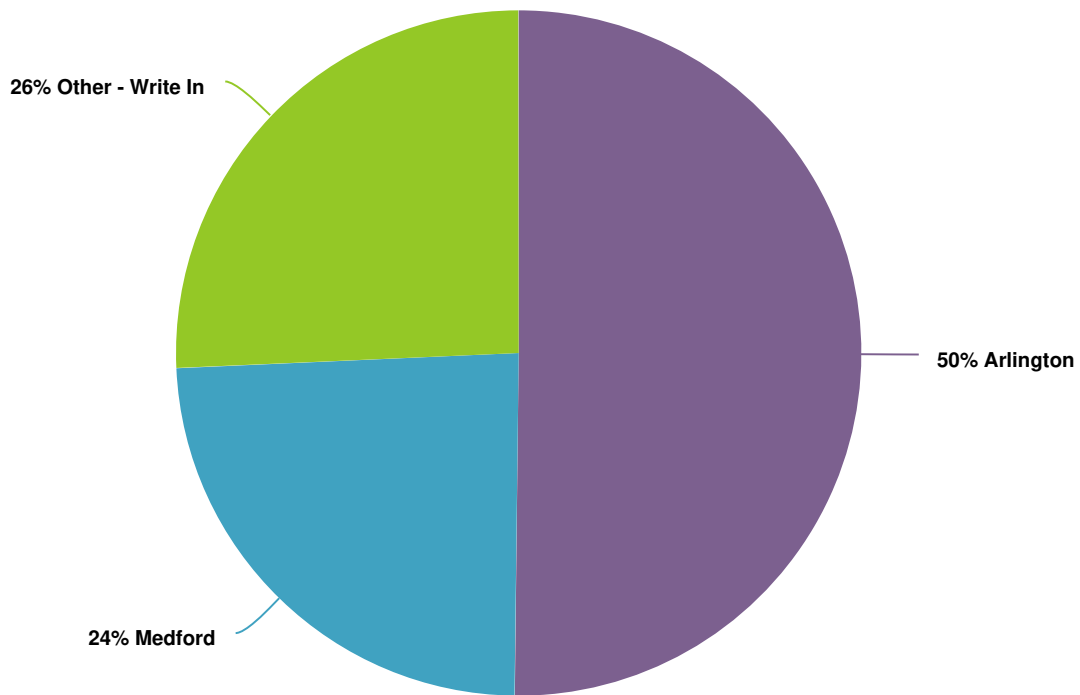
643 Include directions on how people can be involved with ongoing removal of invasive species along the river as part of a big community participation project/crowd sourcing project.

653 I would like to see resident of medford parking opportunities away from traffic for parking so we can have easy access to the walk ways.

ResponseID Response

654	Don't make this into Disney world. don't put a playground. this is my only natural place in Arlington without you paving it, (arlington reservation, spy pond) or destroying the natural beauty and swans and ducks.
659	i'm not sure if anything can be done about the geese in this area, but it makes it very hard to find any grass to sit in or to set up a picnic blanket due to all of the goose poop. might be nice to add some other covered elevated seating situations that would be poop-free
664	Increasing native plants would awesome, especially between that and the waters edge. It would be great to improve the ecology on the waters' edge and have educational signage. It could also be a fun location for creative seasal and/or permminate art installations.
676	Such lovely ideas!
684	Wherever possible, a boardwalk is preferable to surface paving, maintaining the drainage and ecosystem on the natural park/riverbank.
692	Need to provide picnic table opportunities, so that families may linger with children, or friends gather to experience nature.
699	Like orchard idea, but who will maintain and work it?
701	A great corridor for commuting to encourage alternate transport to offload from the roads.
726	A canoe/kayak launch on the Arlington side of the river would be nice!
742	Placemaking opportunities are great for resting and getting your bearings, crucial on a bike

14. In what community do you live?



Value	Percent	Responses
Arlington	50.2%	254
Medford	24.1%	122
Other - Write In	25.7%	130

Totals: 506

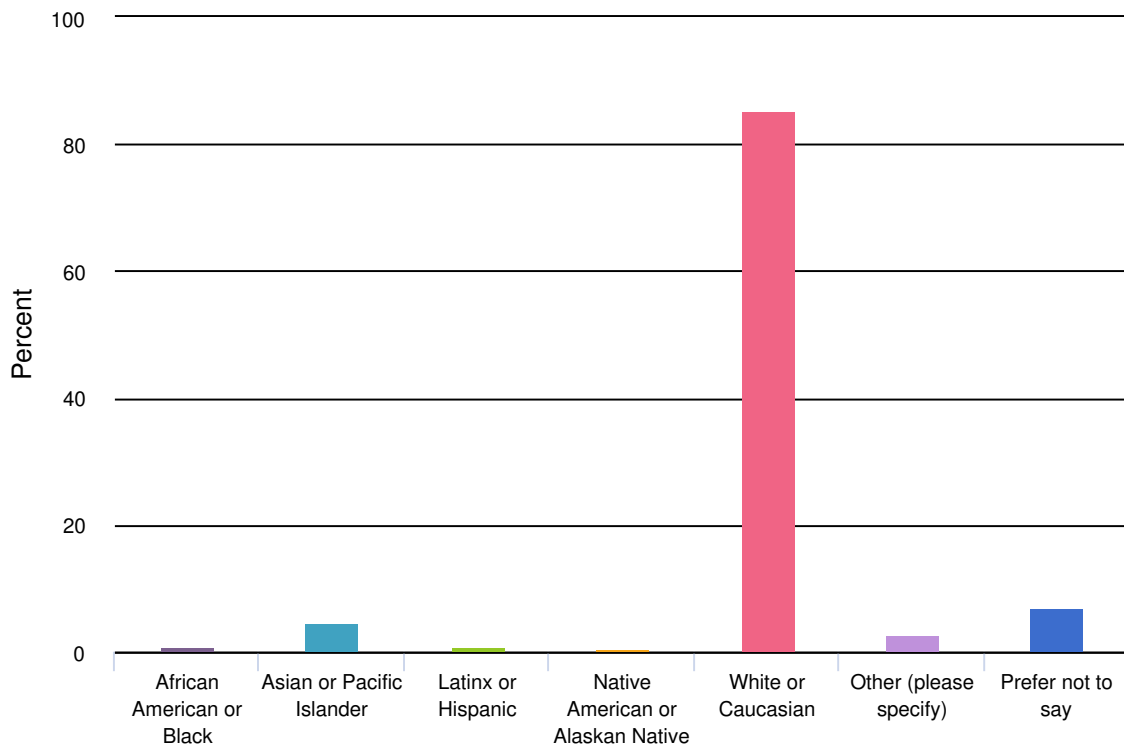
Other - Write In	Count
Somerville	50
Cambridge	13
Somerville	9
Boston	7
Cambridge	5
Malden	4
Totals	129

Other - Write In	Count
Bedford	2
Belmont	2
Lexington	2
North Cambridge	2
Waltham	2
Watertown	2
West Somerville	2
Winchester	2
Winchester	2
Woburn	2
somerville	2
Alewife	1
Both	1
Brookline	1
Charlestown	1
Malden	1
Melrose	1
North Cambridge	1
SOMERVILLE	1
Salem	1
Somerville (medford line)	1
Somerville but prospective resident of Arlington or Medford	1
Somerville, commute through Arlington	1
Totals	129

Other - Write In**Count**

Stoneham	1
Stoneham	1
Waltham, MA	1
Watertown	1
Wilmington	1
Work in Medford	1
woburn	1
Totals	129

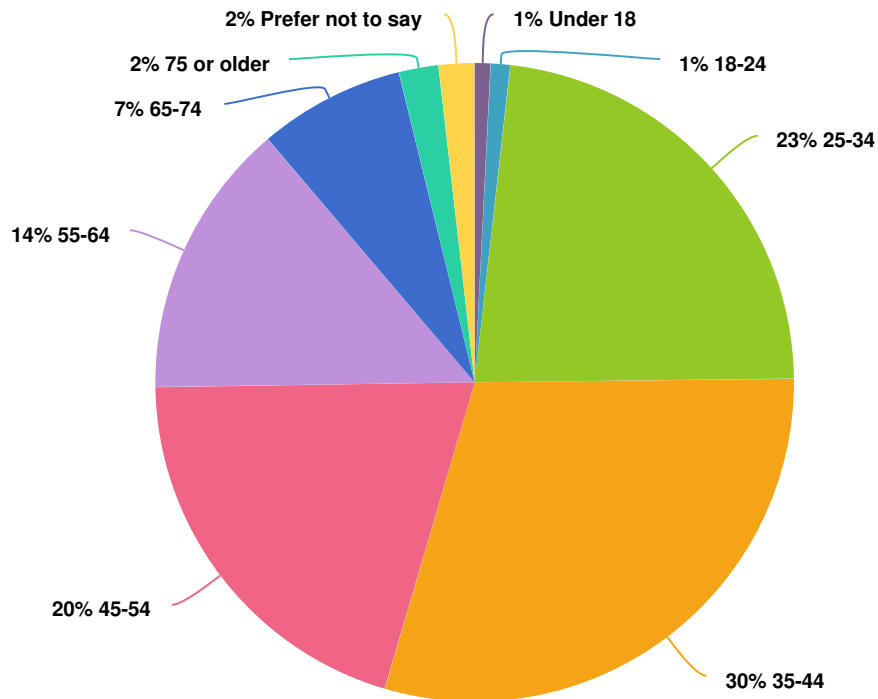
15. What race or ethnicity do you most strongly identify with?



Value	Percent	Responses
African American or Black	0.8%	4
Asian or Pacific Islander	4.6%	23
Latinx or Hispanic	0.8%	4
Native American or Alaskan Native	0.6%	3
White or Caucasian	85.3%	425
Other (please specify)	2.8%	14
Prefer not to say	7.2%	36

Other (please specify)	Count
Ashkenazi	1
Ashkenazi Jewish	1
Eastern European Jewish	1
Euro-American	1
Japanese / Turkish	1
Latinx	1
MENA (Middle Eastern North African)	1
Meat Popsicle	1
Mixed	1
South Asian	1
Totals	10

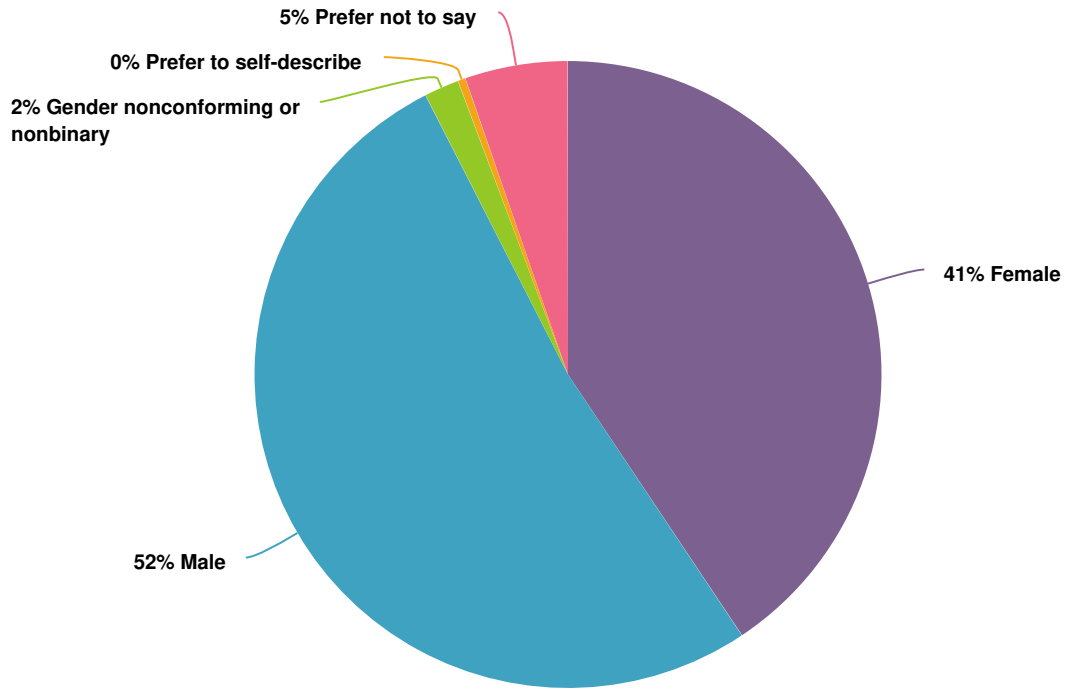
16. What is your age?



Value	Percent	Responses
Under 18	0.8%	4
18-24	1.0%	5
25-34	23.0%	115
35-44	29.7%	148
45-54	20.2%	101
55-64	14.0%	70
65-74	7.4%	37
75 or older	2.0%	10
Prefer not to say	1.8%	9

Totals: 499

17. What is your gender identity?



Value	Percent	Responses
Female	40.6%	199
Male	51.8%	254
Gender nonconforming or nonbinary	1.8%	9
Prefer to self-describe	0.4%	2
Prefer not to say	5.3%	26

Totals: 490

Prefer to self-describe	Count
All Beef	1
Totals	1

NOTES: PUBLIC MEETING 3

June 22, 2022

Survey Circulation

How was it ensured that the survey was distributed to an equal base of interest in case there was a particular boost in the cyclist community?

- The Mystic River Watershed shared it via social media and emails. The biking community made their voices heard, but the Mystic River Watershed tried to hear everyone's voices but recognizes they may have missed some folks.
- The Town sent postcards to abutters, sent out a town notice, posted on social media, and advertised to the Transportation Advisory Committee, Bicycle Advisory Committee, Clean Energy Future Committee, and Affordable Housing Authority. Additionally, there were focus groups with Arlington and Medford residents and yard signs were posted for about three months throughout the study area.

