

MV MOVES

Merrimack Valley Active Transportation Plan



Executive Summary

MV Moves, the region's updated Active Transportation Plan, identifies priority projects intended to provide nonmotorists with safe transportation options. The plan's priority projects promote regional connectivity by linking communities into existing and planned active transportation spines. If realized in their totality, the region's comfortable paths will reduce carbon emissions and health risks, improve roadway safety, support economic development, and allow independent mobility. The plan's approach—to identify several projects of importance rather than all possible and desirable active transportation projects—will help regional staff and municipal partners center their focus on several prime opportunities rather than expend resources on the concept du jour.

The *MV Moves* planning process included data collection, data analysis, and extensive public engagement exercises that built a portfolio of knowledge and supported a thorough decision-making process. The decision-making process was carried out by a regionally representative active transportation committee and facilitated by MVPC transportation staff. This plan details the planning process and the outcomes of the completed tasks.

Through the *MV Moves* planning process, the Merrimack Valley Planning Commission (MVPC) and the regional active transportation committee identified six regionally significant next generation path projects that, once completed, will improve access and connectivity to regional destinations by walking, biking, and other similar modes. The six projects are:

1. Haverhill – River Street Corridor from Maxwell Street to the Comeau Bridge
2. Lawrence – Canal Street Corridor from Broadway to the Spicket River Greenway
3. Amesbury – Riverwalk Extension from the Riverwalk terminus at Water Street to Market Square
4. Lawrence – Shawsheen River Path from Costello Park to Lawrence Public High School
5. Newbury – Parker Street Sidepath Extension from the intersection of the Clipper City Rail Trail to the intersection of High Street
6. Georgetown – Groveland to Georgetown Connector from the terminus of the Groveland Community Path to the future Border to Boston segments.

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List of Acronyms

Acronym	Meaning/Definition
ADA	Americans with Disabilities Act
ATC	Active Transportation Committee
ATN	Active Transportation Network
DOT	Department of Transportation (Federal, also see USDOT)
DPW	Department of Public Works (Local/Municipal)
FFY	Federal Fiscal Year
FHWA	Federal Highway Administration
GHG	Greenhouse Gas
GIS	Geographic Information Systems
HIN	High Injury Network
HSIP	Highway Safety Improvement Program
LRTP	Long Range Transportation Plan (synonymous with MTP)
MA	Massachusetts
MASSDOT	Massachusetts Department of Transportation
MBTA	Massachusetts Bay Transportation Authority
MEVA	Merrimack Valley Transit
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MTP	Metropolitan Transportation Plan (see also LRTP)
MV	Merrimack Valley
MVMPO	Merrimack Valley Metropolitan Transportation Planning Organization
MVPC	Merrimack Valley Planning Commission
PIF	Project Initiation Form
PINFO	Project Information System (of the Massachusetts Department of Transportation)
RAISE	Rebuilding American Infrastructure with Sustainability and Equity Program
RCP	Reconnecting Communities Pilot Program
REJ+	Regional Environmental Justice Plus
RFP	Request for Proposal
RFQ	Request for Quote
RITIS	Regional Integrated Transportation Information System
ROI	Return On Investment
ROW	Right Of Way
RPA	Regional Planning Agency
RTA	Regional Transit Authority
RTP	Regional Transportation Plan (see LRTP, MTP)
SS4A	Safe Streets and Roads for All
TIP	Transportation Improvement Program
UPWP	Unified Planning Work Program
USDOT	United State Department of Transportation
VMT	Vehicle Miles Traveled

Introduction

MV Moves builds on previous planning efforts to prioritize active transportation projects. It advances the development of safe and comfortable paths for those who cannot or choose not to drive, encourages a shift to non-motorized modes, and creates pleasant recreational opportunities, all of which in turn supports economic development in the region's town and urban centers.

The region has made significant progress in developing an active transportation network that enhances access to destinations, social and economic opportunities, and recreation for both residents and visitors. Both the state and municipal governments have substantially invested in off-road shared-use paths, which have become attractive recreational and transportation features for the communities they serve. The goal of this plan is to build on these regional investments by planning connections to existing paths. Essentially, the plan aims to extend these paths into a broader transportation network, maximizing the potential of previous investments.

As detailed in the public engagement section of this plan, today's off-road shared-use paths are predominantly used for recreational purposes. Often, people drive to these paths to walk, bike, or participate in other recreational or social activities. Connecting these paths to regional destinations encourages people to replace driving trips with walking, biking, or transit-riding. Existing regional paths, such as Newburyport's Clipper City Rail Trail and the Amesbury Riverwalk, already connect housing to key destinations and are used for short trips, errands, or commuting. Expanding the active transportation network will enhance access for those walking, biking, or using transit, helping transform a car-oriented region into a more sustainable, healthy, and equitable regional community.

To prioritize connections, the region must first understand the context of existing paths, how people use them, and what destinations they want to access. By gaining an understanding of current usage and needs, the region can make informed decisions about capital projects that will significantly enhance the active transportation network. These projects represent the next generation of paths, building on the existing network and advancing the goals set out in this plan.

The decision-making process for this plan involved forming an Active Transportation Committee (ATC), consisting of municipal planners and active transportation advocates from across the region. The ATC used data collection and analysis, public engagement, and site visits to prioritize the next generation of active transportation projects.

This plan identifies six regionally significant next-generation projects designed to expand the existing active transportation network and develop regional greenways (see Figure 1). When realized, these projects will enhance access to high-demand activity nodes and offer alternative travel options for current high-demand travel patterns. In addition to the priority projects, the plan provides guidance and strategies for local decision-making, path design, and future planning efforts, all focused on promoting the development of a livable region.

Active Transportation

Active transportation is human-powered mobility, such as walking, biking or rolling. The Merrimack Valley MPO Board has set goals to improve access to active modes of transportation to encourage mode shift from driving. Shifting from driving to active modes of transportation has several benefits (see Figure 1).



Figure 1. Benefits of Active Transportation Graphic

Active Transportation Network

The *MV Moves* planning process aims to enhance the development of an active transportation network that encourages walking, cycling, and other non-motorized forms of transportation. This network is designed to connect people across the region to high-quality paths, thereby improving both mobility and access to key activity nodes.

Mobility: *The ease and efficiency with which people can travel from one place to another using active transportation modes.*

Access: *The ability of individuals to reach desired services, destinations, and opportunities.*

The current state of the region's active transportation network is restricted, both in terms of who it serves and what it connects to. These limitations often result in a dependence on cars for mobility and access. *MV Moves* seeks to address these issues by expanding and improving the network, ensuring it serves a broader range of people and connects them to more destinations.

Next Generation Active Transportation Projects

MV Moves uses the term "next-generation projects" to describe active transportation initiatives that are regionally significant but still in the conceptual stage—essentially just lines on a map. Through the *MV Moves* process, the region will advance these projects by engaging the public, conducting site visits, collaborating with state and regional partners, and developing detailed project profiles.

Paths

The Merrimack Valley's Active Transportation Network (ATN) is made up of sidewalks, off-road shared use paths (rail trails), and on-street buffered and non-buffered bike lanes. The Active Transportation Network will connect people to regional destinations on safe and comfortable pedestrian and bicycle paths. By studying the region's existing paths and the users' experiences, MVPC can begin to understand which connections, improvements, and extension will allow greater access to opportunities for our regional community.

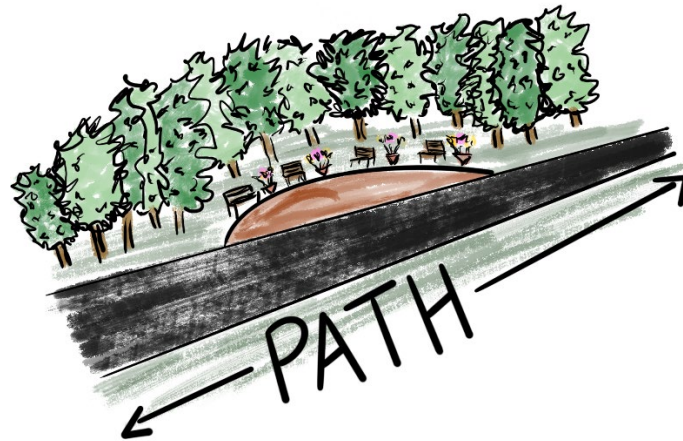


Figure 2. Path

Nodes

Nodes are points where two paths converge. Nodes are where people gather. Often intersections have the potential to be nodes as they are natural points along a route where people stop or slow down. In future planning efforts, *MV Moves* will expand to identify potential nodes and enhancements to existing nodes where people want to stop, stay awhile, and take part in the surrounding public life.



Figure 3. Node

Types of Active Transportation Infrastructure

Shared Use Paths also called trails, multi-use paths, greenways, or bike paths – are active transportation infrastructure shared by people walking, biking, or using other forms of active transportation. The paths are separated from motor vehicle traffic and tend to be ADA-compliant. Typically, shared-use paths are paved, but can also be stabilized aggregate, crushed stone, or unimproved natural surfaces. There are different types of shared-use paths, such as rail trails, rails with trails, sidepaths, and linear parks. Rail trails and sidepaths are the most common form of bicycle infrastructure in the Merrimack Valley.



Figure 4. Salisbury Ghost Trail - Shared Use Path

Separated Bike Lanes, or protected bike lanes, are for the use of people biking, scootering, or using other mobility devices that travel at greater speeds than people walking. Separated bike lanes are designed for one-way travel along a street with motorized traffic. Separated bike lanes are separated from motor vehicle travel lanes by a horizontal buffer. Often, separated bicycle lanes include a vertical element for additional protection, such as a tubular marker (flex post), hardened planter box, or vertical landscaping. When such elements are present, the transportation industry refers to these as *protected* bike lanes.

Often separated bike lanes are at street grade but can be at sidewalk grade. The buffer and vertical element create protection and a feeling of safety from motor vehicle traffic – resulting in a comfortable space for active transportation. The intensity in the level of protection varies in the design of separated bike lanes and considerably impacts users’ perceptions of safety and comfort.



Figure 5. Separated Bike Lanes – Boston, MA

Two-way Separated Bike Lanes are similar to sidepaths, but are generally intended for cyclists, scooters, or other rolling users traveling at greater speeds than people walking. Two-way separated bike lanes are designed for bidirectional travel on one side of a street with motorized traffic. Two-way separated bike lanes are separated from motor vehicle travel lanes by a horizontal buffer. Many two-way separated bike lanes include vertical elements to improve protection.

Often two-way separated bike lanes are at street grade but can be at sidewalk grade. The buffer and any associated vertical elements create protection and a feeling of safety from motor vehicle traffic – resulting in a comfortable space for active transportation. Two-way separated bike lanes are commonly implemented when there are no nearby alternative routes or when one side of the street has far fewer intersections or driveways. Because one direction of active transport travel operates contraflow to vehicles, intersection crossings, turns, and facility transitions can be more complex for two-way facilities.



Figure 6. Two-Way Separated Bike Lanes – Boston, MA

Bicycle Boulevards, or shared streets, are streets with low traffic volumes and speeds that have been designed to prioritize travel by active modes of transportation. Bicycle Boulevards use signs, pavement markings such as sharrows, and traffic calming measures to discourage cut through traffic and prioritize the movement of people outside of cars. Bicycle Boulevards/shared streets are not appropriate for streets with vehicle speeds that exceed 25 miles per hour.



Figure 7. Bicycle Boulevard (Shared Street) – Maple Avenue, Andover, MA

Vision

The ATC established the vision for this plan through the completion of the 2014 Merrimack Valley Active Transportation Plan. Instead of creating a new vision, the ATC decided to carry forward the spirit of that vision with concrete and specific actions. Through this planning process, the region translated the vision below into a region-wide active transportation network concept (see Figure 8).

The MVPC envisions a Merrimack Valley region connected by safe and comfortable active transportation paths used by people of all ages and abilities. The region will create an equitable, sustainable, healthy, and economical transportation network by increasing active transportation mobility and access. MVPC, the MVMPO, and its member communities will connect jobs, housing, essential services, and recreation, to reduce automobile dependence and environmental impact, thereby enhancing the region's livability and economic vitality.

Goals

MV Moves shares the goals of recent regional and statewide plans through regionally significant capital projects.

MassDOT 2021 Bike Plan

1. Eliminate bicyclist fatalities and serious injuries.
2. Increase the percentage of everyday trips made by bicycling.

Merrimack Valley 2014 Active Transportation Plan

1. Expand multi-modal access and options.
2. Provide a quality and safe transportation network.
3. Support livable and economically vibrant communities.

Strategies

MV Moves executes the strategies laid out in the Merrimack Valley Metropolitan Planning Organization's Metropolitan Transportation Plan, *MV Vision 2050*.

- *Identify and prioritize filling gaps in the active transportation network.*
- *Identify improvements to existing active transportation network segments.*
- *Identify funding sources for gaps in active transportation.*

Tasks

Through the *MV Moves* Planning process, MVPC and the Merrimack Valley Active Transportation Committee completed three major tasks to execute the strategies mentioned above.

1. **Existing Conditions:** *Assess the current state to understand the values, opportunities, and challenges of the Merrimack Valley's Active Transportation Network.*
2. **Next Generation Projects:** *Identify priority capital projects to expand the Active Transportation Network, enhancing access to high-demand activity nodes and providing non-driving travel options for current high-demand travel patterns.*
3. **Project Initiation:** *Advance priority capital projects through further public engagement and conceptual design.*

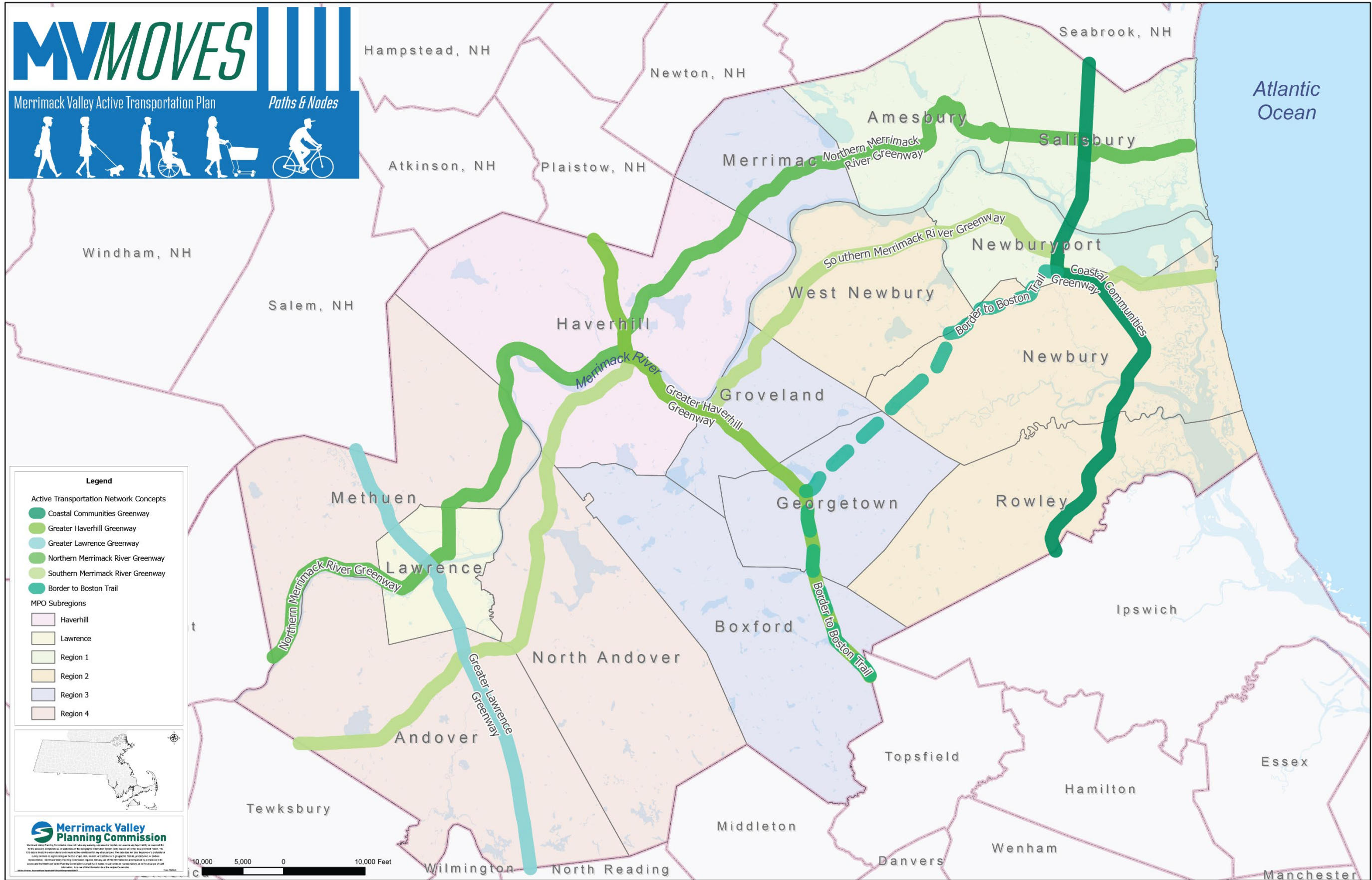


Figure 8. Merrimack Valley Greenways Map.

Planning Process

The Planning Process occurred between September 2023 and July 2024 and was broken into subtasks designed to accomplish the tasks listed above. Figure 9 displays a high-level timeline of the public engagement and planning process subtasks.

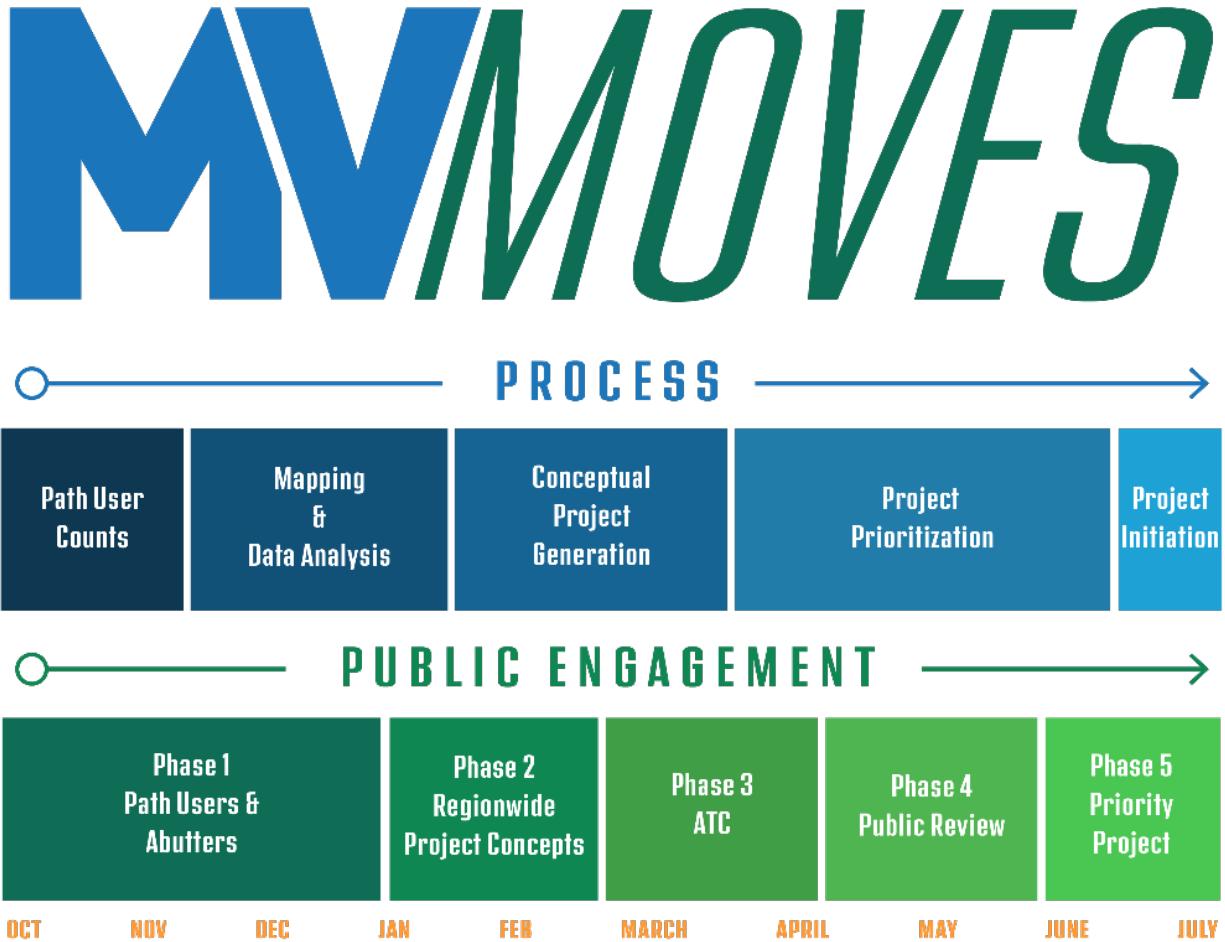


Figure 9. MV Moves Timeline

Planning Process and Public Engagement Subtasks

Existing Conditions Assessment (See Figure 10)

Path User Counts

Execute a weeklong path user counting program to capture a snapshot in time of path usage throughout the region.

Path User Intercept Surveys and Abutters Surveys

Conduct intercept surveys along the region's existing paths and distribute postcards with survey links to households within 300 feet of a shared use path.

Mapping & Data Analysis

Identify and map existing, under-construction, designed, and planned paths. Analyze path user count data and public engagement results to assess current conditions of the active transportation network.

Next Generation Projects

Conceptual Project Generation

Draft an initial list of next generation active transportation projects aligned with the *MV Moves* vision. Collect project ideas from the Metropolitan Transportation Plan (MV Vision 2050) and Phase 2 public engagement.

Regionwide Project Concepts

Collaborate with municipal planners, public advocacy groups, and the public at regional events to refine project concepts.

ATC – Active Transportation Committee

Convene a committee of planners and advocates to provide regional perspectives on the active transportation plan and next generation projects.

Project Prioritization

Guide the Active Transportation Committee through a 4-month process to prioritize the next generation of active transportation projects.

Project Initiation

Advance a demonstration priority project with an initial design concept. to facilitate public engagement and grant writing. Continue this task beyond the completion of this plan

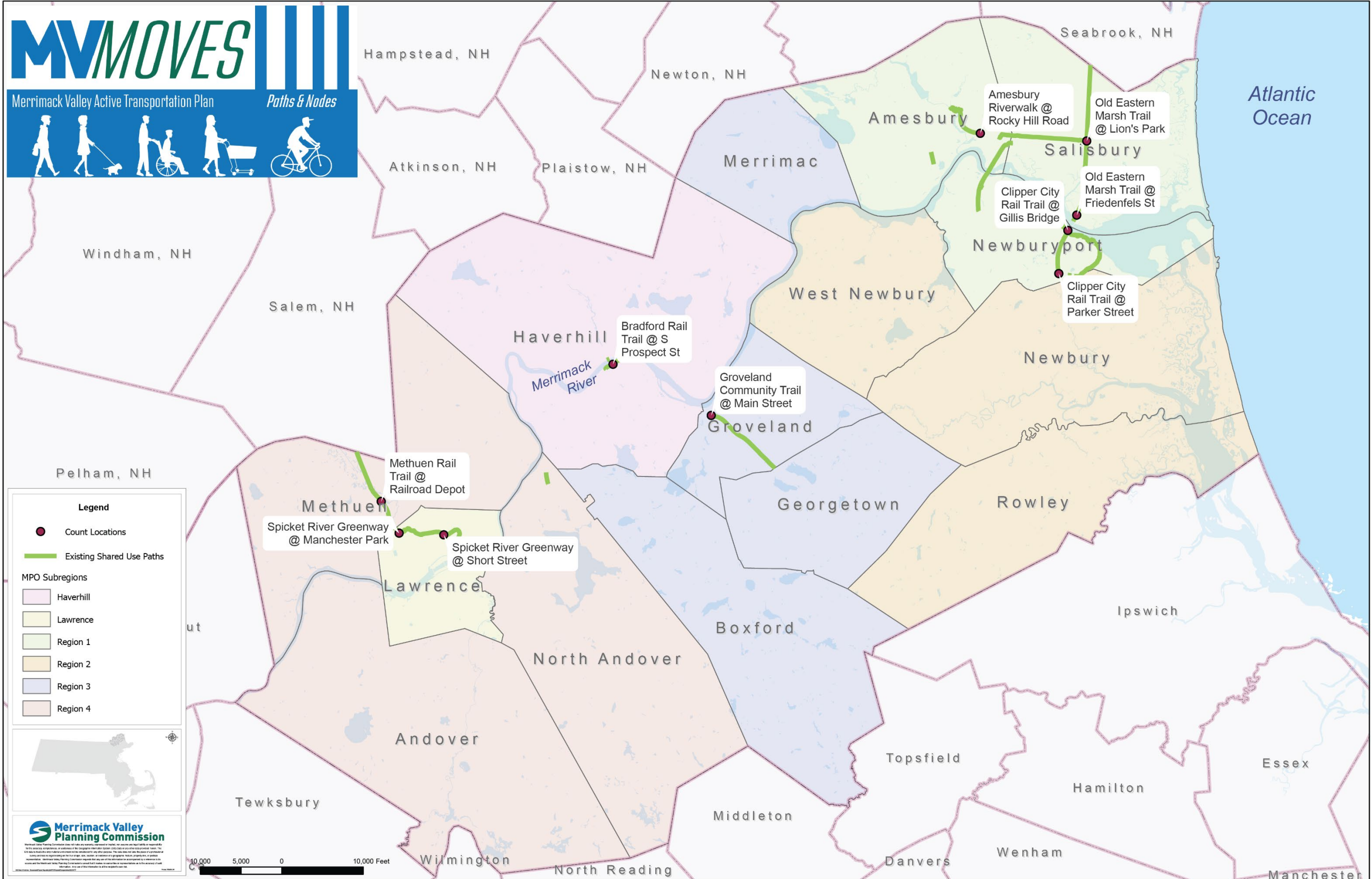


Figure 10. Map of Locations Where MVPC Staff Conducted Path User Counts and Intercept Surveys

Existing Conditions Assessment

MV Moves builds on the existing and planned active transportation network. Table 1 includes all paths that are existing, under construction, in design, or planned. MVPC and the Active Transportation Committee use this list to develop potential next-generation projects.