Were there specific questions assuming the path would be asphalt? If that was established, was it asked who would use that? How were these questions asked and how was the survey distributed?

- The questions about how the path would be used were general and did not discuss material. The question about what material is preferred was separate from who would use it.

Survey got a lot of coverage, but what ways was it ensured that those who took the survey accurately represented the community, especially with respect to the area being in an Environmental Justice community?

- Focus groups were conducted to try to capture opinions of those voices we often do not hear. Additional methods used to collect public opinions are described above.

Some attendees only heard of this project recently, so this public meeting was their first interaction with the proposed material.

Path Width, Alignment, and Material

Is an 11'-wide asphalt path needed through a natural, green area with trees on either side? If bikes are passing, are pedestrians supposed to step off of the path?

- Widths and path materials have been vetted throughout the study process, which is coming to an end at this point. The path is for all ages and abilities and paving the path to make it accessible is important. Travel lane widths are reduced with separated bike lanes proposed along the roadway to encourage faster cyclists to use those spaces instead of the path. There are no biking or walking accommodations on the other side of the river, so this is the most used side and it is important to make it useable for a wide range of users. An 11' path is considered a narrow path by today's standards, but is just wide enough to allow people to pass, families to

walk with strollers, etc. The Minuteman Bikeway is 12' but is heavily used which makes it feel narrower. The Minuteman Bikeway Planning Project is intending to delve into the details of path widths further.

Where did the 11' path width come from?

- That width exists along the path currently.

Constituent noted that if the path is not made of asphalt, then it is not worth riding on, and if the Minuteman Bikeway is 12', then 11' may be too narrow.

Constituent voiced concern that trying to meet ADA needs also means building a fast bike path and that they wished planners asked communities what types of bike facilities they'd like.

Straight asphalt segments, especially along Segment C, requires a lot of balancing in terms of accessibility and bicycle speeds.

Segment A

Segment A is a busy area and people meander onto the sidewalk while watching Buzzell Field games. Lots of children in the area to consider and concern of speeding bikes through the area, especially around rush hour.

- The design team recognizes the conflicts and did not implement a Buzzell Field connection to the Minuteman Bikeway for that reason. There will be some conflicts with bikes, but there will be features to address speeding and to maintain degrees of separation. There will be an edge in the Buzzell Field area.

Segment B

The curve through Segment B near Lower Mystic Lake is narrow – would that change?

- The plan is to make the roadway more consistent throughout and smooth out some curves where possible.

Segment C

Through Segment C, are the separated bike lane within the existing curb width?

- Yes, the travel lanes are narrowed, and on-street bike lanes are proposed within the existing curb-to-curb width.

Could we provide any sort of vertical separation for on-street cyclists?

- Yes, could install flexposts, planters, quick curb, etc. within available buffer space where applicable.

If on-street bike lanes are added, can more incremental changes be made to the path to make it more accessible without opening it up to fast bikers?

- Have seen cases where high speeds have deterred some users but have also heard that families want to be able to walk near one another. In this case, 11' is a compromise and additional design features such as meandering through trees can help slow speeds.

Like seeing elements of the Charles River Esplanade being applied to Segment C.

On-street bike lanes along Mystic Valley Parkway are a great opportunity to enhance bike connectivity without having to cut new trails.

On-Street MVP Bike Lanes

Could we provide any sort of vertical separation for on-street cyclists?

- Yes, could install flexposts, planters, quick curb, etc. within available buffer space where applicable.

On-street bike lanes along Mystic Valley Parkway are a great opportunity to enhance bike connectivity without having to cut new trails.

Priority Intersections

What is intersection performance like in proposed conditions?

- Signal timing and phasing adjustments are proposed to account for proposed changes in geometry and to provide more frequent crossings for pedestrians and cyclists. Based on traffic modelling analysis, all intersections operate similar to existing conditions and/or the incoming volumes do not exceed the theoretical capacity of the proposed signal timing and phasing plans.

Are bike signals proposed anywhere?

- Bike signals are not proposed at this stage since most path crossings are from the shared use path. Generally, where facilities are shared between bicycles and pedestrians, pedestrian signal indications and typical pedestrian crosswalks are proposed. At locations where the bike facilities are separate from pedestrian facilities, further consideration can be given to bike signal feasibility in later stages of design.

At the Medford Street and High Street roundabouts and Summer Street at Mill Street, could we implement more of a Dutch-style design that keeps pedestrians and cyclists separate at the intersection(s)?

- The current design shows more mixing zones since people are expected to cross in the same spaces given the multi-use nature of the path.

Summer Street at Mill Street

Concerned about removing the northbound and eastbound right turn lanes at the intersection.

- Traffic modelling analysis at this stage suggests that the incoming vehicle volumes do not exceed the theoretical capacity of the proposed geometric and operational changes at the intersection.

Not having detection for westbound left turning bicycles makes it difficult to execute that turn as a cyclist. Fixing the bike detection for that movement would be a helpful short-term improvement.

Summer Street at Mystic Street and Mystic Valley Parkway

Can the diagonal crosswalk be shown as a crosswalk and not a bike crossing?

- Yes, the crossing can be shown as a crosswalk instead of a bike crossing since anyone can use it and its coming from the multi-use path.

Was there discussion to address the grades approaching the intersection via the path from the west? The approach is currently steep.

- Grades are something that is discussed in the report. The path is planned to somewhat meander on its approach to Mystic Street to mitigate the intensity of the grade.

Diagonal crossing is of concern, especially for pedestrians and considering the safety building on the corner which may see emergency vehicles travel through the intersection quickly.

Some skepticism that the crossing will work considering how long it is.

High Street and Medford Street Rotaries

Was the reconstruction of Parallel Park considered in the roundabout design?

- The team was unaware that there were plans to reconstruct the Parallel Park playground.
- Constituent mentioned that it is intended to be reconstructed within the next two years.

How do bikes move through the rotaries?

- On the multi-use path around the roundabouts, and along the separated bike lanes on the bridge deck.

The bridge deck between the two rotaries is not currently structurally deficient, so the design represents a quick-build option that could be implemented within the existing curb-to-curb width. Using quick-build materials avoids having to reconstruct the bridge which would be necessary if curb were moved, pavement/sidewalk were added, etc.

Does not like how bicycles will have to navigate the pinch points at the roundabouts going east-west, especially heading towards Winchester.

Praise for the redesign of the rotaries into more modern roundabouts, especially on the Medford side.

Neighborhood Crossings

Have we considered installing pedestrian signals at Hayes Street? The curve will be dangerous there given the sight lines. There have been crashes here in the past.

- Travel lanes are narrowed throughout the project, including in this area, to slow down vehicles. Advanced warning signage, rectangular rapid flashing beacons (RRFBs), and other features to enhance visibility of the crosswalk are suggested. Based on preliminary analysis, there is enough sight distance to recommend placing a crossing here. The Hayes Street intersection is in DCR jurisdiction and would therefore require further analysis for feasibility from their team.

Is there a crossing proposed at Menotomy Manor?

- No, not through this project. Menotomy Manor is not directly adjacent to the Parkway. It is set back from the Parkway towards Broadway, beyond Decatur Street. DCR installed a signal at the Alewife Brook Greenway that provides safe pedestrian/bike crossing.

Constituent echoed need for some type of pedestrian beacon at Hayes.

Appreciation for new and enhanced crossing locations.

Short-Term Plans

Are there plans for short-term improvements at the intersections?

- No conceptual plans were developed for short-term improvements as that was outside of the scope of this study, but presentation slides and the report outline potential treatments that could be applied. Largely, those treatments involve tactical materials to tighten curves and narrow travel lanes, signal timing and phasing changes to optimize cycle lengths for all users, and spot treatments at crossing locations to provide accessible curb ramps and crosswalks where there may be desire lines. The main priority in this project was to focus on larger elements.

Funding Sources

What are the funding sources for this project?

- The study has been funded by the MassTrails program and the Lawrence and Lillian Soloman Foundation. Further design funding has been applied for through MassTrails for Segment A. DCR is intending to look at funding through the Bipartisan Infrastructure Law (BIL) and/or their own capital funding, or sources like the Transportation Improvement Program. Generally, next steps for funding are to be determined.

Trees

Is there information that currently identifies the caliper and how many trees may be removed?

- No, the exact tree count was not reviewed at this stage, but it is likely that some trees will be removed at crossing locations. The impacts will be looked at in more detail in the next phases of design and the path alignment will be placed to avoid tree removal.

Trees are not just an amenity but a critical part of infrastructure – it is important to uphold the goal of preserving trees.

Flooding

Are there plans to raise the path to avoid flooding?

- The path is not intended to be raised. An asphalt path would not be washed away in the event of flooding like a more porous/natural path would be.

Are any mediating factors being applied to address flooding concerns? Flooding happens every 5-7 years. Are culverts being widened?

- Team is aware of flooding from culvert near Palmer Street. The curb is proposed to be removed along Segment B, and drainage would be reworked through this section to mitigate disruptions from flooding events. Reconstruction along Segments C and D would have to be considered further in later design stages.
- Town is looking into more funding opportunities to address flooding issues in the area. Here, it's not a question of elevating the path, but more about addressing stormwater management.

Next Steps

Final revisions to the report will be made and the Town will soon hear if they received funding for Segment A. DCR will have to go through their process to secure funding and understand their phasing. Arlington is trying to move ahead with sections within their jurisdiction.

Chat Record

19:32:24 From Amber Christoffersen she/her, Mystic River Watershed Association to Everyone:

Welcome! We'll be getting started in just a few minutes

19:44:14 From Phil Goff to Everyone:

Perhaps it was mentioned but how many survey responses were received? thnx

19:45:31 From Nicholas Tucker to Everyone:

a way to put kayaks / SUPs / other small boats (ie, just carried stuff) at the overlook locations would be awesome

19:45:39 From Daniel Amstutz, Town of Arlington to Everyone:

The second survey received 513 unique responses.

19:46:00 From Phil Goff to Everyone:

Solid! thnx

19:50:40 From Nicholas Tucker to Everyone:

if parking will remain on summer street, a sidewalk bump out into 1 car spot at the crosswalk location to buzzell field would be great - visibility leaving the park when cars are parked is atrocious

19:52:19 From Andrew Freeman to Everyone:

Second the bump out at the crosswalk between Buzzell and Victoria Rd!

19:52:55 From Daniel Amstutz, Town of Arlington to Everyone:

@ Nicholas Tucker -- yes, that is exactly the intent for that crossing, a bump out will prevent parking near the crossing.

19:53:41 From Petru Sofio (he/him) to Everyone:

Would any physical separators be used to protect bicyclists from higher speed cars?

19:54:02 From Nicholas Tucker to Everyone:

would love to see some trees in the mystic lake buffer, if there is any room

19:57:04 From Amber Christoffersen she/her, Mystic River Watershed Association to Everyone:

@Nicolas - yes, where there is more room that may be feasible. TBD in the next phase of design

19:57:14 From Daniel Amstutz, Town of Arlington to Everyone:

@ Petru Sofio -- not in the short term, as the Department of Conservation and Recreation has maintenance concerns about temporary materials like plastic bollards. May be determined through further design.

19:57:30 From Petru Sofio (he/him) to Everyone:

Thanks, Daniel! Understandable

19:58:22 From Mark Kaepplein to Everyone:

how does the diagonal crossing and longer walk cycle affect intersection performance and LOS

19:59:53 From Mark Kaepplein to Everyone:

How do changes for Medford st/High St. affect intersection performance and LOS?

20:01:09 From Nicholas Tucker to Everyone:

at the mill st intersection, the westbound left turn from summer to mill currently does not detect bicycles and will not give a protected left. while waiting on the intersection overhaul, a bike sensor or guaranteed protected left would be appreciated.

20:02:11 From gina s to Everyone:

With crossing traffic at Mill St, design omits the right turning lane from Mill St to Summer St. - Ditto some way to restrict parking at crossing from Buzzell to Victoria, plus a pedestrian crossing sign - high visibility desired.

20:02:19 From Jo Anne Preston to Everyone:

Eleven feet wide asphalt along the river ruins a very green, vegetative area into a sort of a highway.

20:03:06 From Jo Anne Preston to Everyone:

Crossing at Hayes street not safe because of the cuve. Need a pedestrian light.

20:07:48 From Beth Melofchik to Everyone:

Is there a connection for residents of Menotomy Manor?

20:07:51 From Mark Kaepplein to Everyone:

What are all the funding sources?

20:09:25 From Pete Nersesian to Everyone:

My connection cut out during discussion of the rotaries. Will the slides be available?

20:10:52 From Daniel Amstutz, Town of Arlington to Everyone:

@ Pete N - yes, we will make the slides and recording available on the Town's website in several days

20:11:44 From Phil Goff to Everyone:

Can you clarify the bicycle movement west/northbound from the path along the river to the "other" Mystic Valley Parkway that heads up to Winchester. That is a prominent bike route and I'm having trouble understanding how bikes get through the Medford rotary. thanks

20:13:03 From Pete Nersesian to Everyone:

Thanks, I see now that there are islands and crosswalks, and that makes me very happy. Been trying to get a response from the DCR for five years about this.

20:14:26 From Pete Nersesian to Everyone:

That said, does anyone have an answer to the perpetual question how does one reliably get answers from DCR? Even a "we don't know" is all but impossible to get.

20:16:51 From Robert Santosuosso to Everyone:

I am interested in how the survey was done. I never saw any survey.

20:17:24 From Lorraine Fryer to Everyone:

there were several signs along the path for some time with qr codes and urls for the survey

20:21:16 From Robert Santosuosso to Everyone:

It sounds like there will be no tree removal. Is that true?