Table 1. List of Paths Existing (Open), in Design, in Planning, or Under Constructions

	Path Name	Community	Status
1	Parker Street Sidepath (CCRT)	Newburyport	Construction
2	Route 110 Separated Bike Lanes in Haverhill	Haverhill	Design
3	Boxford Section of the Border to Boston	Boxford	Design
4	Bradford Rail Trail Phase 3	Haverhill	Design
5	Georgetown to Boxford Section of the Border to Boston	Georgetown	Design
6	Georgetown to Byfield Border to Boston Section	Georgetown	Design
7	Lafayette Road (Route 1)	Salisbury	Design
8	Lawrence Rail Trail	Lawrence	Design
9	Newbury to Georgetown Border to Boston	Newbury	Design
10	Riverwalk/Ghost Trail Connector	Amesbury	Design
11	Route 110 Lowell/Dracut/Methuen Separated Bike Lanes	Methuen	Design
12	Route 114 Shared Use Path	North Andover	Design
13	Route 133 Shared Use Path	Andover	Design
14	Route 1A Sidepath	Salisbury	Design
15	Route 97 Shared Use Path	Georgetown	Design
16	Water Street Shared Use Path	Haverhill	Design
17	Amesbury Riverwalk	Amesbury	Open
18	Bradford Rail Trail	Haverhill	Open
19	Clipper City Rail Trail Phase 1	Newburyport	Open
20	Clipper City Rail Trail Phase 2	Newburyport	Open
21	Ferry Road Access to Garrison Trail	Newburyport	Open
22	Garrison Trail	Newburyport	Open
23	Ghost Trail	Salisbury	Open
24	Groveland Community Path	Groveland	Open
25	Haverhill Boardwalk	Haverhill	Open
26	Methuen Rail Trail	Methuen	Open
27	Newburyport Harborwalk	Newburyport	Open
28	Old Eastern Marsh Trail	Salisbury	Open
29	Parker Street Side Path	Newburyport	Open
30	Route 1 Rotary Shared Use Path and Crossings (CCRT)	Newburyport	Open
31	North Andover Amazon Shared Use Path	North Andover	Open
32	Spicket River Greenway	Lawrence	Open
33	Haverhill Riverside Park Path	Haverhill	Planning
34	Newbury Border to Boston	Newbury	Planning
35	Newburyport Border to Boston	Newburyport	Planning
36	North Andover Downtown Shared Use Path	North Andover	Planning

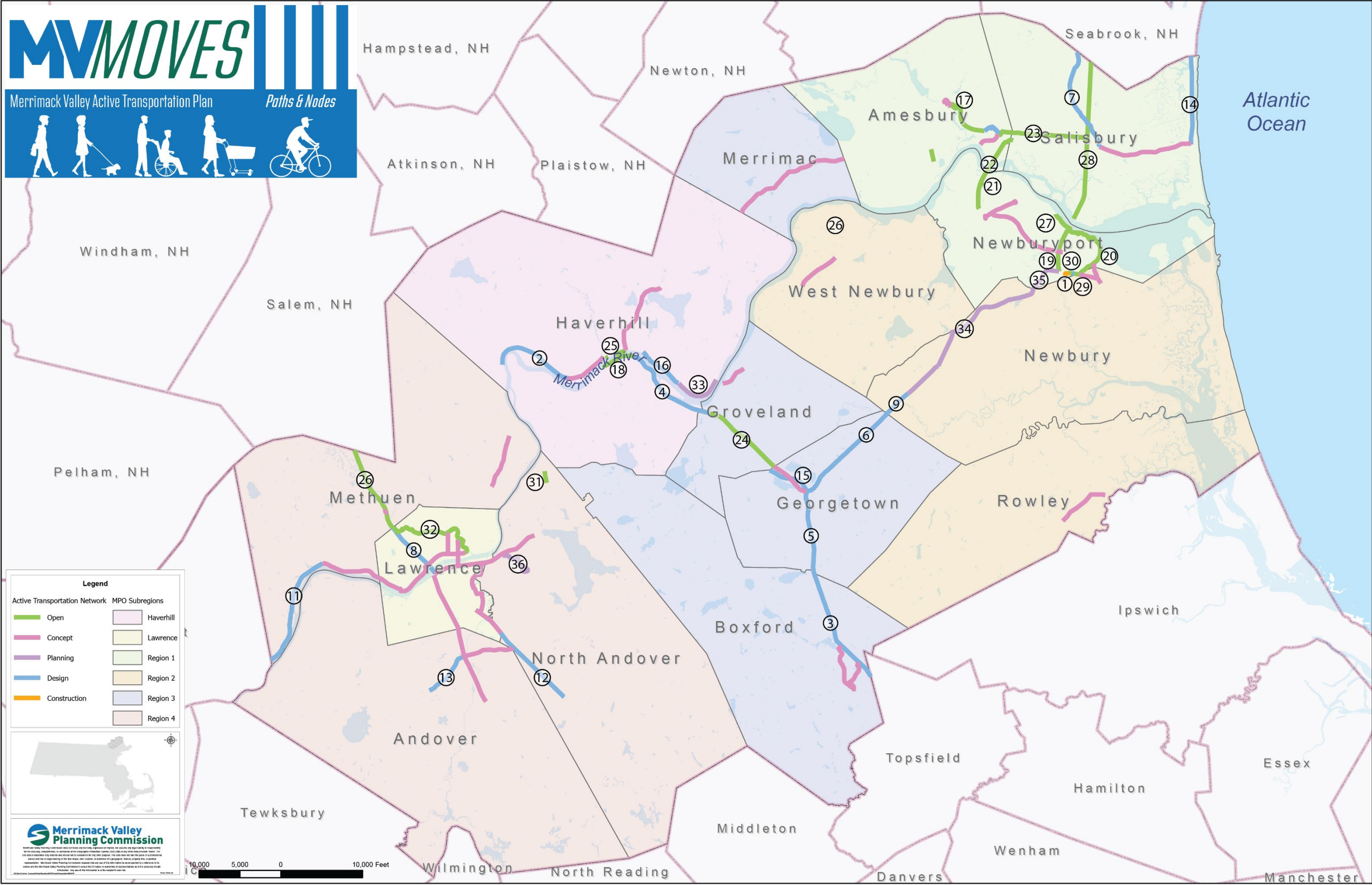


Figure 11. Map of Paths Existing (Open), Designed, Planned, and Under Construction.

Assets and Limitations

To understand existing conditions, MVPC assessed both the state of the active transportation infrastructure and the user experience on paths. This involved user count data collection, intercept surveys, and abutters surveys. For the intercept surveys, staff set up a table near a pass access point and invited path users to take a survey as they passed by. Staff asked the path users questions and filled out their responses on tablets. For the abutters survey, staff identified households within 300 feet of a shared use path in the region using MVPC's MiMap GIS service for each community. Staff created an online survey using ArcGIS's Survey123 application and created postcards with a QR code and link to the survey

MVPC categorized findings into assets and limitations, highlighting areas for potential improvement in the active transportation network.

Assets

The region's existing paths possess several valuable qualities. MVPC, the MVMPO Board, and other regional partners can leverage these assets to enhance the paths contemplated as next generation projects in this plan.

Connected Coastal Trails

The coastal paths network offers a diverse experience, transitioning from the urban, commercial, and cultural environment of Newburyport to the more natural beauty of Salisbury. As users move from Salisbury into Amesbury, they again encounter urban settings rich in historic, social, and cultural amenities. The connection points, where path users need to decide about where to turn to get to their destination, could be stronger with the introduction of wayfinding signage and maps. The coastal paths network could be the first phase of a regional wayfinding program that is implemented as connections are made.

Intercept survey responses indicate that increasing regional connections between communities and activity nodes encourages more walking and biking. The coastal paths effectively highlight the historic, cultural, commercial, and natural features of these areas. The Active Transportation Plan aims to strengthen and expand these connections, allowing more people to experience the diverse amenities of the Merrimack Valley.

OPPORTUNITY: PLAN PATH PROJECTS THAT ENHANCE ACCESS TO THE REGION'S CULTURAL, NATURAL, ECONOMIC, AND RECREATIONAL AMENITIES.

OPPORTUNITY: IMPLEMENT A REGIONAL WAYFINDING PROGRAM TO IMPROVE PATH CONNECTIVITY AND GUIDE USERS TO LOCAL DESTINATIONS.

Neighborhood Paths

The Bradford Rail Trail had the highest percentage of daily users who biked to the path (43%), while Newburyport had the highest percentage of daily users (60%) who walked to the path. This high usage is likely due to the strong connectivity between Newburyport's dense neighborhoods and the Clipper City Rail Trail. Overall, 61% of those surveyed who walked to the paths and 47% of those who biked to the paths used them daily.

The Bradford Rail Trail, Spicket River Greenway, and Methuen Rail Trail saw peak usage during the week while all other paths saw peak usage on the weekends. Unlike the coastal paths, the Spicket River Greenway extends through parks, making it more of a local amenity rather than a regional destination. Similarly, the Methuen Rail Trail, which lacks connections to commercial areas, serves more as an after-work destination rather than a weekend attraction.

OPPORTUNITY: ENHANCE NEIGHBORHOOD CONNECTIVITY TO NEIGHBORHOOD PATHS BY PROVIDING MULTIPLE ACCESS POINTS, ALLOWING RESIDENTS TO WALK OR BIKE DIRECTLY FROM THEIR HOMES.

Safety from Cars

The region's paths provide a safe, car-free environment for recreation and social interaction. Users consistently cite the separation from vehicular traffic as a key factor in their enjoyment of the paths. The ability to walk or bike without the hazards of traffic and to connect with other path users are highly valued aspects of the path experience. Results suggest that, in terms of demand, perceived safety and comfort of a facility is as equally important as actual safety and comfort.

OPPORTUNITY: ENSURE SAFE, CAR-FREE SPACES FOR WALKING AND BIKING, PARTICULARLY IN AREAS WHERE THE GENERAL ENVIRONMENT MAY BE LESS SAFE.

OPPORTUNITY: BUILD SAFE AND CONNECTED SIDEWALKS THAT ALLOW PEOPLE TO WALK AND ROLL TO OFF-ROAD SHARED USE PATHS

Enjoyable Scenery

In Newburyport, users appreciate the scenic views, public art, and public spaces along the paths. In Salisbury and Groveland, users particularly value path's natural beauty.

OPPORTUNITY: ENHANCE USERS' EXPERIENCES BY ADDING LOOKOUT POINTS WITH SEATING, INSTALLING PUBLIC ART, AND CREATING PLAY AREAS FOR CHILDREN. THIS WILL MAKE THE PATHS MORE ENGAGING AND ENJOYABLE FOR ALL USERS.

Local Economic Activity

Over 50% of surveyed path users in Amesbury, Salisbury, and Newburyport reported spending money during their path trips (see Figure 12). Examples include shopping for groceries, picking up cars from repairs, and dining out. This highlights the paths' varying roles in supporting local businesses and stimulating economic activity.

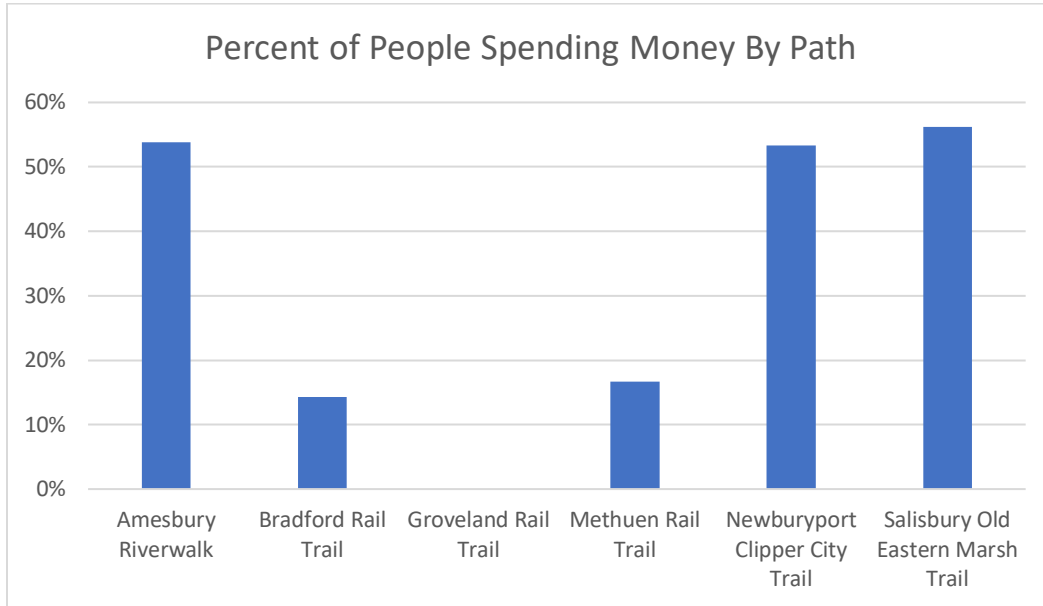


Figure 12. Percent of People Spending Money by Path.

OPPORTUNITY: IMPROVE CONNECTIVITY TO GROCERY STORES, RESTAURANTS, AND OTHER COMMERCIAL ACTIVITIES TO ENCOURAGE MODE SHIFT FROM DRIVING TO ACTIVE MODES OF TRANSPORTATION.

OPPORTUNITY: STRENGTHEN ACTIVE TRANSPORTATION LINKS TO COMMERCIAL AREAS TO INCREASE FOOT TRAFFIC AND BOOST LOCAL ECONOMIC ACTIVITY.

OPPORTUNITY: DEVELOP AMENITIES ALONG PATHS, SUCH AS BIKE RACKS AND REST AREAS TO SUPPORT AND ENCOURAGE MORE FREQUENT SHOPPING AND LOCAL ERRAND ACTIVE TRANSPORTATION TRIPS.

Perceived Benefit for Homebuyers

Overall, 57% of respondents were already living in their home when construction of the shared use path was completed. Of the 43% of respondents who chose to rent or buy a home near an existing shared use path, 65% perceived it as a benefit, 27% reported that the shared use path did not impact their decision, and 4% reported that the shared use path was a concern (see Figure 13). The respondent that perceived the path a concern did not leave a comment regarding why it was a concern, but based on comments from other respondents a top concern is trespassing, noise, or lack of maintenance.

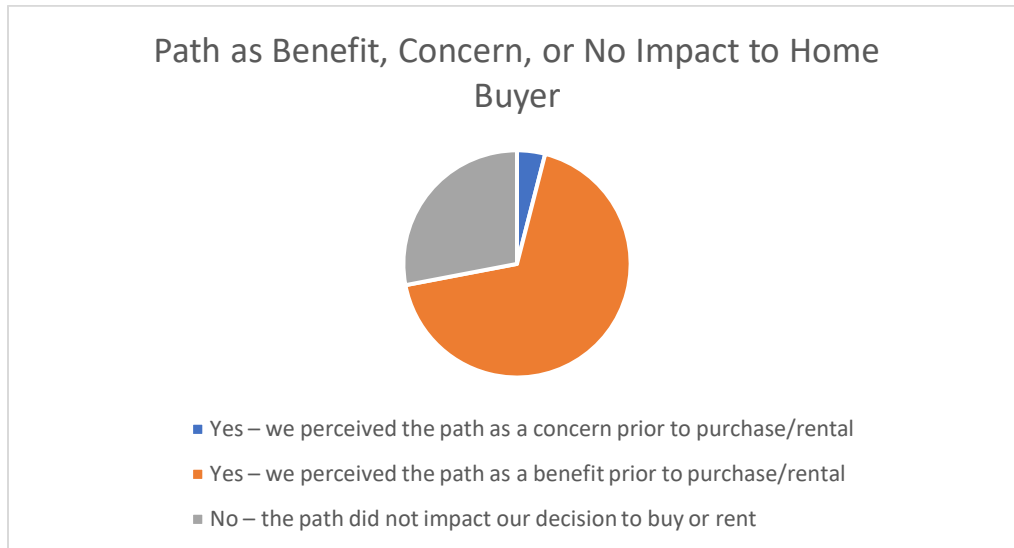


Figure 13. Graph of Perceived Impact of Paths for Homebuyers.

OPPORTUNITY: HIGHLIGHT THE BENEFITS OF PATHS WHEN MARKETING COMMUNITIES AS PLACES TO RESIDE

Social and Community Activities

The counts collected during the first study period on the Clipper City Rail Trail at the Gillis Bridge location were skewed due to a run/walk 5k that took place on Sunday, September 24, 2023. Activity spiked during the time of the event. The inclusion of the event’s data highlights the role paths play beyond individual recreation, commuting, or trips: they serve as safe community gathering places for large-scale community activities.

On the Newburyport Clipper City Rail Trail, users frequently discussed the social interactions that people have along the path, indicating this as positive and desirable. People reported making acquaintances and friendships due to seeing the same people using the path daily. The Clipper City Rail Trail offers many public spaces that allow people to stop, sit down and chat, which likely increase opportunities for passive social interaction.

OPPORTUNITY: SHOWCASE AND FULLY USE PATHS FOR COMMUNITY EVENTS AND CIVIC ACTIVITIES.

OPPORTUNITY: CREATE PLACES ALONG THE PATHS WHERE PEOPLE CAN CONVENE (TABLES AND CHAIRS, BENCHES, BUSINESSES WITH OUTDOOR SEATING ALONG THE PATH).

Limitations

While the existing paths offer numerous benefits, there are several areas that require improvement. These limitations can be addressed through capital projects and ongoing maintenance efforts. Considering these issues when making upgrades or designing new facilities will significantly enhance the next generation of active transportation projects and the region's overall network.

Unconnected Paths

In Groveland (75%) and Methuen (71%), a significant number of respondents drove to access the paths. Public transportation was rarely used, with only one survey respondent taking it to the Bradford Rail Trail. While 29% of those who carpool and 27% of those who drive to access the paths use them daily, there is a clear need for improvement.

Survey comments highlighted a demand for wider paths and improved connectivity within the path network. Typically, shared use paths are between 10' and 12' wide which is sufficient for typical demand; larger paths at 12' and beyond tend to be appropriate for paths with greater demand. Some respondents from Newburyport also emphasized the need for better sidewalk connections to the paths and improved links in areas with high traffic volumes.

OPPORTUNITY: INITIATE PROJECTS THAT LINK EXISTING PATHS BY ON-ROAD OR OFF-ROAD FACILITIES TO ENHANCE ACCESS TO DESTINATIONS AND MOBILITY OF PEOPLE USING ACTIVE TRANSPORTATION. INVEST IN PROJECTS THAT CONNECT PEOPLE TO THE EXISTING NETWORK OR CONNECT THE EXISTING NETWORK TO DESTINATIONS.

OPPORTUNITY: DEVELOP A COMPREHENSIVE SIDEWALK NETWORK TO ENSURE EASY ACCESS TO EXISTING AND FUTURE PATHS, IMPROVING CONNECTIVITY AND CONVENIENCE FOR USERS.

Isolated and Dark areas of the Paths

Users have expressed concerns about safety on isolated segments of paths, particularly in poorly lit areas. Many respondents noted the need for improved lighting along these paths. Specific concerns include sections of the Newburyport path and the Marsh Trail in Salisbury, where inadequate lighting makes users feel unsafe, especially at night. Some areas, such as the East Marsh Trail, are heavily wooded and lack activation from other users, further contributing to the safety issues. While some users find lighting crucial for their enjoyment and safety, others, like a respondent from Groveland, have suggested avoiding lighting due to personal preference. Light pollution can impact nocturnal animals and human circadian rhythms, as well as some individuals' overall enjoyment of the natural environment. A balanced approach to lighting can limit paths' impact and increase the appeal for all.

OPPORTUNITY: INSTALL HUMAN SCALE AND/OR TIMED LIGHTING ALONG THE PATH THAT ALLOWS PEOPLE TO SEE AFTER SUNSET AND DOES NOT DISRUPT WILDLIFE OR THE QUALITY OF LIFE FOR ABUTTERS.

Maintenance

Respondents highlighted several areas for improvement in path maintenance, including snow plowing, mowing, clearing vegetation, and repairing fences. Regular upkeep of both paths and connecting sidewalks is essential to enhance the overall user and neighborhood experience. As one respondent noted, “Regular maintenance—sweeping, mowing, trimming—makes the path a terrific community asset.” Additionally, concerns were raised about noisy maintenance activities before 9 a.m.

OPPORTUNITY: DEVELOP A COMPREHENSIVE MAINTENANCE PLAN FOR PATHS AND COLLABORATE WITH THE COMMUNITY TO ORGANIZE REGULAR CLEAN-UP EVENTS. PARTIES RESPONSIBLE FOR MAINTENANCE SHOULD BE IDENTIFIED IN THE COMPREHENSIVE MAINTENANCE PLAN.

Trash and Dog Waste

The need for frequent trash receptacles at entrances and along paths was a theme that is consistent with what staff heard during intercept surveys. One comment noted that trash should be picked up more frequently; however, it is unclear whether the respondent meant picking up litter along the path or emptying trash receptacles. One comment from a Methuen respondent was clearer, stating that litter needed to be cleaned up along the paths.

Respondents noted that dog waste can be an issue. Certain path users leave dog waste either in bags or simply on the ground along the path.

OPPORTUNITY: INSTALL TRASH RECEPTACLES AND DOG WASTE STATIONS AT PATH ACCESS POINTS AND INTEGRATE THEIR UPKEEP INTO THE OVERALL PATH MAINTENANCE PLAN.

OPPORTUNITY: ADOPT BYLAWS TO LEVY FINES AGAINST THOSE WHO LITTER OR LEAVE DOG WASTE ALONG A PATH.

Various Speeds in a Shared Spaces

Users across paths expressed concerns about electric bicycle (e-bike) speeds and potential conflicts with pedestrians. Feedback highlighted the need for clear signage to remind cyclists to alert pedestrians and suggested implementing lane lines and etiquette signage. Some respondents even proposed restricting e-bikes and motor vehicles from the paths.

OPPORTUNITY: DEVELOP SAFE ON-STREET FACILITIES FOR BIKES, E-BIKES, AND OTHER MOBILITY DEVICES THAT EXCEED 15MPH TO PROVIDE ALTERNATIVE ROUTES AND REDUCE CONFLICTS ON SHARED PATHS.

OPPORTUNITY: IMPLEMENT USER-FRIENDLY SIGNAGE ALONG PATHS TO PROMOTE SAFETY AND COURTEOUS INTERACTIONS BETWEEN CYCLISTS AND PEDESTRIANS.

People

In the gateway cities of Haverhill, Lawrence, and Methuen, there is a reported need to address the presence of unhoused individuals living along the paths. While the housing crisis and lack of affordable shelter are beyond the scope of the Active Transportation Plan, it is important to acknowledge these issues. Recommendations may be considered for further investigation, but the complexity of the situation extends beyond this plan.

In Groveland, some respondents expressed concerns about privacy following the completion of the path. One respondent noted that the path disrupted their preference for a more secluded lifestyle, suggesting the addition of dense shrubs or evergreens could improve privacy. Conversely, another Groveland resident found the path to be a positive addition, appreciating the visibility of people enjoying the path.

Additionally, there were reports of people trespassing through private property to access the path.

OPPORTUNITY: COLLABORATE WITH HUMAN AND SOCIAL SERVICES TO PROVIDE ASSISTANCE TO UNHOUSED INDIVIDUALS LIVING ALONG THE PATH IN SEARCH OF SHELTER.

OPPORTUNITY: DESIGN AND IMPLEMENT A SUFFICIENT BUFFER BETWEEN THE PATH AND ADJACENT PROPERTIES USING TREES, BUSHES, AND FENCING TO ENHANCE PRIVACY AND AESTHETICS.

OPPORTUNITY: WORK WITH ADJACENT LAND OWNERS TO ESTABLISH MULTIPLE FORMAL ACCESS POINTS TO THE PATH TO PREVENT TRESPASSING THROUGH PRIVATE PROPERTY.

Existing Conditions Conclusions

The Newburyport Clipper City Rail Trail (500 average daily users) and the Salisbury East Marsh Trail (418 average daily users) were the most used paths in the path user count study (see Table 2). Compared to the other paths, the Clipper City Trail had the highest total volume of people walking (2,553) and the East Marsh Trail had the highest total volume of people biking (1,786). The East Marsh Trail was the only path in the study that had higher volumes of people biking than people walking, suggesting the commonly held stereotype that paved paths are primarily implemented for avid cyclists is not valid (see Table 3). The Amesbury Riverwalk (244 users) and the Bradford Rail Trail (274 users) had similar average daily usage. The Methuen Rail Trail (150 users) had the third lowest average daily usage followed by the Groveland Rail Trail (108 users) and the Spicket River Greenway (94 users).