20:22:09 From Lorraine Fryer to Everyone:

i'd like to suggest that it be made clear that cyclists should use the pedestrian signal, because although that's a common behavior, some of us avoid using pedestrian signals as cyclists unless indicated that we should

20:22:22 From Petru Sofio (he/him) to Everyone:

Thanks, great work as always! Really excited for this project!

20:22:35 From Lorraine Fryer to Everyone:

that said, i am very excited about this work on improving safety & access to public greenways, can't wait to use it once it's implemented. thank you!

20:24:14 From Lorraine Fryer to Everyone:

SO excited about having more crosswalks in the medford/mystic rotary

20:24:29 From Charles Blandy to Everyone:

To echo the above: General comment that bike rules, etiquette, and expectations should be made as explicit as possible with signage, signals, etc.

20:24:49 From Nicholas Tucker to Everyone:

seconded to lorraine and charles's comments!

20:26:47 From Mary Knapp to Everyone:

Another thumbs up for expectations being explicit via signage at the roundabouts

20:27:27 From Pete Nersesian to Everyone:

I have fallen running around pedestrians on that narrow, rooty path. I would appreciate more width for users to pass, something along the lines of what currently exists south of the Alewife Brook.

20:27:54 From Lorraine Fryer to Everyone:

in favor of a pedestrian light at the bottom of hayes, if it's possible to slow cars enough that they'd be able to respond to one

20:29:11 From Charles Blandy to Everyone:

The Bruce Freeman bike path from Lowell to Acton is quite wide; paved; and beautifully integrated into nature. It's possible.

20:30:51 From Mark Kaepplein P9TMM to Everyone:

Paths need 4 lanes! walkers, runners, slow cyclists, and fast cyclists!

20:30:57 From Mary Knapp to Everyone:

+1 BFRT is awesome and definitely well integrated with trees/nature

20:31:01 From Lorraine Fryer to Everyone:

awesome, thank you!

20:31:44 From Tanya B. to Everyone:

There are other surfaces than asphalt to meet ADA requirements, which do not require as heavy machinery and widening of the path. Separately, when there are fast bikes whizzing by, wheelchairs are not safe anyway. We do not see wheelchairs or bikes or pedestrians on major highways because the fastest vehicles dominate the path.

20:32:18 From Elaine Smith to Everyone:

Has the decision already been made to go ahead with the next phases of the project? If not, what is the process for making this decision?

20:34:24 From Lisa Roderick to Everyone:

Mystic Valley parkway closes frequently due to flooding.

20:35:04 From Amber Christoffersen she/her, Mystic River Watershed Association to Everyone:

@ Lisa which stretches of MVP closes due to flooding?

20:35:19 From Andrew Freeman to Everyone:

Section B

20:35:54 From Elaine Lyte to Everyone:

How wide is Minuteman path?

20:36:26 From Amber Christoffersen she/her, Mystic River Watershed Association to Everyone:

Section B closes due to flooding?

20:36:36 From Lisa Roderick to Everyone:

From intersection of Mystic and Summer to first rotary. T

he police often put up a barrier to close it from traffic.

20:36:52 From Amber Christoffersen she/her, Mystic River Watershed Association to Everyone:

This is good to know, thank you

20:36:53 From Andrew Freeman to Everyone:

We live on Kimball, which is where the flooding was always the most severe. Recent drainage improvements have drastically reduced closures due to flooding but I think there's still a common perception that it closes often due to flooding.

20:37:16 From Lisa Roderick to Everyone:

Most heavy fast rains cause the flooding and closes the road

20:37:46 From Lisa Roderick to Everyone:

Every year, not every five years

20:42:54 From Petru Sofio (he/him) to Everyone:

Thanks, Phil! I meant to mention this as well!

20:43:33 From Mary Knapp to Everyone:

I second concerns about getting from the path on the Arlington side to the MVP toward Winchester

20:44:37 From Christina Chase to Everyone:

Would like to keep benches at regular intervals as already exists along the river, please.

20:44:43 From Nicholas Tucker to Everyone:

good point. using the rotaries in vehicle traffic will be improved with the tightening, but if you want to stick to the path it's circuitous.

20:45:14 From Mark Kaepplein P9TMM to Everyone:

Removing right turn lane on Summer EB at Mill will greatly hurt intersection performance as it is heavily used.

20:45:46 From Tanya B. to Everyone:

are you leaving time for comments?

20:46:14 From Amber Christoffersen she/her, Mystic River Watershed Association to Everyone:

Apologies I didn't make it clear, we're now in comments section

20:46:18 From Amber Christoffersen she/her, Mystic River Watershed Association to Everyone:

you can chat or raise your hand

20:47:31 From Nicholas Tucker to Everyone:

the rotaries are challenging to drive through too!

20:47:47 From Kelly Lynema, Town of Arlington to Everyone:

And to walk through!

20:47:50 From Nicholas Tucker to Everyone:

will be an improvement for all users

20:48:46 From Kristina Osborn to Everyone:

For the Summer & Mill intersection, elimination of turn lanes will increase traffic pressure on the Minuteman bikeway crossing, and the MVP corridor connection will increase bike and ped traffic at this crossing. I realize the crossing is part of the Minuteman Bikeway study, but a traffic study at peak times would inform what additional safety measures could be needed to keep both traffic moving smoothly and folks crossing the at the Minuteman pathway safe. A crossing light similar to what is currently at Lake street could be appropriate.

20:51:14 From Pete Nersesian to Everyone:

Also thank you to the Town of Arlington for getting a plan for an intersection in Medford that the City of Medford has ignored the problems with for years. I wish you could get involved with the rest of our issues!

20:51:28 From Nicholas Tucker to Everyone:

if a crossing light at mill st is implemented, it should be synced with the northbound mill st car lights. the path is only 2-3 car lengths from the intersection, a green northbound at mill that is blocked by a red at the bike path is pointless.

20:52:21 From Kristina Osborn to Everyone:

+1 Nicholas, exactly. A well coordinated crossing light would be so clutch at that crossing.

20:53:08 From Beth Melofchik to Everyone:

Apologies if I missed where the funding would come from

20:53:34 From Beth Melofchik to Everyone:

We are facing a significant override in Arlington already. This would be on top of that?

20:54:39 From Nicholas Tucker to Everyone:

that traffic analysis feels right to me. as an often driver there, i don't think that'll change total traffic much. the right turn lane gets a lot of use, but the late part of the green often sees few / no cars.

20:55:21 From Pete Nersesian to Everyone:

The bike lanes definitely help redefine these roads from their current interpretation as express highways.

20:55:23 From Beth Melofchik to Everyone:

Yes, trees are critical infrastructure. Mature trees irreplaceable

20:55:59 From Petru Sofio (he/him) to Everyone:

Maybe an asphalt path only where there isn't an on street bicycle facility as a compromise?

20:56:25 From Robert Santosuosso to Everyone:

I agree with Arshan!

20:56:52 From Beth Melofchik to Everyone:

I agree with Arshan. Let's preserve the amenities of riverside path

20:57:36 From Christina Chase to Everyone:

I agree with preserving the varied use along the river

20:57:55 From Mark Kaepplein P9TMM to Everyone:

Non-binding ballot questions on local elections get better participation and accuracy

20:58:23 From Beth Melofchik to Everyone:

Good point, how has the environmental justice community been accommodated?

20:59:33 From Phil Goff to Everyone:

In winter and spring especially, sections of the Mystic River Greenway that are paved are MUCH more accessible than the stonedust segments. Even w good maintenance they get muddy and don't work well for bicyclists and wheelchairs

20:59:56 From Tanya B. to Everyone:

If there are road lanes for bicycles, paved path should not be necessary. ADA does not require asphalt.

21:00:12 From Christina Chase to Everyone:

putting it on the ballot would be good; many in town use MVP to summer street to traverse from one end of the town to the other

21:00:42 From Pete Nersesian to Everyone:

@Mark Is a yes/no ballot question format really an effective way to survey a community on needs to inform this kind of project?

21:01:37 From Petru Sofio (he/him) to Everyone:

I agree that a ballot question would be unfair, as that would also exclude people under 18 (like me and other HS students), which feels discriminatory.

21:01:49 From Nicholas Tucker to Everyone:

i'd much rather hear from the most interested people that live, walk, drive, and bike here than those just passing through as fast as they can.

21:02:56 From Mary Knapp to Everyone:

Street bike lanes aren't accessible to less confident cyclists - I don't see the street bike lanes as a substitute for a paved off-road shared use path

21:03:26 From Andrew Freeman to Everyone:

The survey was sent via the Town email system and filtered out to many groups. There were signs along the roadway advertising these meetings. You can't force people to take surveys and the outreach was comprehensive.

21:03:33 From Tanya B. to Everyone:

Andrew said it as it is. The point IS the bike path-- therefore it is not accurate or fair - or truthful- to use mobility accessibility and "multi use path" labeling in promotions.

21:04:30 From Robert Santosuosso to Everyone:

The survey did not reach everyone. I am in the Town email system and reverse 911, etc. and I never saw a survey.

21:04:56 From Andrew Freeman to Everyone:

Good bike paths are more accessible than the roadways, dirt/dust walking paths.

21:05:33 From Charles Blandy to Everyone:

The Minuteman Bike Path functions as a multi-use path, with the shortcoming that it's so narrow.

21:07:19 From Andrew Freeman to Everyone:

"Bike Path" does not always mean "fast bike path".

21:07:42 From Petru Sofio (he/him) to Everyone:

Thank you!!! Great work Toole Design/Everyone! (:

21:08:20 From Amber Christoffersen she/her, Mystic River Watershed Association to Everyone:

And your comments from this evening will be included in the feasibility study report

21:08:27 From Amber Christoffersen she/her, Mystic River Watershed Association to Everyone:

thanks for your time!

21:08:31 From Mark Kaepplein P9TMM to Everyone:

Do you have a population being served in mind? Are there major workplaces or residential areas being served?

21:08:34 From Andrew Freeman to Everyone:

Thank you, really good design, hope to see it happen!

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Appendix C: Notes from Project Team, Focus Group, & Cusack Terrace Meetings

Meeting Notes

Project Team Meeting 1

January 13, 2022

Attendees

Member	Representing	Present
Dan Driscoll	Department of Conservation & Recreation (DCR)	
Gerald Autler	Department of Conservation & Recreation (DCR)	
Stella Lensing	Department of Conservation & Recreation (DCR)	Yes
Jeff Parenti	Department of Conservation & Recreation (DCR)	
Amanda Lewis	Department of Conservation & Recreation (DCR)	Yes
Michael Trepanier	MassDOT	Yes
Pete Sutton	MassDOT (Bicycle & Pedestrian Coordinator)	Yes
Tim Paris	MassDOT (District 4)	Yes
Todd Blake	City of Medford	Yes
Tim McGivern	City of Medford	
Amy Ingles	City of Medford	Yes
David Loutzenheiser	MAPC	Yes
Allison Burson	Solomon Foundation	Yes
Herb Nolan	Solomon Foundation	Yes
Daniel Amstutz	Town of Arlington , Dept of Planning & Community Dev	Yes
David Morgan	Town of Arlington , Dept of Planning & Community Dev	Yes
Amber Christoffersen	Mystic River Watershed Association (MyRWA)	Yes
Stephanie Weyer	Toole Design Group, Project Manager	Yes
Lucy Gibson	Toole Design Group, Lead Engineer	Yes

Introductions

Attendees introduced themselves, including who they are representing, and the perspectives they bring to the team.

Stephanie Weyer began a powerpoint that guided the meeting through the agenda.

Project Overview

Stephanie reviewed the project scope and schedule, noting this group will meet four times over the course of the project, which will be complete by the end of June.

Public Engagement

The public meeting on January 26 has been advertised on social media. Postcards are to be sent to abutters prior to the meeting, and yard signs will be placed along the corridor. Additional upcoming engagement activities include online meetings with a miro board, surveys, and a focus group meeting.

Draft Goals

Stephanie presented the draft project goals, as follows:

- Provide an accessible multi-use path that contributes to a regional greenway network while connecting locally from the Minuteman Bikeway to Alewife Brook Greenway
- Increase safety and comfort for all users
- Provide a scenic and legible path with amenities that enhance people's experience along the Mystic River
- Enhance climate resiliency and preserve wetlands, trees, and habitat

Suggestions from the Project Team for additional goals or edits include the following:

- Add regional transportation connectivity (between Mystic path and Minutemen Bikeway) and emissions reduction as goals related to increase mode share of bicycle travel
- Include mention of habitat values
- Improve access to Mystic Lakes and views
- Improve crossings at the rotary, and perpendicular bicycle connectivity to connect path with other routes (i.e. along High Street, River Street)
- Better integration of the path with the road system as a transportation route
- Better connectivity to Somerville
- Connect people to the river and lake to draw people to the path who are not currently using it. Increase the diversity of path users.

Existing Conditions

This included a review of plans, policies, and data.

The corridor has been broken into character zones have differing conditions and challenges.

Segment A – Summer St/Mill St/Buzzell Field area

- Stephanie reviewed existing conditions and uses in terms of street width and parking usage, and asked those present about thoughts on if path connection should be made through Buzzell Field or along Mill Street.
- Dan has observed a lot of parking on game days and school events, which will be challenging. Summer Street is a high traffic corridor, and path along Summer Street will conflict with these other uses.
- The path through Buzzell Field is narrow, and conflict with active park uses must be considered
- A good connection through the Summer/Mill intersection is needed as well, to provide local access to the path and invite people coming from the west through wayfinding, art, etc.