The connectivity of the paths to neighborhoods, accessibility of local and regional destinations, and the length of the path are factors in how often they are used. Connections to commercial nodes as seen along the Amesbury, Newburyport, and Salisbury paths allow people to engage in the local economy. Many people drive to the Groveland and Methuen paths because the paths lack safe connectivity to the surrounding neighborhoods. The walkability of the urban form of the city and the multiple access points to the Clipper City Rail Trail in Newburyport makes walking the path desirable.

The next generation projects identified in this plan build out the active transportation network to connect higher density neighborhoods and destinations. Prioritizing these projects and applying a regional approach to their development will ensure an equitable outcome for future transportation investments. Currently, only the coastal communities have active transportation infrastructure that allows enough access and mobility for people walking and biking for people to leave their car at home. The Greater Haverhill and Greater Lawrence subregions have significant pieces but lack the connections that allow for greater usage.



Figure 14. Methuen Rail Trail

Existing Conditions Conclusion Summary

Most Used Paths

- Newburyport Clipper City Rail Trail: 500 average daily users, highest total volume of people walking (2,553).
- Salisbury East Marsh Trail: 418 average daily users, highest total volume of people biking (1,786), only path with more cyclists than walkers.

Usage of Other Paths

- Amesbury Riverwalk: 244 average daily users.
- Bradford Rail Trail: 274 average daily users.
- Methuen Rail Trail: 150 average daily users
- Groveland Rail Trail: 108 average daily users.
- Spicket River Greenway: 94 average daily users

Key Factors Influencing Path Usage

- Connectivity to neighborhoods.
- Accessibility to local/regional destinations.
- Path length.
- Urban form and walkability, as seen in Newburyport, increase path desirability for walking.

Path Connectivity and Economic Impact

- Paths like Amesbury, Newburyport, and Salisbury, which connect to commercial nodes, enable engagement with the local economy.
- Paths in Methuen and Groveland lack safe neighborhood connections, leading people to drive to the paths.

Future Project Prioritization

- Next-generation projects aim to connect higher density neighborhoods and destinations.
- A regional approach will ensure equitable transportation investments.
- Currently, only coastal communities have sufficient active transportation infrastructure for people to leave their cars at home.
- Greater Haverhill and Greater Lawrence areas lack the necessary connections to encourage more usage of active transportation infrastructure.

As next generation projects are implemented, MVPC should monitor path usage and compare future data with current findings. Success can be gauged by achieving a more balanced distribution of path usage across the region.

Table 2. Path Usage by Day of the Week.

Count Location	Collection Period	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Average Daily
Bradford Rail Trail	9/20/23 - 9/26/23	157	272	373	317	281	294	221	274
Methuen RT	9/20/23 - 9/26/23	61	177	176	230	182	96	126	150
Clipper City RT @ Gillis	9/20/23 - 9/26/23	451	661	801	790	847	518	1392	780
Old East Marsh @ Lions	9/20/23 - 9/26/23	173	320	455	428	458	611	367	402
Groveland Rail Trail	10/3/23 - 10/9/23	126	101	97	104	108	70	153	108
Clipper City RT @ Parker	10/3/23 - 10/9/23	629	486	471	432	419	307	757	500
East Marsh Trail @ Gillis	10/3/23 - 10/9/23	563	376	476	314	297	266	634	418
Spicket River @ Manch. Park	10/3/23 - 10/9/23	52	86	77	44	71	27	87	63
Amesbury Riverwalk	10/18/24 - 10/24/23	246	249	268	303	217	71	351	244
Spicket River @ Short St.	11/14/23 - 11/20/23	76	93	92	125	116	107	51	94

Table 3. Path Usage by People Walking and Biking.

Count Location	Collection Period	People Walking	People Biking	% Walking	% Biking	Total Users
Bradford Rail Trail	9/20/23 - 9/26/23	1704	211	89%	11%	1915
Methuen RT	9/20/23 - 9/26/23	596	452	57%	43%	1048
Clipper City RT @ Gillis	9/20/23 - 9/26/23	4749	720	87%	13%	5469
Old East Marsh @ Lions	9/20/23 - 9/26/23	1449	1786	45%	55%	3235
Groveland Rail Trail	10/3/23 - 10/9/23	522	237	69%	31%	759
Clipper City RT @ Parker	10/3/23 - 10/9/23	2553	948	73%	27%	3501
East Marsh Trail @ Gillis	10/3/23 - 10/9/23	1449	1477	50%	50%	2926
Spicket River @ Manch. Park	10/3/23 - 10/9/23	327	117	74%	26%	444
Amesbury Riverwalk	10/18/24 - 10/24/23	1364	341	80%	20%	1705
Spicket River @ Short St.	11/14/23 - 11/20/23	531	129	80%	20%	660

Path Comparison

The higher density of neighborhoods in Newburyport likely explains the frequent use of the Clipper City Rail Trail, with 500 *daily users* compared to the Groveland Community Path's total of 759 users *per week*. In contrast, the lower density in Groveland contributes to the path's reduced usage. Maps of the Clipper City Rail Trail and Groveland Community Path (Figures 15 and 16) highlight significant differences in connectivity with surrounding neighborhoods, emphasizing how neighborhood density influences path usage. Despite contextual differences between Newburyport and Groveland, the data clearly shows that denser neighborhoods lead to higher path utilization.

The Clipper City Trail connects to neighborhoods with residential densities of approximately 10 units per acre and a walkable downtown with numerous pedestrian-oriented retail establishments (see Figure 15). There are about 15 formal access points along the Clipper City Trail and access to the path is quite fluid along Waterfront Park and through the harbor. The longest segment between access points is .47 miles and runs from the entrance at Parker Street to the access point off Low Street.

Groveland is the least densely populated community in the study: neighborhoods around the path have residential densities under three dwelling units per acre (see Figure 16). The path supports far fewer users compared to others in the study due to the lack immediate, convenient access and scant non-residential destinations. The two-mile path stretches from the Haverhill boundary in the north to Georgetown in the south. As more connections are made in neighboring communities, the path will become an important connector for people going between Haverhill and the Border to Boston in Georgetown.



Figure 15. Map of Newburyport Clipper City Rail Trail with Residential Density and Local Destinations.

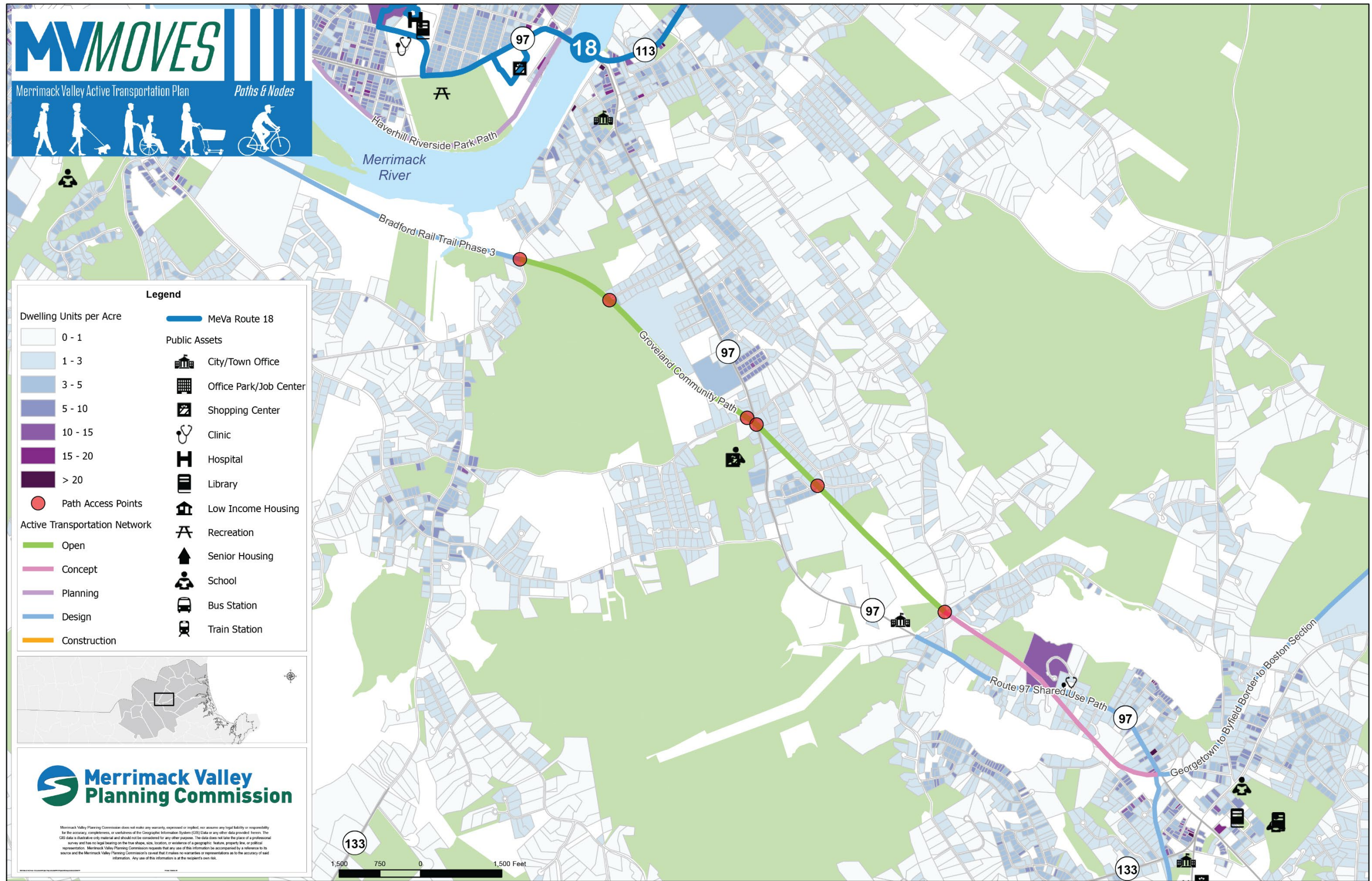


Figure 16. Map of Groveland Community Path with Residential Density and Local Destinations.

Concept Project Generation

Public engagement, data analysis, and collaboration with municipal officials through the planning process guided the development of concept active transportation projects. In the summer 2023, MVPC engaged with all 15 municipalities to generate a comprehensive list of potential projects for MV Vision 2050 (the region's Metropolitan Transportation Plan [MTP]). Staff refined this list to focus on bike and pedestrian projects that aligned with the Merrimack Valley Greenways Vision Map (Figure 8) or connect with key destinations. Staff mapped these projects and reviewed them with the Active Transportation Committee (Figure 17).

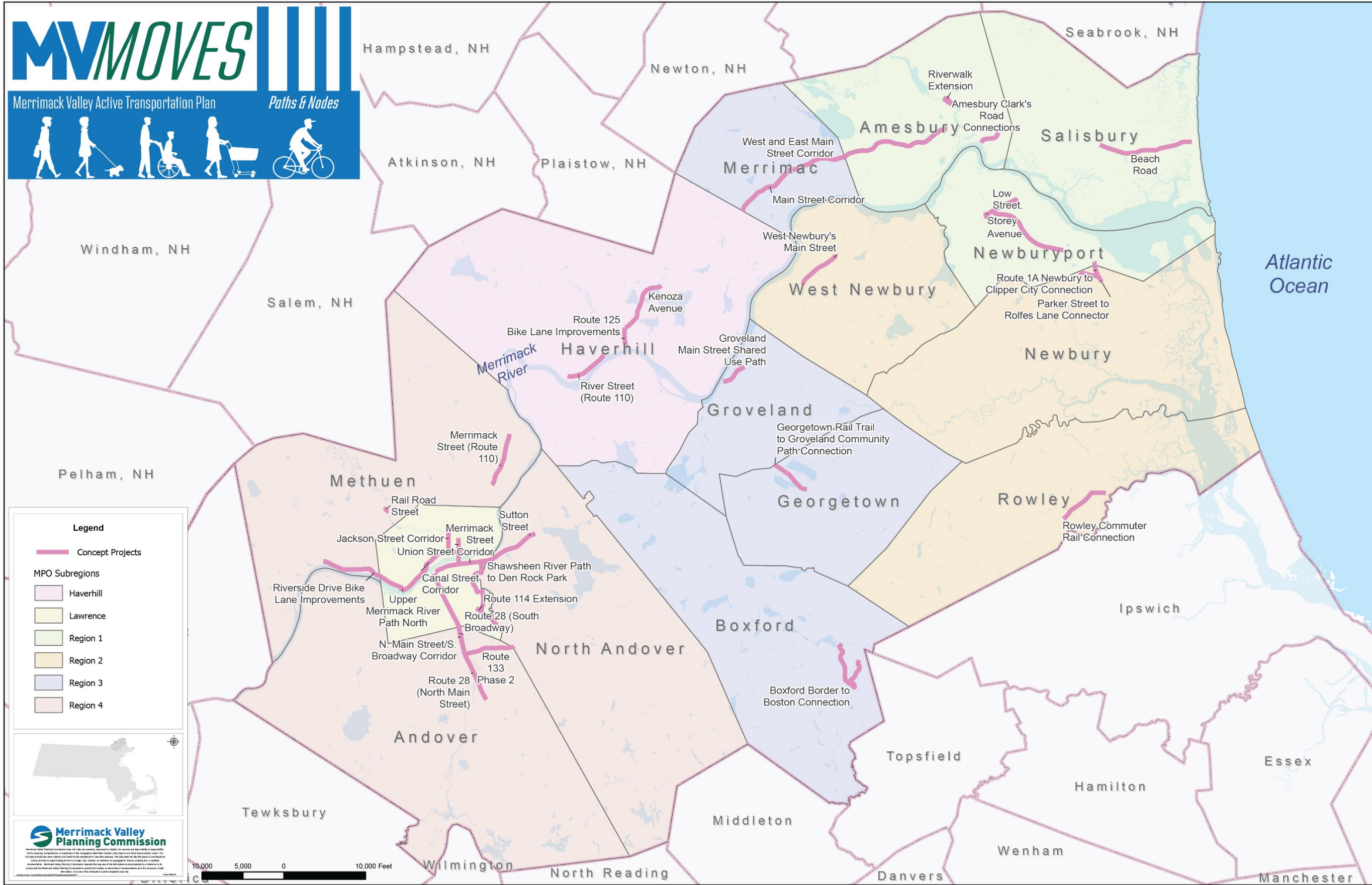


Figure 17. Concept Projects Map

Next Generation Projects

Advancing the regional active transportation network involves identifying key capital projects that expand the existing infrastructure. These projects should enhance access to destinations for users of active transportation modes. The Merrimack Valley Active Transportation Committee (ATC) was established to refine and prioritize conceptual projects derived from the Metropolitan Transportation Plan, public engagement, and municipal planning. Over a 4-month period, the ATC developed prioritization metrics, conducted subregional visioning, performed site visits, and carried out regional prioritization.