Segment B – Summer/Mystic St/Mystic Valley Parkway intersection

- Discussion confirmed that Town of Arlington controls and maintains the intersection
- Dan indicated that changes to intersection geometry are possible
- David L suggested considering an offset intersection with a split phase
- Todd noted that this would require a split phase, with tradeoffs between crossing distance and cycle length (crossing frequency)
- Dan noted that the existing southbound bike lanes south of the intersection should be extended through intersection.
- Dan noted that people cross entire intersection diagonally during the exclusive phase

- Peter asked if the path vision includes widening the sidewalk on the south side of Summer Street the width of a shared use path?
- Dan noted that this study will need to evaluate parking challenges. There is likely to be resistance to parking enforcement along Summer that will push parking onto neighborhood streets.
- Widening sidewalk into the park will impact trees and a fence.

Segment C: Lower Mystic Lake

- Stephanie reviewed existing conditions, features and challenges of this segment, including existing widths, overlook opportunities, roadway width, culvert condition, and crossing to Hayes Street.
- Stephanie asked if Tim can provide construction plans and inspection report for the culvert.
- Dan noted that grade change and cemetery on south side will be a factor to consider. Dead end streets have informal connections to the path – we should look at improving those and making them accessible.
- Michael noted that there looks like there is space for a wider path with the existing buffer and the shoulder. He noted that the steel plate on the culvert photo looks temporary, as it is no longer there, and wondered if it can be rehabbed to avoid Chapter 91.
- Stella asked who owns culvert, and is a road diet is possible?
- Herb noted that capturing the views is important. He will share some examples of platforms that can provide a viewing area with minimal impacts.
- David L suggested that the guardrail be placed between the road and path, Allison and Amber agreed.

Segment D: Medford Street/High Street Rotaries

- Stephanie reviewed existing conditions, including that there are no crossings of High Street for the existing path, and the rotary design does not provide any deflection to reduce traffic speeds.
- Bus routes 80 and 95 pass through intersection
- Todd noted that Medford has hopes for improved crossing on their side, but no specific plans or ideas yet. There is demand for a crosswalk at the rotary. The jurisdiction is complicated, with MassDOT owning the bridge, DCR owning the parkway through the rotary, Medford St under Arlington jurisdiction, and the City of Medford controls High and Arlington streets. They are very interested in improving safety here.
- MassDOT road inventory shows Medford St bridge under DCR jurisdiction and River St bridge under MassDOT. Need to confirm.
- Dan noted that the town has looked at a crossing of Medford Street.
- David L noted that he usually crosses at the middle of the bridge when running through this area.
- Allison suggested looking at the Great Plain Ave/Wellesley Ave (Wellesley) rotary as a precedent project, in a residential area with bus traffic.
- David M noted that school buses sometimes stop on the bridge; not sure if that is part of a planned route.

Segment E: East End

- Stephanie reviewed existing conditions: woodland character, grade separation of parkway and path; asked the group for thoughts on paved vs unpaved paths here? How do we address River

Street crossing? Do you maintain a mid-block crossing, or bring path users to the signal to cross?

- Amber summarized the options from the DCR parkway guide: raised one-way bicycle lanes, raised two-way bicycle lanes on the river side, or a paved shared use path.
- Todd noted that Medford has requested DCR to look at traffic calming on River Street
- Dan noted that River Street is very wide, and that we should ensure a (bicycle) connection between River Street and the path
- David L encouraged narrowing of River Street
- David L and Amber both expressed concerns that an unpaved path would erode and get rutted, and encouraged consideration of a paved path.

Bridges

The next topic was to discuss the need to evaluate crossings underneath the bridges, to avoid the need for grade crossings of the streets. Michael T did not recommend spending any time/effort on this unless there was really no alternative. Stella and Amber agreed, that it was important to provide safe street-level crossings, and keep eyes on the street. Going under the bridges would also impact paddling.

Traffic Evaluation

- Lucy reviewed the existing traffic and safety conditions analysis to date. Our work will be guided by the priorities of Connect Arlington, which places pedestrians at the highest priority, followed by bicycles, scooters, and other rideables. The goals of Connect Arlington also include increasing the mode share of non-SOV auto travel.
- Traffic counts were conducted in mid-December, so should reflect the “new normal” between the Delta and Omicron virus surges. These counts are 16-17% lower than counts conducted in 2015. Toole recommends using the 2021 counts, unadjusted, as the basis of design.
- Preliminary capacity analyses have been conducted at some intersections, indicating that there is available capacity at these intersections.
- Improving safety at the affected intersections is a priority from Connect Arlington, and a preliminary crash analysis indicates that the High street rotary in Arlington has the greatest number of crashes, though no crashes along the corridor in the past 5 years has involved people walking or biking.
- The group was asked if there were any major developments or projects planned in the area that should be considered. There are some housing developments (117 Broadway at Broadway & Everett, Clarendon Hill in Somerville, 196 Boston Ave in Medford), but are unlikely to generate enough traffic to warrant consideration.
- The GLX phase 2 is too far into the future to consider at this time.
- Lucy reviewed the purpose of the traffic study, which will be consider town’s aspirations for safety and mode share, and not assume inevitable growth in traffic. There was general agreement, though several noted that current MassDOT practices for state-funded projects assume traffic growth, and FDR traffic counts have to be approved. Dan noted that the Arlington DPW may be concerned about reduction in capacity or level-of-service.
- The group also discussed the design process that may be required to take this project forward. The DCR will be involved. Michael T noted that there were two possible pathways, depending on the funding source: DCR only, or DCR/MassDOT. DCR prioritizes projects based on their planning process, so MassDOT involvement is needed if other funding is used, but DCR will still be involved.

- Consider alignment of Medford rotary and crosswalk to make diversion toward bridge more gradual than abrupt as it is today

Closing/Next Steps

- Stephanie reviewed the next steps, including public meeting, survey, and documenting existing conditions. The team will then begin to develop alternatives.
- The next meeting of this group will be mid-March.
- Allison noted as a closing thought that is great to see both municipalities working together on this project.

Meeting Notes

Project Team Meeting 2

March 14, 2022

Attendees

Member	Representing	Present
Dan Driscoll	Department of Conservation & Recreation (DCR)	Yes
Gerald Autler	Department of Conservation & Recreation (DCR)	
Stella Lensing	Department of Conservation & Recreation (DCR)	Yes
Jeff Parenti	Department of Conservation & Recreation (DCR)	Yes
Amanda Lewis	Department of Conservation & Recreation (DCR)	
Michael Trepanier	MassDOT	Yes
Pete Sutton	MassDOT (Bicycle & Pedestrian Coordinator)	Yes
Tim Paris	MassDOT (District 4)	
Todd Blake	City of Medford	Yes
Tim McGivern	City of Medford	
Amy Ingles	City of Medford	Yes
David Loutzenheiser	MAPC	
Allison Burson	Solomon Foundation	Yes
Herb Nolan	Solomon Foundation	Yes
Daniel Amstutz	Town of Arlington, Dept of Planning & Community Dev	Yes
David Morgan	Town of Arlington, Dept of Planning & Community Dev	Yes
Amber Christoffersen	Mystic River Watershed Association (MyRWA)	Yes
Stephanie Weyer	Toole Design Group, Project Manager	Yes
Lucy Gibson	Toole Design Group, Lead Engineer	

Started with Takeaways from Public Meeting

- Public seemed to support not going through Buzzell Field
- People brought up the need to think to some level about both long- and short-term
- User separation, particularly for fast cyclists, came to the fore and is part of how we are thinking about concepts

Cross Sections

Stephanie presented cross section concepts from west to east, stopping for discussion at each segment.

All cross sections are available [HERE](#) on miro with the descriptions that Stephanie also walked through. The Project Team has the ability to comment but not edit.

Summer St

- Option 1 No Parking Project Team comments included:
 - Can narrow lanes to add more space
 - Can't plant trees under live wires, and trees will probably not survive in the buffer zone. Can probably plant shrubs
 - 12' width seems fine.
 - Option 1 has best likelihood of getting snow removal
 - If people persist in parking for busier days, it would be good to dissuade them with elevation change. 6' buffer on option 1 is better in providing more buffer if people try to park there.
 - Toole response: goal for this one to entirely prevent parking as road would be very narrow with this option if people park
 - Option 1 confirmed as preferred
- Options 2 & 3:
 - Will be difficult for snow removal with utility poles and particularly with fence
- Option 3:
 - Question was asked about how width compares to Causeway Street in Boston. Mike responded that as user of Causeway, it feels really cramped regardless of width due to the curb
 - Can't bikeway and sidewalk space be combined. Lanes don't meet AASHTO.
 - Toole response is that lanes meet AASHTO if a one foot shoulder provided against curb
 - Make all same level and a shared use path. Roadway level has drainage issues. Emphasis on separating cyclists and pedestrians not always necessary.
- Suggested Option 4:
 - Combine bikeway and sidewalk in Option 3 and keep constrained widths to allow parking
- Utilities:
 - Mike asked about undergrounding utilities and whether that's a crazy idea. Conscious of trees.
 - DCR responded that it's not a crazy idea, but cost is the primary issue.
 - From Dan A., undergrounding would be doubling cost
 - Underground utilities in roadway, not in tree root zone
- Arlington Catholic:
 - Toole presented a possibility for taking some space within the Arlington Catholic berm to get back some parking
 - Up to 60 spaces would be lost on Summer Street if all parking removed. People also park on side streets up to Johnson Road
 - No real discussion by team, but the idea was not opposed

Crosswalk at Victoria Road

- Dan A.: Crosswalk at Victoria Road problematic due to sightlines, particularly with people parked on the park side
- Stephanie presented the concept for Victoria Road, including moving the crosswalk west
- Response from Dan A.: Transportation advisory committee has received complaints about this crosswalk and has suggested moving the crosswalk west to align with the field. One consideration is a woman who lives at Mystic/Victoria is legally blind and comes down and crosses here. Moving the crosswalk would impact her as she would need to use two crossings

Mystic Valley Parkway to Lake at Culvert

- Stephanie presented a cross section that narrows the roadway to widen path and buffer with the context that Toole explored incorporating bike lanes, but as the road narrows toward the culvert, you can really only fit one bike lane consistently along the lake, and if you make a climbing lane up toward the Mystic/Summer/MVP intersection, downhill cyclists must use the path.
- Dan A.: after Stephanie mentioned that vegetation debris encroaches into the roadway on the cemetery side, Dan corrected that it's after the culvert (in the next cross section) that debris tends to encroach
- When asked, Stephanie clarified that the cemetery side curb would stay in place while the path side curb moves to narrow the roadway
- Question raised whether we are in a Resource Area. Stephanie responded we likely are (follow-up confirms it is Resource Area as it's floodway). David also responded, and Stephanie and David followed up to clarify context here:
 - » Mitigation may be required for redevelopment of the riverfront area along the parkway.
 - » Maps show riverfront area bookending the lakes. Work in those areas will, at minimum, need to improve Mill Brook and the Mystic River, whether through stormwater improvements, or ConCom may want to see some other form of mitigation. One criterion they'll look at is whether or not the work is located closer to the river than existing conditions. If so, a 1:1 restoration will likely need to be done, or 2:1 if the restoration can't be done onsite.
 - » 2:1 flood storage compensation required for lakeside floodway
- The general response was approval of the basic cross section:
 - » Stella: Solution is practical and gets biggest benefit for use of space
 - » Allison said she won't ride the road here given the conditions, but the path is an alternative
 - » Herb: Gets to snow removal concerns Dan D. raised. Moving curb is expensive but opens up the option for more comfortable path and trees. And along the bottom of the lake is very important for scenic aspects and community.

Mystic Valley Parkway along Lake

- Stephanie presented narrow and wide cross sections that work the same as the MVP to Lake at Culvert cross section in that they narrow the roadway to widen the path and buffer.
- Request made to determine whether the path can be pulled away from the slope to preserve larger trees. Thinking about Conservation Commission.
- Buffer between the path and road, think about ways that can be made more comfortable and in consideration of Conservation Commission
- Stephanie introduced question on whether a guardrail is needed or if the buffer is wide enough that a guardrail is unnecessary:
 - » Stella: vegetation establishment is tough in the buffer zone. Wouldn't count on it due to salt. A guard rail is probably a good idea.
 - » Dan D.: Guardrail need determined based on speed, distance from slope, and distance from pedestrians
 - » Jeff: Could possibly remove guardrail here. Need to take a closer look at cross sections. Will need every inch to get in all features
 - » Stella: Don't want people to feel encouraged to pull up on curb. Curb may not be enough of a deterrent.
 - » If guardrail is needed, request to consider wood for better user experience

- Discussion on roadway width:
 - » Jeff: 24 feet is narrower than currently in the system; need to determine minimum tolerable width; parkways in Blue Hills at 26 feet; people do stop on a Sunday drive or to let someone out. It's difficult to prevent people from stopping; over 6,000 to 8,000 cars a day on and we'd want to go up from 26 feet to 28 feet. Fire Department looking for 26 feet to 28 feet; need to consider space for apparatus to drive in middle of cars
 - » Dan: Must add pavement marking line width to cross section, so that essentially brings 24 feet up to 26 feet.

Mystic Valley Parkway to River Street Bridge & East of River Street (essentially same cross section)

- DCR does not use flexposts on parkways. Open to creative vertical separation, but traditional flexposts would be an issue
- We're getting close to approving e-bikes in legislation so the two-way bike lane has much more value given the faster users who are coming
- Toole Design has not yet considered the type or "hardness" of the two-way bike lane buffer
- Question asked: if 12-foot shared use path next to parkway with a decent buffer, is that sufficient for cyclists (vs needing both the path and bike lane). Could path in parkland be soft surface?
 - » Stephanie clarified that in most of the off-road path, it's just one path. There are a few areas of about 200 feet where redundant bike/pedestrian paths would be created within the park itself.
 - » Dan A. rides the section between River Street and Alewife Greenway and wouldn't mind having something on road. The stonedust gets wet, icy, muddy during winter. Would use bike lane, particularly if connected to rotaries.
 - » Currently there's not a shared use path on the other side of the river, so this side has all the capacity
- If you're going to do separate paths, DCR has found the best way to do that is by changing the material. People can still bike on stonedust stabilizer path but tend to go slower.
- Given its Mystic to Minuteman connector, Minuteman is so busy and over capacity there's conflict between different users. Would be good to think about separation from that standpoint
- Mitigation will be required. Give consideration to pavement and proximity to river

Summer Street at Mill Street/Cutter Hill Road Intersection, Options 1 & 2 (with and without medians)

- It's hard to see from the bike path. Need to consider signage and other warning methods for next steps
- Approval on general schemes from those in attendance
- Herb asked what's the value of the medians?
 - » Dan A. responded they used to provide some level of refuge but not here. It's possible they help with traffic flow, but they may also be encouraging people to drive faster.
 - » Stephanie responded it's mostly proposed as a lower cost option
- Dan A: likes the bike lanes going off to the west and putting the seed in for that

Mystic Valley Parkway/Summer Street at Mystic Street Intersection

- Under standards, diagonal crosswalk may require middle landing due to length of 110'
- After the suggestion was made by Allison, Dan A. agreed there would be value in having a crossing on the south side, partly to help people reach the cemetery
 - » Stephanie responded the driveways create an odd angle for that crosswalk

- » Todd asked if you can sneak the crosswalk between the old stop bar and diagonal crosswalk south of the driveways

High Street Rotaries

- General approval of concept by those remaining in the meeting.
- Todd appreciates the consideration for the westbound bike lane from Medford and encourages continued consideration of connections over to Medford
- If we're successful as we want to be with the crossing, will we need an RRFB on the Arlington side? Does that warrant going back to a center crossing with an RRFB?
- Todd: Arlington Street to Mystic River Road, could there be facilities incorporated? Dan A. responded it's very wide there so could put facilities on road.

Mystic Valley Parkway at River Street

- Allison: like the wide crossing
- David: like the wide crossing but wondering about proximity of traffic signals. Similar thought about bike box: just trying to think about where it ought to be; seems logical in front but as cyclist going south would I know to cross crosswalk to get to bike box
 - » Todd: signal longer than 30' away.
- Dan A.: signal just goes through timed cycle so doesn't seem to be based on detection; you learn what the cycle is so can anticipate it. One concern is it's too busy and so much to maintain in terms of pavement markings. Includes an exclusive pedestrian phase.
- Todd: I know this may be beyond scope, but thinking about same crossing on Medford side - connects to dirt ped paths. If we want folks to cross at Mystic River Rd how does that affect the crossing layout?
- When asked, Stephanie responded that we're currently proposing the crossing flush with the roadway
- Re: timing of cycles as Dan was describing, will there be sufficient time to get everyone across if there are a number of people and different types of users?
- Dan A. commented on need for pedestrian push button at big crossing
 - » Toole Design will give consideration as to operations and where a push button would be located.

Closing/Next Steps

- Stephanie told the people remaining in the meeting that Toole Design will review everyone's comments, follow up with some people/groups, and update concepts before the focus group meeting to happen Wednesday 3/23.

ARLINGTON MYSTIC RIVER PATH CONNECTION

Date: 05/04/22

Subject: **DCR Meeting Notes**

In attendance

DCR

- Gerald Autler
- Stella Lensing
- Jennifer Norwood
- Jeffrey Parenti

Mystic River Watershed Association

- Amber Christofferson

Town of Arlington

- Daniel Amstutz

Toole Design Group

- Stephanie Weyer
- Julie Shapiro

Segment B Design (Mystic Street to High Street Bridge)

- Buffer and Trees
 - Concerns that 6' buffer is insufficient for trees—should not have less than 10-15'
 - Problem of insufficient space is compounded by road salt, stormwater overwash
 - Preferable to not have paving on both sides of the trees
 - Flip path and buffer locations to allow trees to access rooting space in the landscape/slope adjacent to lake?
 - Public demand for wide buffer, but maybe this will not include trees
 - Could potentially omit the trees in buffer and rely on existing trees along lake to provide canopy
 - Concerns about root damage to paved path
- Cross Section
 - Latest design concepts show 24' roadway: 11' lanes, 1' shoulders
 - Alternately, can consider 26' roadway the default (11' lanes, 2' shoulders), narrowing as necessary to maintain consistent path width and buffer.

- Vertical Separation
 - Guardrail location: between roadway and path? (There have been public requests for this design.)
 - Would still need barrier along lake—use wood, per DCR standard
 - Side of guardrail facing path would need backer board to cover sharp components
 - May be unsafe to have people inside the guardrail: in path of crash, could get pinned to rail, not protected
 - Guardrail along roadway could help prevent parking on buffer

Follow up:

- Further study on Segment B cross-section regarding buffer, tree planting, and guardrail placement

Path Surface Materials

- Asphalt path along river
 - Public has expressed strong opinions both for and against
 - Opinions against: pedestrians concerned that paved trail will encourage fast bike-riding and disrupt peaceful character of riverside path area, and/or have negative ecological impacts on river
 - Majority of participants/respondents riding bikes want to use shared-use path along the river
 - Possible compromise for those concerned about asphalt path: paved path 10' instead of 12'-14'
 - 10' path with stone dust shoulders may be good solution
 - Ensure reinforced base is wide enough to prevent shoulder settling or lip at asphalt edge, i.e. 14' for 10' paved trail. DCR has done loam and seed over reinforced base
 - Asphalt better for snow clearing
 - Asphalt trail more suitable for urban mobility needs, seems non-negotiable for this setting.
- Stone dust pedestrian path
 - Should be Organic-Lock, rather than conventional stabilized stone dust
 - DCR has had much better results with the Organic-Lock proprietary product for durability and maintenance

Follow up:

- Finalize path and shoulder widths and materials

On Street Bike Facilities

- High demand for on-street facilities, including racing time-trials in the project corridor
- If no on-street facilities in some areas, can park land be expanded into that roadway width?
- DCR will need to see plans for how on-street buffered lanes begin and end
- One way vs. two way:
 - One way pair makes sense for short term implementation
- Bike lane buffering and separation
 - DCR does not use plastic flexposts—not suitable to parkway aesthetic, not durable enough
 - Wide buffers instead of vertical separators

- Maintenance
 - Snow removal: special bike lane clearance needs would not be supported by current DCR maintenance equipment/procedures

Follow up:

- Resolve buffer design
- Finalize one-way vs two-way selection
- Resolve how new on-street bike lanes connect to existing roadway cross-section at either end

Placemaking

- Nature Opportunity Areas
 - Orchards are not likely to be feasible—to much maintenance demand
 - No more community gardens
 - Pollinator meadows/no-mow areas would be a great addition
 - Avoid over-programming
- Passive recreation area at mouth of Mystic River: open space there could be an asset for informal games/gatherings, frisbee, etc.
- Water access
 - Boat launch brings questions of car access and adding parking—not desired along the river.
 - Step-downs: need final design for permitting review. Precedents on Charles River and other locations on Mystic River, so they are of interest and known to be possibly feasible.

Follow up:

- Look toward feasible locations for step-downs if desired

Next Steps

- Feasibility study to be completed end of June 2022
- Proceeding to design
 - DCR to release RFP
 - DCR to determine funding structure for Segments B and C
 - Town of Arlington to apply for MassTrails funding for Segment A (Summer Street)
 - DCR must do the design in-house; evaluate staff capacity and find ways to maintain momentum on this project
- Phasing
 - Complete all DCR work in one phase
 - Intersection projects: quick ways to improve conditions for people walking/biking
 - Crosswalks: can be done with maintenance contract, no need for design contract
 - Consider other tasks that can be completed with maintenance contracts only (e.g. restriping)

MYSTIC RIVER PATH CONNECTION STUDY

Final Project Team Meeting

June 8, 2022

ROLL CALL

- » Daniel Amstutz
- » Amber Christofferson
- » David Morgan
- » Stella Lensing
- » Dan Driscoll
- » Pete Sutton
- » Amy Ingles
- » Todd Blake
- » Stephanie Weyer
- » Kristen Braley

CONCEPT PLANS

- » Green on concept plans outside of edge of curb represents landscaped areas.
- » Toole to represent estimated jurisdiction layout lines on concept plans.

CONCEPT PLANS, HIGH ST/MEDFORD ST ROTARIES

- » The bridge can support huge amounts of capacity with available cross section width, but likely to need to be reconstructed if curb is moved because bridge is in fair/satisfactory condition.
- » Two-way separated bike lanes on both sides of the bridge intended to be a low-impact solution that would avoid need for bridge reconstruction.
- » Should bridge be reconstructed in future, MassDOT would implement Complete Streets approach to right of way.
- » Suggestion to consider redesigning the bridge to allow for a pedestrian underpass, eliminating the need for crosswalks across the bridge.
- » Toole to add long-term cross section option in report in the event the bridge is reconstructed in the future.

CROSS SECTION OPTIONS

- » Suggestion to make shoulder on path more useable and easier to maintain by consolidating to one side and installing loam and seed instead of stabilized aggregate (SA).
- » Wider path (>10' shown currently) may encourage faster speeds by people on wheels but would allow for side-by-side riding/walking in one direction. Twelve-foot paths suggested in unpublished AASHTO

bike guide to allow for three “travel lanes” for people walking, biking, and rolling, the center lane being for side-by-side users. Suggested 11’ minimum in guide.

- » Path width to ideally be maintained at 11’ throughout (denote as “11’ +/-” in public meeting) with 3’ loam and seed on one side; adjustments can be made to widen or narrow path depending on more localized available space/constraints. Toole to update report with these dimensions.

COST OPINION

- » Placing utilities underground expected to be approximately \$1.4 million more than concept that keeps them above ground.

GUARDRAIL AND POSTS NEXT TO PATH

- » Standards allow guardrail to be steel-backed wood or green steel option.
- » If there is a vertical curb, speed limits are less than 30 mph, and the buffer is greater than 6’, guardrail may not be necessary depending on adjacent land uses/grades. Warrants need to be evaluated throughout for applicability, but guardrail could also be implemented in some areas for comfort.
- » Guardrail recommendation to be softened in report to reflect need for further evaluation in later design stages.
- » Guardrail to be edited out of rendering.
- » AASHTO calls for 18” of clearance adjacent the path. Outlook fence/posts to be set back from path and minor shoulder to be shown in rendering.

NEXT STEPS

- » Toole to send updated draft report to group for review.

Focus Group Meeting Notes

March 23, 2022

Attendees

Member	Municipality / Entity
Martha Ondras	Medford
B Dan Fairchild	Medford
Petru Sofio	Arlington, High School Student / MassBike
Phil Goff	Arlington, Everywhere Arlington Livable Streets
Shoji Takahashi	Arlington
David Watson	Arlington
Emily Nink	Arlington, Open Space Committee
Scott Smith	Arlington, Transportation Advisory Committee
Marc Breslow	Arlington, Clean Energy Future Committee
David Morgan	Town of Arlington Environmental Planner / Conservation Agent
Dan Amstutz	Town of Arlington, Senior Transportation Planner, Project Manager
Amber Christoffersen	Mystic River Watershed Association
Stephanie Weyer	Toole Design Group

The notes below were originally recorded in miro sticky notes.

Cross Sections: Decatur Street to River Street

- David M: asphalt vs stonedust from Con Com; 12' span of asphalt path would require considerable mitigation.
- Marc: don't like paved paths going through woods in nice areas, much harder to run on paved paths vs bike on them. Rather you don't pave.
- David W: primarily a cyclist, frequently walk along natural surface trails, some in very poor conditions but would prefer to keep natural surface; think you will get pushback on paved path.
- Phil: halfway in between, 10' wide asphalt on others side - think a hybrid makes a lot of sense, 10' paved, 6' stonedust shoulder on one side if space.
- Martha - prefer stonedust and to minimize width of path near river.
- Phil: 12' path adjacent to roadway think people won't use it if they want to be closer to river, not convinced that the wide two-way is needed.
- David: for commuting cyclists think the roadway may be preferred.
- Martha: agrees, wouldn't eliminate two-way.
- Petru: if two-way bike lane really needs to be separation; using concrete curb a good idea for drainage
- Phil: do we know whether DCR would be supportive of 24'?
 - » We're talking with them about it.

Cross Sections: River Street to Lower Mystic Lake

- Scott Smith: would suggest retaining conventional one-way bike lanes on the road for several reasons. (1) more logical transitions to other roads in the area, (2) easier bike access to the local neighborhood (I live on Rawson), (3) Turning from Rawson (and, probably other streets) is challenging due to visibility issues created by the large street trees. Moving the drivers closer to the curb may make the visibility issues worse.
- David W: if we move forward with separated two-way bikeway really need to contemplate that this will be used by cyclists at varying speeds; need to remind people that pedestrians have their own space alongside the roadway; don't want to communicate that pedestrians have to share that space
- B Dan Fairchild: Even with signage you can get people walking in a bike path, especially where it's unclear

Cross Sections: Summer Street

- David M: one-foot shoulder is there anything in there that may be hazardous, like storm drains, still in favor of the narrow cross section
- David W: don't feel I can express a strong preference for one-way vs two-way bike lanes without knowing how intersection will work; for Summer St you're undoubtedly going to get a lot of pushback on loss of parking, need to have a really clear idea of how much parking is needed and to have some alternative plans
- Scott Smith: accommodation of westbound bike traffic continuing on Summer Street? Will parking on the north side be retained?
- Shoji: question on Summer St parking; more in favor of keeping parking, think there will be tremendous pushback; Summer is Route 2A so wonder if there will be state concerns

Intersection: Summer Street at Mill Street/Cutter Hill Road

- Scott Smith: Need to check options with signal phase / timing before finalizing. (a simple critical link analysis might suffice). Will removal of the right turn lane from Mill Street lead to more frequent backups that block the Minuteman Bikeway?
- Petru: consider raising Minuteman bikeway crosswalk or putting louvers on traffic signal so those going towards Summer don't miss the bikeway crossing because they see a green light. Summer/Mill, option 2 the clear winner, right turn lane isn't needed, protected intersection is nice; it's a good gateway to the trail; crosswalk at Minuteman can be uncomfortable

Intersections: Mystic Valley Parkway/Summer Street at Mystic Street

- Crosswalk is really long, it would require a really long clearance phase, bad for LOS; like left turn lanes; maybe make diagonal bike only for timing. Restrict turns on red over crosswalks.
- Scott Smith: This needs to be checked with signal phase and timing scenarios. The crossing on the long diagonal could be a problem. Keeping the channelized right turn lane from Summer to Mystic has one advantage – it provides an opportunity for a concurrent bike/ped crossing of Mystic without right-turn conflicts.