Active Transportation Committee

The *MV Moves* Active Transportation Committee was established in the spring of 2024 to recommend prioritization for the next generation of projects. Comprising municipal planners and active transportation advocates from 13 of the 15 communities in the region, the committee plays a crucial role in shaping the active transportation network.

On March 21, 2024, the committee convened to review the current state of the network and explore opportunities for enhancement. They discussed and developed prioritization metrics for ranking regional projects. During this meeting, MVPC also introduced the *MV Moves* Engagement Module, which presented information from the Existing Conditions section of this plan. The module was instrumental in guiding the ATC's decision-making process.

Committee Members

- Amesbury – Steve Ridgley (Interested Resident)
- Andover – Andrew Lewine (WalkBike Andover)
- Georgetown – Kate Cook (Georgetown Rec Path Committee)
- Groveland – Annie Schindler (Groveland Executive Coordinator)
- Haverhill – Rachel Thuerk (Interested Resident)
- Lawrence – Alejandra Juarez-Diaz (Groundwork Lawrence)
- Merrimac – Denise McClure (Merrimac Town Planner)
- Methuen – Bob Lennon (Interested Resident)
- Newbury – Kristen Grubbs (Newbury Town Planner)
- Newburyport – Rick Taintor (Newburyport Livable Streets, Newburyport Planning Board Chair)
- North Andover – Christina Minicucci (MeVa Transit Development Manager)
- Salisbury – Jerry Klima (Coastal Trails Coalition)
- West Newbury – Sue Brown (West Newbury Town Planner)

Prioritization Metrics

The Active Transportation Committee used stickers and a white board to aid discussion about which prioritization metrics the committee should consider as they prioritize the next generation of active transportation projects. Figure 6 displays the metrics that the committee discussed.

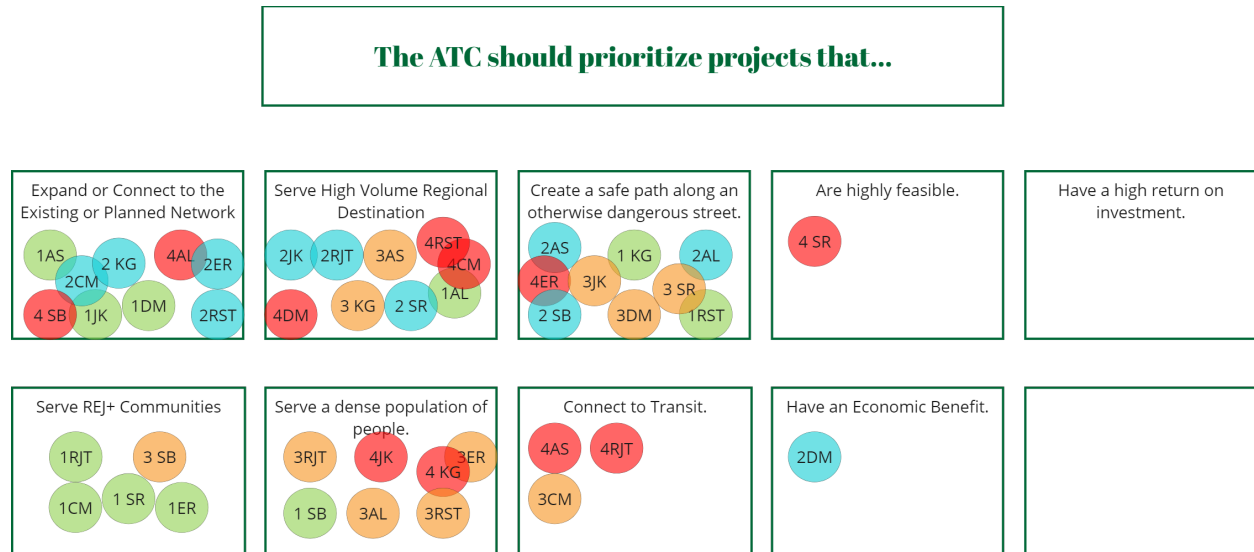


Figure 18. Active Transportation Committee Prioritization Metrics Miro Board.

From the prioritization metrics discussion, MVPC developed a scoring system for the next generation of active transportation projects. Table 6 displays the scoring system applied to the projects through GIS. The scoring data was then available to be viewed through the *MV Moves* Engagement Module. Table 4 displays the scoring metrics, and the points ascribed to each. Staff used GIS expressions to spatially identify whether the next generation projects answered yes or no to each of the questions associated with the metrics.

Table 4. Next Generation Active Transportation Project Scoring Metrics.

Expand or Connect to the Existing Network	Serve REJ+ Communities	Serve High Volume Regional Destination/Economic Impact	Create a Safe Path Along an Otherwise Dangerous Street	Serve a Dense Population of People	Connect to Transit	Are Highly Feasible	Have a High Return on Investment	Serve Locations where people commute by biking, walking or transit	Serve locations with a high volume of people taking trips less than 5 miles
Does the project intersect or come within a 300-foot buffer of the existing path network?	Does the project intersect with a REJ+ Block Group or extend a path within an REJ+ Block Group?	Does the project intersect with or come within 300-foot buffer of a downtown walkshed or a cluster of jobs or public assets	Does the project address intersections or road segments along the trends-based or risk-based HIN?	Does the project serve a dense population of people?	Does the project intersect with a 300-foot buffer of a bus route and .25 miles for a commuter rail station?	Would the project limits be within the ROW? Does it have wetlands impacts? Does it impact endangered species? Known utility impacts?	Is the project length less than two miles and address two other merit criteria?	Is the percentage of people commuting by biking, walking, or transit in block groups intersected by the project 7% or higher	
20	20	10	15	10	5	5	5	5	5

Subregional Visioning

The ATC divided into three subregions for focused visioning: the Coastal Communities (Amesbury, Salisbury, Newburyport, Newbury, West Newbury, and Rowley), the Greater Haverhill Communities (Merrimac, Haverhill, Groveland, Georgetown, and Boxford), and the Greater Lawrence Communities (Methuen, Lawrence, North Andover, and Andover).

Each subregion met to discuss and select two priority next generation projects that advance active transportation goals. This approach ensured that the final list of prioritized projects reflects geographic equity across the region.

Coastal Communities

The ATC's Coastal Communities representatives, which have the most connected path system in the region, aimed to link their network to regional destinations. Public engagement highlighted Plum Island as a key destination for improved bike access. With several route options available for connecting the Clipper City Rail Trail to Plum Island, the ATC and local advocates carefully deliberated to determine the best route.

In the northern part of this subregion, the Amesbury Riverwalk extension emerged as a top priority in the metrics. This long-proposed project would not only boost economic activity in Amesbury but also integrate the coastal trails network, offering new destination access. Despite the debate over route options, the ATC concluded that the Amesbury Riverwalk Extension has significant potential to enhance the entire network due to the connections to the Ghost Trail and Eastern Marsh Trail.



Figure 19. MVPC Transportation Staff conducting public engagement at the Newburyport Earth Day event

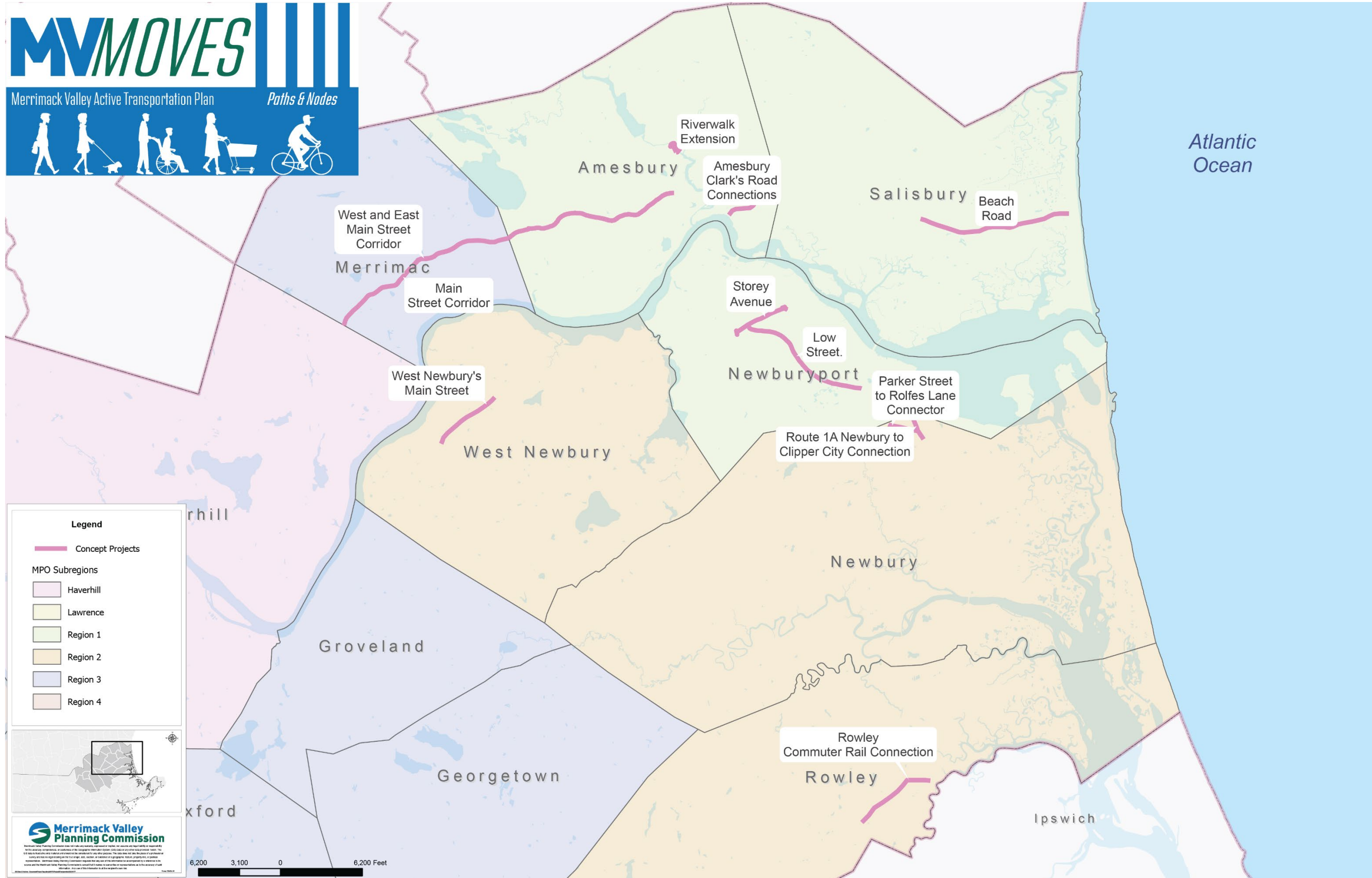


Figure 20. Coastal Communities Next Generation Projects

Greater Haverhill

Building on the Bradford Rail Trail and its future connection with the Groveland Community Path, ATC representatives from the Greater Haverhill Communities aimed to enhance connectivity to future paths and nearby destinations. The ATC members recognized the critical importance of linking the Groveland Community Path to the upcoming Border to Boston segments in Georgetown. Upon completion of phase three of the Bradford Rail Trail, the tri-community path will need only one more segment to connect Haverhill, Groveland, and Georgetown. Additionally, the subregion identified an opportunity to extend the path network west along Route 110, providing access to Westgate Plaza, which houses the city's popular Market Basket. This connection aligns with the regional vision to link communities along Route 110 (see the Northern Merrimack Valley Greenway in Figure 8)