- David W: doing what you can to help all the different users climb that steep grade is important; flip side is thinking about helping people to control their speed on the descent; right now people come screaming down the hill.
- B Dan Fairchild: thoughts on grade; making path as wide as possible to have varying speeds is probably most useful thing.
- David W: recognize concern about length of crosswalk; really like direct connection; when people have decided they want to be on a bike path separated from vehicle traffic, want to give them a direct connection that's separate as well; wish this connection were included at Mass Ave; agree on getting rid of slip lane

Intersections: High Street Roundabouts

- Principal connection through High Street roundabout is making the connection; carry very clear crossing through roundabout
- Need very clear connection for getting to the Minuteman; allow people to know how to get there and signal to motorists that's the major crossing
- Approach to rotaries is steep; need to consider approaches throughout
- Definitely brings better organization; still not clear with how this would operate with the multitude of two-way bike lanes; particularly concerned where motorists only look typically to the left when entering rotary, concerned about bicyclists entering roundabouts coming from an unexpected direction;
- Same question about entering and exiting two-way bike lanes; for lanes going with MV obvious how that will work, much less clear for how bikes will travel in opposite direction; maybe can be resolved with signage, how they're entering the roadway needs to be taken into account and where they're supposed to go
- Can art go in some of the extra space to help narrow the space beyond basic paint
- Would like to see raised crosswalks at roundabouts; worried about people failing to yield; there are some places where bikes would have to go really out of the way to turn left; need flexposts on the bridge
- Thinking about what will be effective at making sure cars aren't carrying too much speed going onto the bridge; need to define edges of roadway and material

Intersections: Mystic Valley Parkway at River Street

- Scott Smith: Like the wide crosswalk. Do not love the two-way bike lane (local travelers may want to be on the Arlington side of the parkway). Need to check signal phasing and timing
- Like wide crosswalk; interested to see signal timing; like the solution. If 2-way bike lane has green at the same time as MVP, consider a left turn ban from EB MVP to NB River St
- David W: like the concept, other side of bridge there are walking trails so a desire line to cross there as well, might want to think about that.

Intersections: Summer Street at Victoria Road

- Transportation advisory committee has received complaints; has suggested moving the crosswalk to align with the field; a woman who lives at Mystic/Victoria is legally blind comes down and crosses here - potentially an impact

- Like the crosswalk on axis and love the RRFB; a lot of students use that crosswalk

Miscellaneous

- David W: hoping for good ideas on wayfinding; potentially a lot of routes and connections; helping people who may not be familiar with area to know options would be really important

Cusack Terrace Meeting Notes

June 23, 2022 – 11 am

Attendees

Daniel Amstutz, Amber Christofferson; about 10 residents of Cusack Terrace, including Ellen Leigh (primary contact)

Meeting Notes/Comments from Residents about Project

- Existing sidewalk on Summer Street is not ADA accessible and not safe (experience shared about person in wheelchair who finds it very difficult to use the sidewalk especially by the Arlington Catholic Field)
- Want to know existing parking spaces vs. proposed parking when project is designed
- Daniel/Amber noted parking study would be done in next phase
- More visitors are parking on Summer Street and side streets in the neighborhood
- Parking on Mystic Street is confusing and has changed with the construction of the police/public safety building
- Some bicyclists expect people to get out of the way and raise concerns about safety
- Concerns about fast cyclists
- All modes/users need to share the trail with people in wheelchairs or other disabilities
- Someone noted they gave up walking on the Minuteman Bikeway because it doesn't feel safe
- People walking/biking with headphones in, not listening or paying attention, can cause problems

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Appendix D: Traffic Analysis for Proposed Concepts

Mystic River Path Connection to the Minuteman Bikeway Feasibility Study

TRAFFIC ANALYSIS FOR PROPOSED CONCEPTS

The following section discusses the operational implications of the proposed concepts with some discussion of signal timing and phasing strategies employed at each of the intersections. Discussion of existing lane assignments and phasing, traffic counts, and analysis metrics are included in the Existing Conditions memorandum attached in Appendix A.

BASIC SIGNAL STRATEGY

A consistent methodology was applied in determining proposed signal phasing and timings at each of the signalized intersections. The following section includes discussion of some of the options evaluated, as well as some of the primary criteria reviewed in selecting the proposed signal phasing and timings.

Pedestrian Phasing

Two phasing options are typically used for pedestrian phasing at signalized intersections: exclusive or concurrent. Each serves pedestrians with varying degrees of separation from conflicting vehicular movements and each reserves their own implications for pedestrian delay.

Exclusive Phasing

Exclusive pedestrian phasing stops all vehicular traffic in all directions so people may cross along all crosswalks and, if programmed, to cross diagonally across the intersection. This type of signal phasing grants full separation and full priority to pedestrians where there are no conflicting vehicular turning movements permitted. Stopping all vehicular movement for the duration of the time required to cross the longest leg or corner-to-corner distance at an intersection may require a long signal cycle length, leading to high delay for both pedestrians and drivers.

Concurrent Phasing

Concurrent pedestrian phasing provides pedestrians a WALK signal at the same time as a green light for parallel vehicular movements. Concurrent phasing typically reduces the amount of delay both pedestrians and drivers experience at an intersection compared to exclusive phasing due to the shorter cycle length but requires turning drivers to yield to pedestrians in the parallel crosswalk. Leading pedestrian intervals (LPIs) provide a timed buffer to pedestrians, typically between 3 and 7 seconds long, ahead of the concurrent vehicular movement. During an LPI, pedestrians can enter the crosswalk before the vehicular movement begins, allowing them to establish their presence in the crosswalk ahead of any conflicting turning movements.

Based on conversations with Town officials and precedent throughout Arlington, exclusive phasing is proposed to be maintained at each of the signalized intersections. Exclusive phasing offers no legal benefit to people biking, however, in accordance with the Manual on Uniform Traffic Devices, "the R9-5 sign may be used where the crossing of a street by bicyclists is controlled by pedestrian signal indications." With R9-5 signs, people biking along the proposed shared use path would be expected to follow pedestrian indications and cross roadways during the exclusive phase. In situations where potential conflicts between people walking across the street and people making turning movements on bikes may be traveling through the same phase, supplemental 'BIKES YIELD TO PED' (R9-6) are suggested to clarify priority for pedestrians over people on bikes.

Pedestrian Phase Recall Modes

Pedestrian phases can either be placed on recall and come up every cycle without need for activation, or they can be programmed to require pedestrian actuation. At each of the signalized intersections in the study area, pedestrian phases are currently set to need to be activated by a pedestrian for the exclusive pedestrian phase to be called. While pedestrian signals on recall typically reduce the amount of wait time that an active user is required to wait for the next WALK indication, placing a pedestrian phase on recall can sometimes lead to longer cycle lengths and delay for all users. Varying recall modes were employed at each of the signalized intersections, based on specific intersection characteristics, such as intersection geometry, where the path crossing is proposed, and delay for all users.

Generally, maintaining pedestrian phases on recall was the preferred recall mode where the path crossed a leg, or legs, of a signalized intersection. For example, the exclusive pedestrian phases at Mystic Valley Parkway at River Street/Harvard Street and Summer Street/Mystic Valley Parkway at Mystic Street are proposed to be on recall since the path crosses one or more of the motor vehicle travel lanes. Having the exclusive pedestrian phase on recall provides path users frequent and reliable crossing opportunities, which may encourage more people to use the path. At Summer Street at Mill Street/Cutter Hill Road, the exclusive pedestrian phase is not proposed to be on recall because the path does not cross any travel lanes at the intersection. This decision also takes into account vehicle and pedestrian delay at the intersection, which is discussed further in the Intersection Operational Analysis section.

Volume-to-Capacity Ratios

One of the primary metrics used to evaluate the feasibility of each of the proposed concepts from an operational analysis perspective was volume-to-capacity ratios. Volume-to-capacity (v/c) ratios measure the actual volume of the roadway relative to the theoretical volume that a travel lane can accommodate with the provided green times. Where a v/c ratio is less than 1.00, the movement is considered under capacity, suggesting that the amount of actual vehicle traffic is able to be accommodated without oversaturating the signal under evaluated conditions. All cycle lengths and splits were chosen to prioritize maintaining pedestrian average delays less than level of service F (average delay less than 60 seconds), while also maintaining v/c ratios less than 1.00 for motor vehicles.

INTERSECTION OPERATIONAL ANALYSIS

Summer Street at Mill Street/Cutter Hill Road

The existing phasing is proposed to be maintained under conditions that remove the eastbound and northbound right turn lanes. Though operations see increased delay for motor vehicles, all movements remain operating under capacity with a v/c ratio equal to or less than 1.00 (Table 1). The primary reason for the increases in delay in all peak hours is likely due to the removal of the dedicated eastbound right and northbound right turn lanes. Due to space constraints, the turn lanes cannot be maintained with one-way separated bike lanes on Summer Street or with the path on Mill Street. Choosing to maintain the bicycle and pedestrian accommodations over additional travel lanes to facilitate vehicle movements emphasizes Connect Arlington's goals for mode shift and enhanced active-user connections. The exclusive pedestrian phase is proposed to be pedestrian actuated since the majority of active users are anticipated to continue along the path along the southeast corner which does not cross any of the signalized crossings. Average pedestrian delay is anticipated to remain consistent with existing conditions.

Table 1. Summary of Motor Vehicle Operations in Existing and Proposed Concept Conditions at Summer Street at Mill Street/Cutter Hill Road

	Existing Conditions				Proposed Conditions			
	V/C	Delay	LOS	Queue (50 th /95 th)	V/C	Delay	LOS	Queue (50 th /95 th)
Morning Peak Hour								
Pedestrian Operations	-	44	E	-	-	47	E	-
Summer St EB Thru	0.68	32.3	C	211/342	0.96	58.7	E	445/#682
Summer St EB Right	0.61	31.2	C	136/241				
Summer St WB Left	0.72	40.9	D	130/#274	0.92	82.5	F	168/#326
Summer St WB Thru/Right	0.35	13.6	B	133/230	0.35	13.9	B	146/212
Mill St NB Left/Thru	0.63	37.0	D	94/172				
Mill St NB Right	0.24	18.3	B	54/102	0.97	87.4	F	~222/#403
Cutter Hill Rd SB Left/Thru/Right	0.27	30.2	C	57/110	0.27	36.6	D	66/119
Overall	0.54	28.2	C	-	0.82	56.1	E	-
Evening Peak Hour								
Pedestrian Operations	-	34	D	-	-	35	D	-
Summer St EB Thru	0.61	21.5	C	105/283	0.86	35.5	D	206/#526
Summer St EB Right	0.38	18.7	B	43/135				
Summer St WB Left	0.50	26.7	C	37/#140	0.79	58.7	E	55/#179
Summer St WB Thru/Right	0.37	9.9	A	60/214	0.41	12.4	B	85/228
Mill St NB Left/Thru	0.62	27.7	C	50/#183				
Mill St NB Right	0.43	16.2	B	39/165	0.97	68.5	E	148/#422
Cutter Hill Rd SB Left/Thru/Right	0.04	20.7	C	5/27	0.04	22.4	C	5/25
Overall	0.52	18.5	B	-	0.81	40.6	D	-
Saturday Midday Peak Hour								
Pedestrian Operations	-	34	D	-	-	35	D	-
Summer St EB Thru	0.51	18.0	B	77/224	0.80	28.0	C	156/#402
Summer St EB Right	0.39	17.2	B	42/135				
Summer St WB Left	0.49	22.6	C	38/#171	0.67	36.6	D	56/#198
Summer St WB Thru/Right	0.34	7.9	A	51/203	0.37	9.6	A	70/201
Mill St NB Left/Thru	0.55	22.7	C	39/142				
Mill St NB Right	0.23	12.3	B	18/96	0.71	30.2	C	84/#292
Cutter Hill Rd SB Left/Thru/Right	0.06	18.6	B	5/31	0.05	19.8	B	6/30
Overall	0.49	15.5	B	-	0.71	24.1	C	-

Summer Street/Mystic Valley Parkway at Mystic Street

Existing lane configurations and phasing are maintained at the intersection with the addition of an approximately 140-foot-long diagonal crossing for path-user connections. The long crossing, which is proposed to operate on recall, calls for a long clearance time meaning additional delay for vehicles. While overall intersection vehicle delay increases in all peak hours, the volume-to-capacity ratios of all movements remains under capacity and PLOS remains the same in proposed conditions at PLOS E (Table 2).

Table 2. Summary of Motor Vehicle Operations in Existing and Proposed Concept Conditions at Summer Street/Mystic Valley Parkway at Mystic Street

	Existing Conditions				Proposed Conditions, with Diagonal Crossing on Recall			
	V/C	Delay	LOS	Queue (50 th /95 th)	V/C	Delay	LOS	Queue (50 th /95 th)
Morning Peak Hour								
Pedestrian Operations	-	50	E	-	-	56	E	-
Summer St EB Left/Thru	0.70	38.6	D	171/#478	0.57	41.3	D	202/296
Summer St EB Right	0.30	36.8	D		0.30	36.8	D	87/146
Mystic Valley Pkwy Left/Thru/Right	0.91	57.5	E	215/#625	0.94	71.0	E	378/#576
Mystic St NB Left	0.26	18.7	B	21/85	1.00	139.7	F	61/#167
Mystic St NB Thru/Right	0.39	19.2	B	86/270	0.63	43.3	D	231/334
Mystic St SB Left	0.54	35.0	D	67/#214	0.98	110.1	F	144/#296
Mystic St SB Thru/Right	0.75	40.1	D	174/#505	1.00	95.6	F	~355/#567
Overall	0.65	39.0	D	-	0.61	71.9	E	-
Evening Peak Hour								
Pedestrian Operations	-	50	E	-	-	56	E	-
Summer St EB Left/Thru	0.87	49.8	D	230/#655	0.79	50.9	D	302/426
Summer St EB Right	0.15	34.8	C		0.15	34.8	C	29/79
Mystic Valley Pkwy Left/Thru/Right	0.85	49.1	D	194/#565	0.97	81.8	F	343/#552
Mystic St NB Left	0.28	18.0	B	28/108	0.81	69.9	E	82/#169
Mystic St NB Thru/Right	0.49	21.0	C	118/357	0.80	52.5	D	315/#466
Mystic St SB Left	0.33	29.3	C	36/119	0.93	115.5	F	82/#198
Mystic St SB Thru/Right	0.56	32.7	C	124/325	0.80	58.1	E	251/#388
Overall	0.58	37.4	D	-	0.58	63.1	E	-
Saturday Midday Peak Hour								
Pedestrian Operations	-	50	E	-	-	46	E	-
Summer St EB Left/Thru	0.64	32.6	C	167/#462	0.67	42.9	D	179/272
Summer St EB Right	0.17	34.3	C		0.17	34.3	C	22/75
Mystic Valley Pkwy Left/Thru/Right	0.70	35.5	D	169/#484	0.93	68.5	E	258/#439
Mystic St NB Left	0.26	15.0	B	29/110	0.87	76.6	E	73/#171
Mystic St NB Thru/Right	0.34	15.8	B	82/258	0.65	39.9	D	191/286
Mystic St SB Left	0.31	25.5	C	40/129	0.66	51.6	D	73/#153
Mystic St SB Thru/Right	0.51	28.1	C	120/315	0.94	80.0	E	215/#385
Overall	0.52	27.5	C	-	0.50	57.8	E	-

High Street Rotaries

Operations at the rotaries, converted to roundabouts, see no changes in vehicle delay in proposed conditions (Table 3, Table 4). The primary benefits of the roundabouts are tied with safety: slower speeds, better defined travel lanes, better defined crossing opportunities for active users.

Table 3. Summary of Roundabout Operations, Western Intersection

	Existing Conditions				Proposed Conditions			
	V/C	Delay	LOS	Queue (95 th)	V/C	Delay	LOS	Queue (95 th)
Weekday Morning Peak Hour								
Medford St EB Left/Thru/Right	0.85	37.9	E	9	<i>Same as existing conditions.</i>			
High St WB Left/Thru/Right	1.01	79.8	F	23				
Mystic Valley Parkway NB Left/Thru/Right	0.68	21.1	C	5				
Mystic Valley Parkway SB Left/Thru/Right	0.88	44.3	E	10				
Overall	-	52.8	F	-				
Weekday Evening Peak Hour								
Medford St EB Left/Thru/Right	1.03	72.2	F	16	<i>Same as existing conditions.</i>			
High St WB Left/Thru/Right	0.90	34.2	D	12				
Mystic Valley Parkway NB Left/Thru/Right	0.95	60.4	F	12				
Mystic Valley Parkway SB Left/Thru/Right	0.86	34.9	D	10				
Overall	-	49.1	E	-				
Saturday Midday Peak Hour								
Medford St EB Left/Thru/Right	0.72	20.6	C	6	<i>Same as existing conditions.</i>			
High St WB Left/Thru/Right	0.72	17.4	C	6				
Mystic Valley Parkway NB Left/Thru/Right	0.53	15.7	C	3				
Mystic Valley Parkway SB Left/Thru/Right	0.54	13.8	B	3				
Overall	-	17.2	C	-				

Table 4. Summary of Roundabout Operations, Eastern Intersection

	Existing Conditions				Proposed Conditions			
	V/C	Delay	LOS	Queue (95 th)	V/C	Delay	LOS	Queue (95 th)
Weekday Morning Peak Hour								
High St EB Left/Thru/Right	0.71	15.2	C	6	<i>Same as existing conditions.</i>			
High St WB Left/Thru/Right	0.70	16.8	C	6				
Arlington St NB Left/Thru/Right	0.08	8.1	A	0				
Mystic Valley Parkway SB Left/Thru/Right	0.78	27.5	D	7				
Overall	-	18.8	C	-				
Weekday Evening Peak Hour								
High St EB Left/Thru/Right	1.03	55.1	F	22	<i>Same as existing conditions.</i>			
High St WB Left/Thru/Right	0.75	20.6	C	7				
Arlington St NB Left/Thru/Right	0.11	11.1	B	0				
Mystic Valley Parkway SB Left/Thru/Right	0.44	12.3	B	2				
Overall	-	37.8	E	-				
Saturday Midday Peak Hour								
High St EB Left/Thru/Right	0.69	13.9	B	6	<i>Same as existing conditions.</i>			
High St WB Left/Thru/Right	0.54	11.0	B	3				
Arlington St NB Left/Thru/Right	0.07	8.2	A	0				
Mystic Valley Parkway SB Left/Thru/Right	0.28	8.7	A	1				
Overall	-	12.1	B	-				

Mystic Valley Parkway at River Street/Harvard Street

Intersection phasing and lane assignments are maintained at the intersection where the northern crosswalk across Harvard Street is widened to accommodate path user crossings. Despite the exclusive pedestrian phase being placed on recall, proposed conditions see overall intersection operations at LOS D or better with all movements operating with a volume-to-capacity ratio less than 1.00 (Table 5). People following pedestrian signals may experience shorter pedestrian delay compared to existing conditions with shorter cycle lengths.

Table 5. Summary of Operations at Mystic Valley Parkway at River Street/Harvard Street

	Existing Conditions				Proposed Conditions			
	V/C	Delay	LOS	Queue (50 th /95 th)	V/C	Delay	LOS	Queue (50 th /95 th)
Weekday Morning Peak Hour								
Pedestrian Operations	-	40	E	-	-	40	E	-
Mystic Valley Pkwy EB Left/Thru/Right	0.69	10.4	B	117/360	0.64	19.5	B	286/409
Mystic Valley Pkwy WB Left/Thru/Right	0.72	14.3	B	129/429	0.93	43.3	D	342/#580
River St NB Left/Thru/Right	0.58	27.5	C	80/211	0.85	61.4	E	135/#252
Harvard St SB Left/Thru/Right	0.45	25.4	C	63/171	0.66	44.1	D	106/178
Overall	0.69	15.8	B	-	0.73	36.6	D	-
Weekday Evening Peak Hour								
Pedestrian Operations	-	40	E	-	-	35	D	-
Mystic Valley Pkwy EB Left/Thru/Right	0.41	9.3	A	78/222	0.50	17.9	B	168/252
Mystic Valley Pkwy WB Left/Thru/Right	0.71	13.9	B	140/406	0.94	44.6	D	321/#547
River St NB Left/Thru/Right	0.63	23.8	C	92/#354	0.91	60.7	E	185/#337
Harvard St SB Left/Thru/Right	0.21	18.9	B	26/106	0.36	32.5	C	52/100
Overall	0.72	15.1	B	-	0.72	39.6	D	-
Saturday Midday Peak Hour								
Pedestrian Operations	-	40	E	-	-	35	D	-
Mystic Valley Pkwy EB Left/Thru/Right	0.16	7.7	A	30/152	0.42	17.1	B	98/167
Mystic Valley Pkwy WB Left/Thru/Right	0.60	10.0	B	54/265	0.79	26.8	C	176/297
River St NB Left/Thru/Right	0.38	14.3	B	27/141	0.58	30.4	C	75/163
Harvard St SB Left/Thru/Right	0.21	13.4	B	15/87	0.32	27.0	C	41/100
Overall	0.59	10.4	B	-	0.50	24.6	C	-

Appendix E: Planning Level Cost Opinions



Preliminary Opinion of Probable Construction Cost

Mystic River Path Connection Study
Segment 1 - Minuteman Bikeway to Mystic Street via Mill Street and Summer Street +
Priority Intersections 1 & 2 (Underground Power and Telecom Lines)

Prepared By: JBG
 Date: 6/14/2022
 Checked By: KF/KF/SW

DESCRIPTION	AMOUNT
Clearing & Grubbing, Demolition, and Site Preparation	\$38,000
Full-Depth Pavement	\$37,170
Pavement Milling & Overlay	\$25,350
Bituminous Trail	\$115,370
Cement Concrete Sidewalk	\$48,360
Cement Concrete Driveway	\$29,030
Curb Ramps	\$50,960
Detectable Warning Panels	\$15,400
Curbing	\$120,410
Remove and Reset Curb	\$33,700
Remove and Discard Curb	\$18,750
Loam & Seeding	\$120,440
Misc Street Furniture	\$21,540
Pavement Markings Symbols	\$8,690
Pavement Markings High Friction Green	\$28,640
Pavement Markings for Stop Lines and Crosswalks	\$13,920
Pavement Markings Lane Lines	\$12,640
Traffic Signs & Posts	\$11,880
RRFBs	\$15,000
Excavation (Cut)	\$83,730
Embankment (Fill)	\$32,450
Traffic Signal Modifications	\$81,760
Drainage Modifications/Adjustments	\$214,000
Street Lighting Modifications/Adjustments	\$300,000
Burying Power and Telecom Lines	\$1,500,000
Landscaping (4%)	\$35,000
Utility Modifications/Adjustments (8%)	\$71,000
Removal of Contaminated Soils (4%)	\$35,000
Erosion and Sediment Control (6%)	\$53,000
Mobilization (5%)	\$159,000
Temporary Traffic Control (3%)	\$95,000
SUBTOTAL =	
\$3,425,190	
CONTINGENCIES	
30% CONTINGENCY =	
\$1,027,557	
TOTAL ESTIMATE FOR CONSTRUCTION (2022) =	
\$4,452,747	
ESCALATION	
YEARS UNTIL CONSTRUCTION (2026 Construction Year) =	
4	
ESCALATION (4.0%/YEAR) =	
\$712,440	
GRAND TOTAL COST =	
\$5,165,187	

General Assumptions and Exclusions:

1. Unit prices are based on historical bid pricing from MassDOT (District 4 and All Districts), using the most recent available data from this time period, and engineering judgement.
2. The opinion does not include environmental permitting, wetland mitigation, easement, or property acquisition.
3. The opinion does not include construction administration and inspection services.
4. The opinion does not include public outreach, funding planning, or client management services.
5. The Traffic Signal Modifications lump sum assumes the installation of supplementary pedestrian and bicycle signal heads to complement the proposed shared use path, removal of signal heads and equipment deemed contradictory or obsolete by the proposed new design, and required new vehicle signal heads as part of the proposed new design. Existing cabinets, traffic conduit, and handholes are assumed to remain. Loop detectors and other vehicle detection systems are not accounted for in this lump sum.
6. The Drainage Modifications lump sum unit price assumes new catch basins in the vicinity of existing ones, new 24" RCP pipe connecting to the new catch basins, adjustment of all existing structures, sawcutting, and density fill.
7. The Street Lighting Modifications lump sum unit price reflects new poles, bases, luminaires, pullboxes, and conduit as a result of all existing overhead utilities being relocated underground. The cost to bury overhead power and telecom lines in concrete encased duct banks is highly variable and will be subject to the actual work completed by the appropriate utility company(s).
8. The Utility Modifications lump sum unit price assumes minor modifications and potential conflicts.
9. Lump sum percentages for Landscaping, Utility Modifications and Adjustments, Removal of Contaminated Soils, Turf Establishment and Erosion Control, Mobilization, and Temporary Traffic Control are based on typical values for similar roadway reconstruction projects.
10. Assume straight escalation percentage per year based on 2021 cost to the estimated mid-point of construction. Note that the actual market conditions and construction year and duration may vary, especially if the project is constructed in separate phases. Also note that Toole Design recommends that escalation be reevaluated closer to the expected period of construction given current market volatility.

This opinion of probable construction cost was developed by identifying pay items and establishing quantities based on the current preliminary design. Additional pay items have been assigned approximate lump sum prices based on a percentage of the anticipated construction cost. Preliminary cost opinions include a 30% contingency to cover items that are undefined or are typically unknown prior to final design. Unit costs are based on 2021-2022 dollars and were assigned based on historical cost data from MassDOT and regional bid tabs. This cost opinion does not include easement and right-of-way acquisition; permitting, inspection, or construction management, or the cost for ongoing maintenance. This cost opinion is provided for the Client's information, and is based on the design professional's recent experience, adjusted for factors known at the time of preparation. Toole Design Group, LLC has no control over the cost of labor and material, competitive bidding, or market conditions; and makes no warranties, expressed or implied, concerning the accuracy of the opinion as compared to actual bids or cost to the Client.