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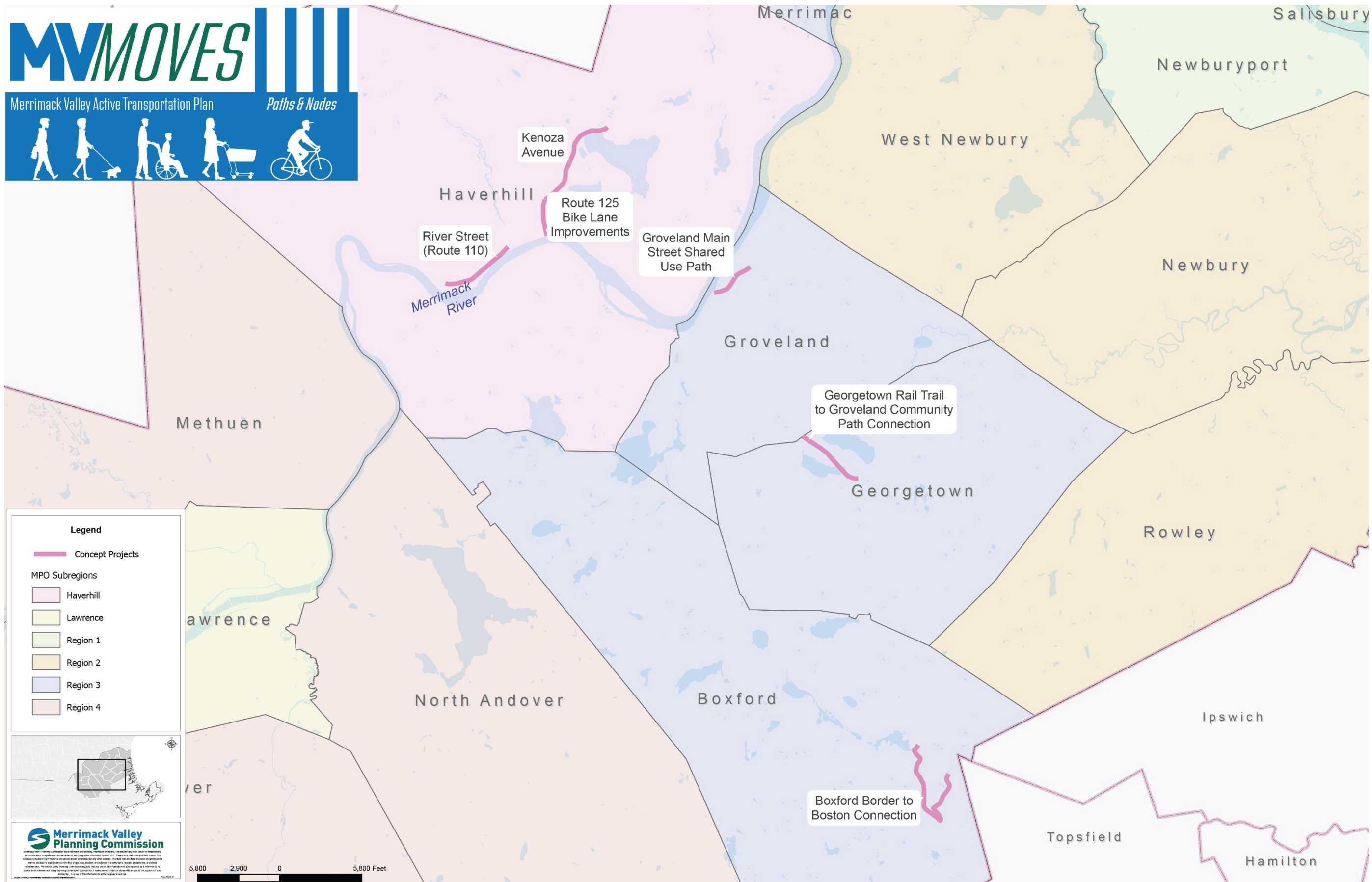


Figure 21. Greater Haverhill Next Generation Projects

Greater Lawrence

With the fewest completed path segments, the Greater Lawrence Communities' ATC representatives focused on overcoming barriers that make inter-community travel unsafe and uncomfortable. Key areas for improvement included the I-495 interchanges at Route 28 and Route 114, which the ATC representatives identified as critical for enhancing mobility for walking, biking, and transit. Potential projects discussed included connecting Lawrence to Haverhill via Jackson Street along Route 110 and developing the Shawsheen River Path on the south side of the Merrimack River. The latter was envisioned as a safe, nature-oriented route for students traveling to local schools, the community swimming pool, and nearby parks.

Following subregional meetings, MVPC engaged with MassDOT officials, who indicated that addressing the I-495 interchange would be a lengthy process. Consequently, the focus shifted to projects with more immediate impact. The Greater Lawrence Communities decided to prioritize the Shawsheen River Path and the Canal Street and Jackson Street Corridors to address existing gaps and enhance regional connectivity, although MVPC staff will continue to pursue opportunities to re-envision I-495's current interchanges. In 2024, MVPC applied to the USDOT's Reconnecting Communities Pilot Program to create a multimodal corridor along Route 114 through the I-495 interchange.

Legend

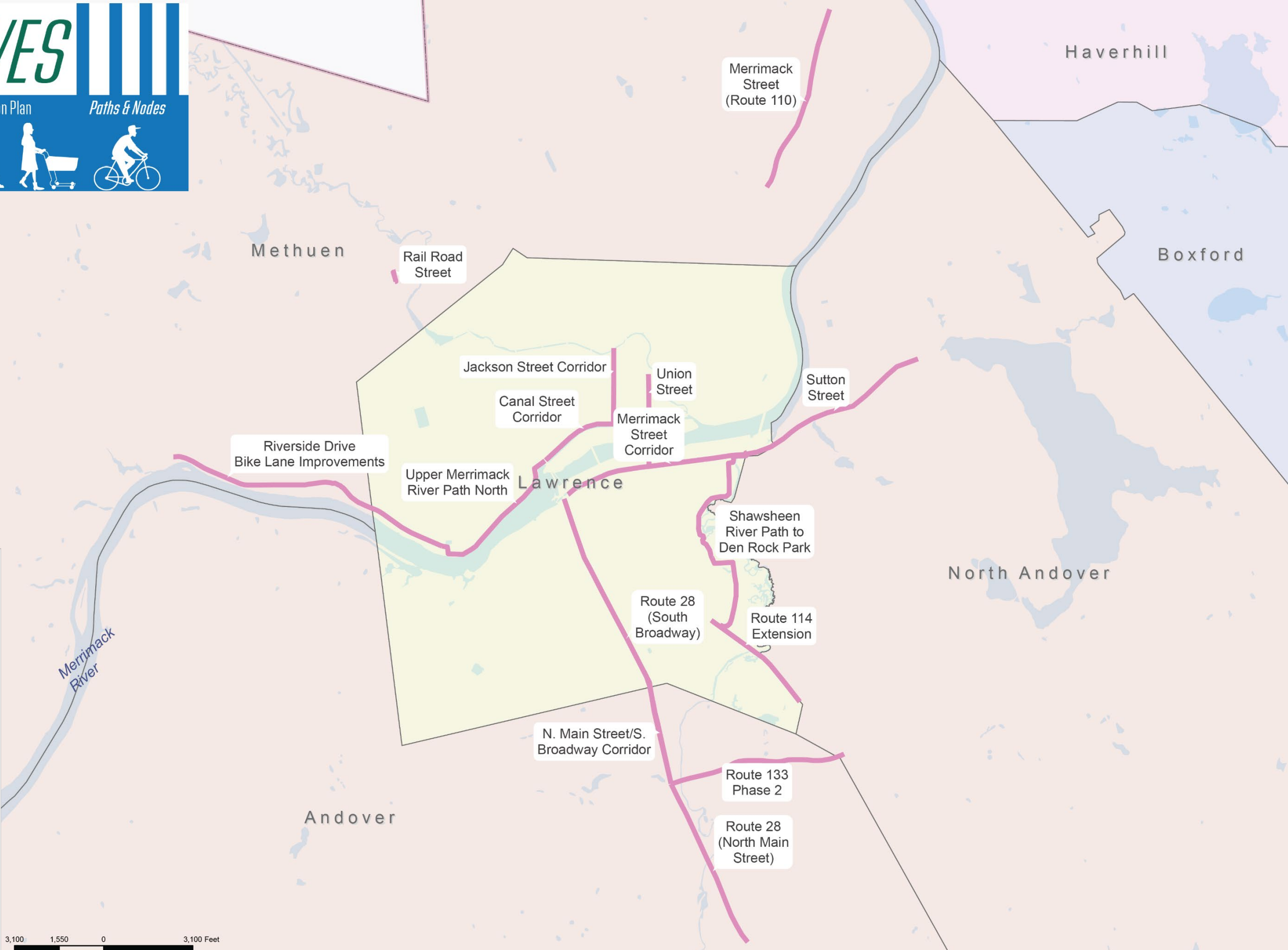
- Concept Projects

MPO Subregions

- Haverhill
- Lawrence
- Region 1
- Region 2
- Region 3
- Region 4

Merrimack Valley Planning Commission

Merrimack Valley Planning Commission is not liable for any errors or omissions in this plan. The Commission and its staff do not warrant the accuracy or completeness of the information provided in this plan. The Commission and its staff do not assume any liability for any damages, including consequential damages, arising from the use of this plan. The Commission and its staff do not assume any liability for any damages, including consequential damages, arising from the use of this plan.



3,100 1,550 0 3,100 Feet

Figure 22. Greater Lawrence Next Generation Projects.

Site Visits

MVPC conducted six site visits to priority next generation active transportation projects identified by the ATC during subregional visioning. During these visits, staff gathered insight to inform future work, such as potential conceptual designs, public engagement materials, and grant applications. MVPC used the insights, discussions, and photos collected during these visits to develop the project profiles detailed in the Project Initiation section of this plan. MVPC distributed these profiles to ATC members prior to the final regional prioritization of projects.

The site visits took place at the following six project locations.

1. Newbury – Parker Street Sidepath Extension
2. Amesbury – Riverwalk Extension
3. Haverhill – River Street Corridor
4. Georgetown – Groveland to Georgetown Connector
5. Lawrence – Shawsheen River Path
6. Lawrence – Canal Street and Jackson Street Corridors

Regional Prioritization

The ATC members received comprehensive information from the planning process, including the project profiles detailed in the Project Initiation section of the plan. The information from conversations, site visits, and the detailed project profiles proved instrumental for the ATC's decision-making. MVPC created a ranking survey allowing ATC members to rank projects from 1 (highest priority) to 6 (lowest priority). Points were allocated as follows: 6 points for a rank of 1, 5 points for 2, 4 points for 3, 3 points for 4, 2 points for 5, and 1 point for 6.

Following the survey, the ATC reviewed the results and discussed next steps. They recommended that MVPC continue organizing ATC meetings and conducting site visits for potential projects.

The survey results prioritized the following projects: Haverhill's River Street Corridor, Lawrence's Canal Street Corridor, and Amesbury's Riverwalk Extension as the top three (see Figure 7). MVPC staff will approach the municipalities where these top projects are located to offer collaboration on concept design. In addition to developing concept designs, MVPC will support all communities with public engagement and grant writing. The project profiles in the Project Initiation Section serve as the foundation for the grant writing process.

Final Next Generation Prioritization List

1. Haverhill – River Street Corridor from Maxwell Street to the Comeau Bridge
2. Lawrence – Canal Street Corridor from Broadway to the Spicket River Greenway
3. Amesbury – Riverwalk Extension from the Riverwalk terminus at Water Street to Market Square
4. Lawrence – Shawsheen River Path from Costello Park to Lawrence Public High School
5. Newbury – Parker Street Sidepath Extension from the intersection of the Clipper City Rail Trail to the intersection of High Street
6. Georgetown – Groveland to Georgetown Connector from the terminus of the Groveland Community Path to the future Border to Boston segments.