Preliminary Opinion of Probable Construction Cost

Mystic River Path Connection Study
Segment 1 - Minuteman Bikeway to Mystic Street via Mill Street and Summer Street +
Priority Intersections 1 & 2 (Relocate Existing Poles)

Prepared By: JBG
 Date: 6/14/2022
 Checked By: KF/KF/SW

DESCRIPTION	AMOUNT
Clearing & Grubbing, Demolition, and Site Preparation	\$38,000
Full-Depth Pavement	\$37,170
Pavement Milling & Overlay	\$25,350
Bituminous Trail	\$115,370
Cement Concrete Sidewalk	\$48,360
Cement Concrete Driveway	\$29,030
Curb Ramps	\$50,960
Detectable Warning Panels	\$15,400
Curbing	\$120,410
Remove and Reset Curb	\$33,700
Remove and Discard Curb	\$18,750
Loam & Seeding	\$120,440
Misc Street Furniture	\$21,540
Pavement Markings Symbols	\$8,690
Pavement Markings High Friction Green	\$28,640
Pavement Markings for Stop Lines and Crosswalks	\$13,920
Pavement Markings Lane Lines	\$12,640
Traffic Signs & Posts	\$11,880
RRFBs	\$15,000
Excavation (Cut)	\$83,730
Embankment (Fill)	\$32,450
Traffic Signal Modifications	\$81,760
Drainage Modifications/Adjustments	\$214,000
Relocating Overhead Utilities	\$345,000
Landscaping (4%)	\$35,000
Utility Modifications/Adjustments (8%)	\$71,000
Removal of Contaminated Soils (4%)	\$35,000
Erosion and Sediment Control (6%)	\$53,000
Mobilization (5%)	\$86,000
Temporary Traffic Control (3%)	\$51,000
SUBTOTAL =	
\$1,853,190	
CONTINGENCIES	
30% CONTINGENCY =	
\$555,957	
TOTAL ESTIMATE FOR CONSTRUCTION (2022) =	
\$2,409,147	
ESCALATION	
YEARS UNTIL CONSTRUCTION (2026 Construction Year) =	
4	
ESCALATION (4.0%/YEAR) =	
\$385,464	
GRAND TOTAL COST =	
\$2,794,611	

General Assumptions and Exclusions:	
1. Unit prices are based on historical bid pricing from MassDOT (District 4 and All Districts), using the most recent available data from this time period, and engineering judgement.	
2. The opinion does not include environmental permitting, wetland mitigation, easement, or property acquisition.	
3. The opinion does not include design services, construction engineering, construction administration, and inspection services.	
4. The opinion does not include public outreach, funding planning, or client management services.	
5. The Traffic Signal Modifications lump sum assumes the installation of supplementary pedestrian and bicycle signal heads to complement the proposed shared use path, removal of signal heads and equipment deemed contradictory or obsolete by the proposed new design, and required new vehicle signal heads as part of the proposed new design. Existing cabinets, traffic conduit, and handholes are assumed to remain. Loop detectors and other vehicle detection systems are not accounted for in this lump sum.	
6. The Drainage Modifications lump sum unit price assumes new catch basins in the vicinity of existing ones, new 24" RCP pipe connecting to the new catch basins, adjustment of all existing structures, sawcutting, and density fill.	
7. Utility pole removal and relocation costs are highly variable and are subject to the actual work completed by the appropriate utility company(s). Existing street lights are assumed to be moved along with the poles.	
8. The Utility Modifications lump sum unit price assumes minor modifications and potential conflicts.	
9. Lump sum percentages for Landscaping, Utility Modifications and Adjustments, Removal of Contaminated Soils, Turf Establishment and Erosion Control, Mobilization, and Temporary Traffic Control are based on typical values for similar roadway reconstruction projects.	
10. Assume straight escalation percentage per year based on 2021 cost to the estimated mid-point of construction. Note that the actual market conditions and construction year and duration may vary, especially if the project is constructed in separate phases. Also note that Toole Design recommends that escalation be reevaluated closer to the expected period of construction given current market volatility.	

This opinion of probable construction cost was developed by identifying pay items and establishing quantities based on the current preliminary design. Additional pay items have been assigned approximate lump sum prices based on a percentage of the anticipated construction cost. Preliminary cost opinions include a 30% contingency to cover items that are undefined or are typically unknown prior to final design. Unit costs are based on 2021-2022 dollars and were assigned based on historical cost data from MassDOT and regional bid tabs. This cost opinion does not include easement and right-of-way acquisition; permitting, inspection, or construction management, or the cost for ongoing maintenance. This cost opinion is provided for the Client's information, and is based on the design professional's recent experience, adjusted for factors known at the time of preparation. Toole Design Group, LLC has no control over the cost of labor and material, competitive bidding, or market conditions; and makes no warranties, expressed or implied, concerning the accuracy of the opinion as compared to actual bids or cost to the Client.



Preliminary Opinion of Probable Construction Cost

Mystic River Path Connection Study
Priority Intersections 3 & 4 - Mystic Valley Parkway at Medford Street/High Street/
 Arlington Street Roundabouts

Prepared By: JBG
 Date: 6/14/2022
 Checked By: KF/KF/SW

DESCRIPTION	AMOUNT
Clearing & Grubbing, Demolition, and Site Preparation	\$18,900
New Pavement	\$24,510
Pavement Milling & Overlay	\$62,700
Cobblestone	\$217,660
Bituminous Trail	\$38,150
Cement Concrete Sidewalk	\$64,020
Curb Ramps	\$48,930
Detectable Warning Panels	\$6,300
Curbing	\$194,490
Remove and Reset Curb	\$22,990
Remove and Discard Curb	\$12,790
Loam & Seeding	\$104,670
Misc Street Furniture	\$27,610
Pavement Markings Symbols	\$510
Pavement Markings for Stop Lines and Crosswalks	\$6,980
Pavement Markings Lane Lines	\$7,740
Traffic Signs & Posts	\$9,680
Excavation (Cut)	\$71,890
Embankment (Fill)	\$34,100
Cedar Rail Fence	\$14,000
Drainage Modifications/Adjustments	\$126,000
Street Lighting Modifications/Adjustments	\$72,000
Landscaping (10%)	\$100,000
Utility Modifications/Adjustments (8%)	\$79,000
Removal of Contaminated Soils (4%)	\$40,000
Turf Establishment and Erosion Control (6%)	\$60,000
Mobilization (5%)	\$74,000
Temporary Traffic Control (3%)	\$44,000
SUBTOTAL =	\$1,593,580
CONTINGENCIES	
30% CONTINGENCY =	\$478,074
TOTAL ESTIMATE FOR CONSTRUCTION (2022) =	\$2,071,654
ESCALATION	
YEARS UNTIL CONSTRUCTION (2026 Construction Year) =	4
ESCALATION (4.0%/YEAR) =	\$331,465
GRAND TOTAL COST =	\$2,403,119

General Assumptions and Exclusions:

- Unit prices are based on historical bid pricing from MassDOT (District 4 and All Districts), using the most recent available data from this time period, and engineering judgement.
- The opinion does not include environmental permitting, wetland mitigation, easement, or property acquisition.
- The opinion does not include design services, construction engineering, construction administration, and inspection services.
- The opinion does not include public outreach, funding planning, or client management services.
- This opinion does not account for any structural analysis or retrofit of the High Street bridge over the Mystic River as part of the planned changes to the bridge deck.
- The Drainage Modifications lump sum unit price assumes new catch basins in the vicinity of existing ones, additional new catch basins, new 24" RCP pipe connecting to the new catch basins, adjustment of all existing structures, sawcutting, and density fill.
- The Street Lighting Modifications lump sum unit price reflects relocation of existing poles with new bases and luminaires, additional poles and luminaires, additional pullboxes, and new conduit. Additional lighting not captured in this estimate may be required for traffic circles.
- The Utility Modifications lump sum unit price assumes minor modifications and potential conflicts.
- Lump sum percentages for Landscaping, Utility Modifications and Adjustments, Removal of Contaminated Soils, Turf Establishment and Erosion Control, Mobilization, and Temporary Traffic Control are based on typical values for similar roadway reconstruction projects.
- Assume straight escalation percentage per year based on 2021 cost to the estimated mid-point of construction. Note that the actual market conditions and construction year and duration may vary, especially if the project is constructed in separate phases. Also note that Toole Design recommends that escalation be reevaluated closer to the expected period of construction given current market volatility.

This opinion of probable construction cost was developed by identifying pay items and establishing quantities based on the current preliminary design. Additional pay items have been assigned approximate lump sum prices based on a percentage of the anticipated construction cost. Preliminary cost opinions include a 30% contingency to cover items that are undefined or are typically unknown prior to final design. Unit costs are based on 2021-2022 dollars and were assigned based on historical cost data from MassDOT and regional bid tabs. This cost opinion does not include easement and right-of-way acquisition; permitting, inspection, or construction management, or the cost for ongoing maintenance. This cost opinion is provided for the Client's information, and is based on the design professional's recent experience, adjusted for factors known at the time of preparation. Toole Design Group, LLC has no control over the cost of labor and material, competitive bidding, or market conditions; and makes no warranties, expressed or implied, concerning the accuracy of the opinion as compared to actual bids or cost to the Client.



Preliminary Opinion of Probable Construction Cost

Mystic River Path Connection Study
Segments B & C - Mystic Street to Alewife Greenway via Mystic Valley Parkway
 (Without Rotaries) + **Priority Intersection 5** - Parkway at River St/Harvard Ave Bridge

Prepared By: JBG
 Date: 6/14/2022
 Checked By: KF/KF/SW

DESCRIPTION	AMOUNT
Clearing & Grubbing, Demolition, and Site Preparation	\$221,800
Full-Depth Pavement	\$33,160
Bituminous Trail	\$479,570
Cement Concrete Sidewalk	\$127,420
Cement Concrete Driveway	\$2,970
Curb Ramps	\$19,250
Detectable Warning Panels	\$2,800
Curbing	\$185,520
Remove and Reset Curb	\$49,140
Remove and Discard Curb	\$27,340
Loam & Seeding	\$486,030
Misc Street Furniture	\$43,760
Pavement Markings Symbols	\$1,920
Pavement Markings High Friction Green	\$17,600
Pavement Markings for Stop Lines and Crosswalks	\$5,380
Pavement Markings Lane Lines	\$50,370
Traffic Signs & Posts	\$16,280
Excavation (Cut)	\$271,640
Embankment (Fill)	\$81,400
Cedar Rail Fence	\$470,750
Traffic Signal Modifications	\$81,760
Drainage Modifications/Adjustments	\$214,000
Street Lighting Modifications/Adjustments	\$1,226,000
Landscaping (10%)	\$259,000
Utility Modifications/Adjustments (8%)	\$170,000
Unknown Soil Conditions (4%)	\$104,000
Erosion and Sediment Control (6%)	\$156,000
Mobilization (5%)	\$240,000
Temporary Traffic Control (3%)	\$144,000
SUBTOTAL =	
\$5,188,860	
CONTINGENCIES	
30% CONTINGENCY =	
\$1,556,658	
TOTAL ESTIMATE FOR CONSTRUCTION (2022) =	
\$6,745,518	
ESCALATION	
YEARS UNTIL CONSTRUCTION (2026 Construction Year) =	
4	
ESCALATION (4.0%/YEAR) =	
\$1,079,283	
GRAND TOTAL COST =	
\$7,824,801	

General Assumptions and Exclusions:

- Unit prices are based on historical bid pricing from MassDOT (District 4 and All Districts), using the most recent available data from this time period, and engineering judgement.
- The opinion does not include environmental permitting, wetland mitigation, easement, or property acquisition.
- The opinion does not include design services, construction engineering, construction administration, and inspection services.
- The opinion does not include public outreach, funding planning, or client management services.
- This opinion does not account for any structural analysis or retrofit of the River Street bridge over the Mystic River as part of the planned changes to the bridge deck.
- The Traffic Signal Modifications lump sum assumes the installation of supplementary pedestrian and bicycle signal heads to complement the proposed shared use path, removal of signal heads and equipment deemed contradictory or obsolete by the proposed new design, and required new vehicle signal heads as part of the proposed new design. Existing cabinets, traffic conduit, and handholes are assumed to remain. Loop detectors and other vehicle detection systems are not accounted for in this lump sum.
- The Drainage Modifications lump sum unit price assumes new catch basins in the vicinity of existing ones, new 24" RCP pipe connecting to the new catch basins, adjustment of all existing structures, sawcutting, and density fill.
- The Street Lighting Modifications lump sum unit price reflects relocation of existing poles with new bases and luminaires, additional poles and luminaires, additional pullboxes, and new conduit.
- The Utility Modifications lump sum unit price assumes minor modifications and potential conflicts.
- Lump sum percentages for Landscaping, Utility Modifications and Adjustments, Removal of Contaminated Soils, Turf Establishment and Erosion Control, Mobilization, and Temporary Traffic Control are based on typical values for similar roadway reconstruction projects.
- Assume straight escalation percentage per year based on 2021 cost to the estimated mid-point of construction. Note that the actual market conditions and construction year and duration may vary, especially if the project is constructed in separate phases. Also note that Toole Design recommends that escalation be reevaluated closer to the expected period of construction given current market volatility.

This opinion of probable construction cost was developed by identifying pay items and establishing quantities based on the current preliminary design. Additional pay items have been assigned approximate lump sum prices based on a percentage of the anticipated construction cost. Preliminary cost opinions include a 30% contingency to cover items that are undefined or are typically unknown prior to final design. Unit costs are based on 2021-2022 dollars and were assigned based on historical cost data from MassDOT and regional bid tabs. This cost opinion does not include easement and right-of-way acquisition; permitting, inspection, or construction management, or the cost for ongoing maintenance. This cost opinion is provided for the Client's information, and is based on the design professional's recent experience, adjusted for factors known at the time of preparation. Toole Design Group, LLC has no control over the cost of labor and material, competitive bidding, or market conditions; and makes no warranties, expressed or implied, concerning the accuracy of the opinion as compared to actual bids or cost to the Client.