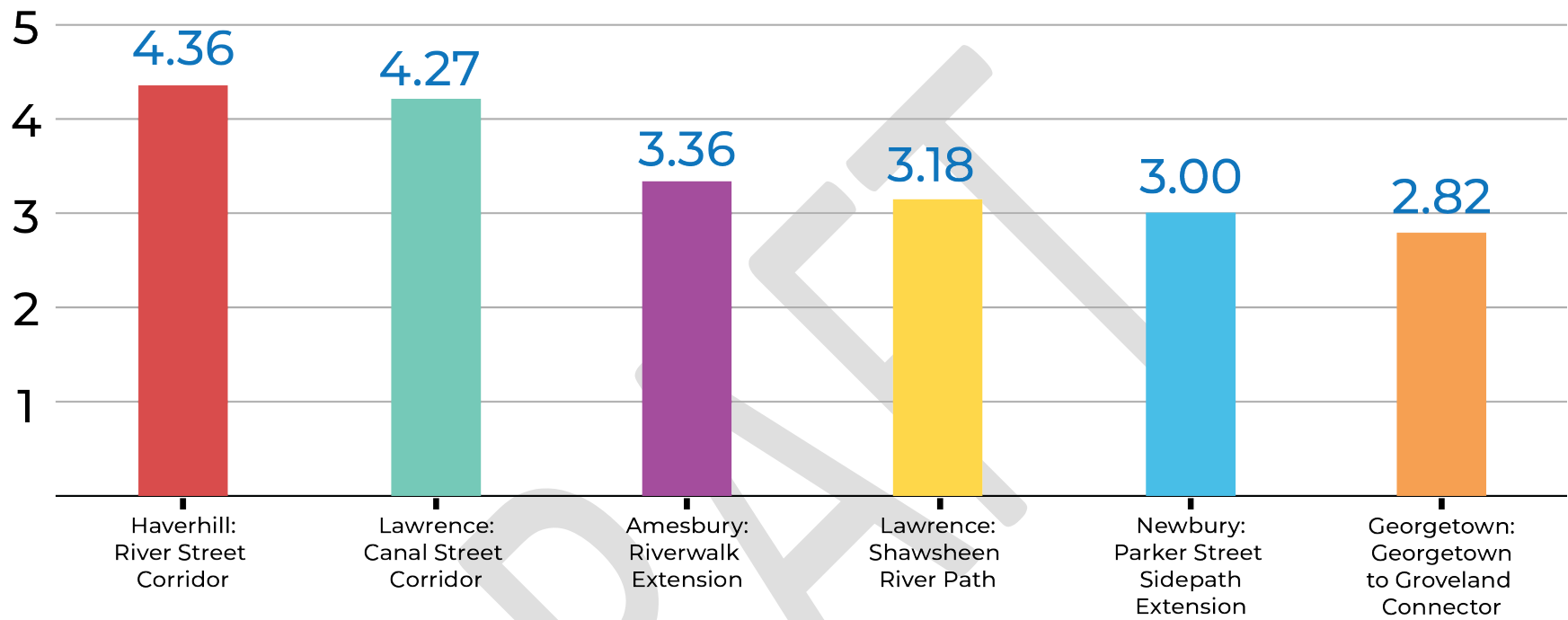


Figure 23. Next Generation Active Transportation Projects Prioritization Survey Results

Project Initiation

Process: Vision to Reality

Many steps are required to realize the next generation active transportation projects (see Figure 24). *MV Moves* is focused on planning and project development. Through *MV Moves*, initial public engagement and planning work has provided valuable information and a clear next step for each of the six next generation projects.



Figure 24. MassDOT Shared Use Path Planning Primer Graphic (<https://www.mass.gov/guides/shared-use-path-planning-and-design-guide>)

Stakeholder Collaboration

The engagement for next generation active transportation projects included discussions with local advocates, municipal officials, MassDOT officials, and regional planners. MVPC also conducted site visits to the project locations in the Spring of 2024, which included local advocates, municipal planners from across the region, MassDOT officials, elected officials, and regional planners.

Future Public Engagement

Early in the project development process, abutters, local businesses, and local community groups will be engaged to provide input on the projects and glean information about how to best accommodate potential concerns. MVPC will establish project teams to gauge public sentiment of the project and address potential apprehension through design. MVPC will support the public engagement campaign for the projects if the municipalities wish to collaborate.

Top Priority Projects

Following the Active Transportation Committee's prioritization of the Haverhill River Street Corridor, Lawrence Canal Street Corridor, and Amesbury Riverwalk Extension as top projects. The City of Haverhill initiated concept design and grant application preparation with a consultant on the River Street Corridor Project. MVPC collaborated with the City of Lawrence on a scope of work for conceptual design work for the Canal Street Corridor. In August and September 2024, MVPC contracted with Toole Design to develop cross sections and plan view concepts for vital segments along Canal Street from the intersection of the Lawrence Rail Trail to the Spicket River Greenway.

Public Engagement

The public engagement and data collection outlined throughout the existing conditions section of this plan will help inform future approaches to planning work. The site visits garnered interest from different stakeholders and proved to be an effective way of gathering ideas for design solutions to potential challenges.

MVPC will collaborate with municipalities on next-generation projects to ensure robust community involvement throughout development. Engaging the community early is essential to align their desires with project constraints. Recommended public engagement tools include:

1. Design charrettes and co-design workshops
2. Public site visits
3. Tabling at community events
4. Online surveys and community mapping
5. Office hours
6. Community forums



Figure 25. Public Engagement - Design Charrette at the Lawrence Public Library for Intersections Along Union Street in Lawrence.

Next Generation Project Profiles

MV Moves compiled the information gathered during the planning process into project profiles for the six next-generation projects. These profiles serve as the foundation for project initiation and can be used for grant writing and public engagement. Given that these projects are still in the early stages of development, design elements and phasing may change as more information and public input are integrated.



Figure 26. Site Visit to the Amesbury Riverwalk Extension Project. City Planner, Nick Cracknell, Depicts a Vision for a Lively Alley Behind Historic Buildings in Market Square.

River Street Multimodal Corridor

Project Vision

The River Street Multimodal Corridor project envisions a safe and comfortable connection from downtown Haverhill to the Westgate Market Plaza. This project capitalizes on a planned MassDOT project to implement buffered bike lanes from west of the I-495 interchange to Maxwell Street by continuing the active transportation infrastructure to the intersection of the Comeau Bridge, River Street, and Washington Street. River Street is a major corridor in the city that provides access to multiple schools and services for community members. Beyond the immediate connection from downtown to local destinations, this project is part of a regional vision to connect the Merrimack Valley communities north of the Merrimack River by an active transportation path. MeVa Transit's Route 1 between Lawrence, Methuen, and Haverhill was the highest ridership route across the system in Fiscal Year 2023 with 302,496 riders. Improving access between the gateway cities for all those who cannot or choose not to drive is vital for the regional economy as it opens economic and quality of life opportunities for our region's historically marginalized populations.

Recognizing that buffered bike lanes are not ideal infrastructure for all ages and abilities, this project would create fully protected bike infrastructure that would set the tone for an infrastructure enhancement project for the state-owned section in the future.



Figure 27. Phased Vision for the River Street Multimodal Corridor Project.

Planning and Project Development

The May 23, 2024 site visit provided an occasion to review and discuss existing conditions, needs, and opportunities along the River Street corridor. Review of the existing conditions on the ground and mapping services show that there is enough pavement width to build active transportation infrastructure.

Opportunity/Need

River Street presents an opportunity to expand access to the destinations along the corridor for those who cannot or choose not to drive. The Constantino Middle School, Silver Hill Elementary School, and the Moody Day Preschool are all located in neighborhoods off River Street. The Westgate Market Plaza features a Market Basket that is preferred by the community. MeVa Transit's Route 1, the highest ridership route according to FY 2023 data, runs the length of River Street and terminates at Washington Square. Currently, all these destinations and services are provided along a corridor with poor pedestrian and bicycle infrastructure, which limits who can access them. The sidewalks, where existing, are in very poor condition and have several long breaks or curb cuts for car access (see Figure 28). The existing conditions stymie the mobility of people walking (see Figure 29). There is no bicycle infrastructure and there are many potholes that are dangerous for people biking in an already dangerous environment (see Figure 30).



Figure 28. Long Curb Cut for Car Access to Car-Oriented Local Business



Figure 29. Disintegrating Pavement and No Sidewalk on River Street.



Figure 30. Person Biking Along River Street While a Car Passes with Enough Space to Pass Without Crossing the Center Line.

There are many segments and intersections along the River Street corridor that are on the regional trends based high injury network (HIN) (see Figure 31). These historically dangerous areas could be remedied through the implementation of safe and comfortable active transportation infrastructure and traffic calming.

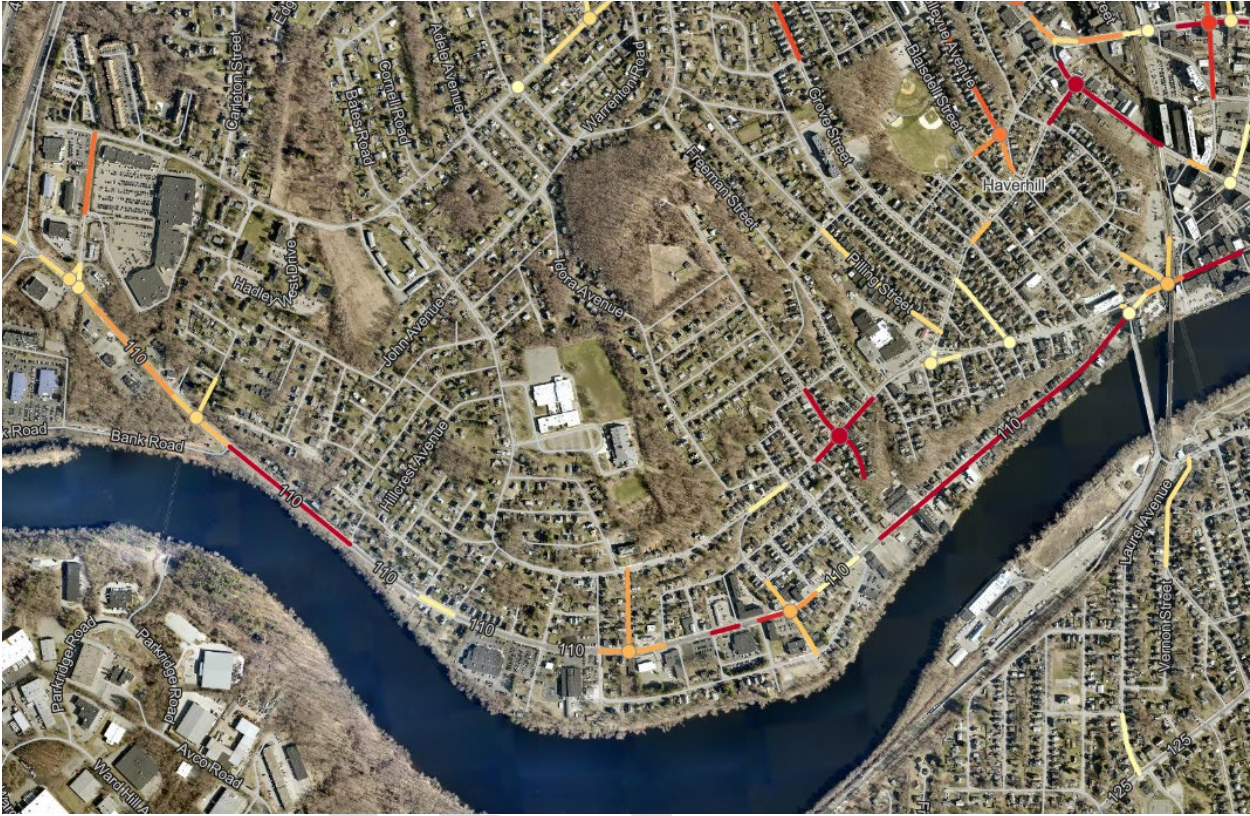


Figure 31. Trends Based HIN for the River Street Corridor.

Context Sensitivity

There are many local businesses along River Street and the corridor is used frequently by truck services. As the project develops, the project team will have to proceed with sensitivity around the reconfiguration of parking to accommodate active transportation infrastructure. The same sensitivity will be necessary for truck access and mobility. Typically, streets are narrowed to encourage slower speeds and safe behavior of all road users, but narrowing the lanes along River Street may not be an ideal design for truck access. Through the design process, the project team will want to work with stakeholders who rely on parking and trucking to balance the needs of all road users in a fair manner that leads to the greatest safety outcomes.

The school communities in the project area will be invited to collaborate in the design process to understand how pick up, drop off, and other school related access could be enhanced through design.

River Street runs parallel to the Merrimack River and likely produces stormwater runoff that may affect its water quality. The ultimate design should respond to environmental issues that could be mitigated by reduced impervious surfaces or the introduction of green stormwater infrastructure.

Preliminary Cross Sections

The most challenging area for River Street is between Varnum Street and the Comeau Bridge where there are greater densities of use, higher volumes of road users, and highly utilized on-street parking. The entirety of the corridor has a curb-to-curb pavement width of 42' and 43'. Currently on-street parking takes up 8' on either side of the curb leaving 12.5' to 13.5' travel lanes. Sidewalk widths vary between 8' and 9' on both sides. Built transportation infrastructure totals about 60'.

Alignment 1 features 7' sidewalks with 4' tree panels on both sides of the street. On the eastbound side of the street, there is a 12' two-way protected bike lane (two 6' lanes) with a 4' buffer. The travel lane widths should be reduced to a maximum of 11' (see Figure 7)

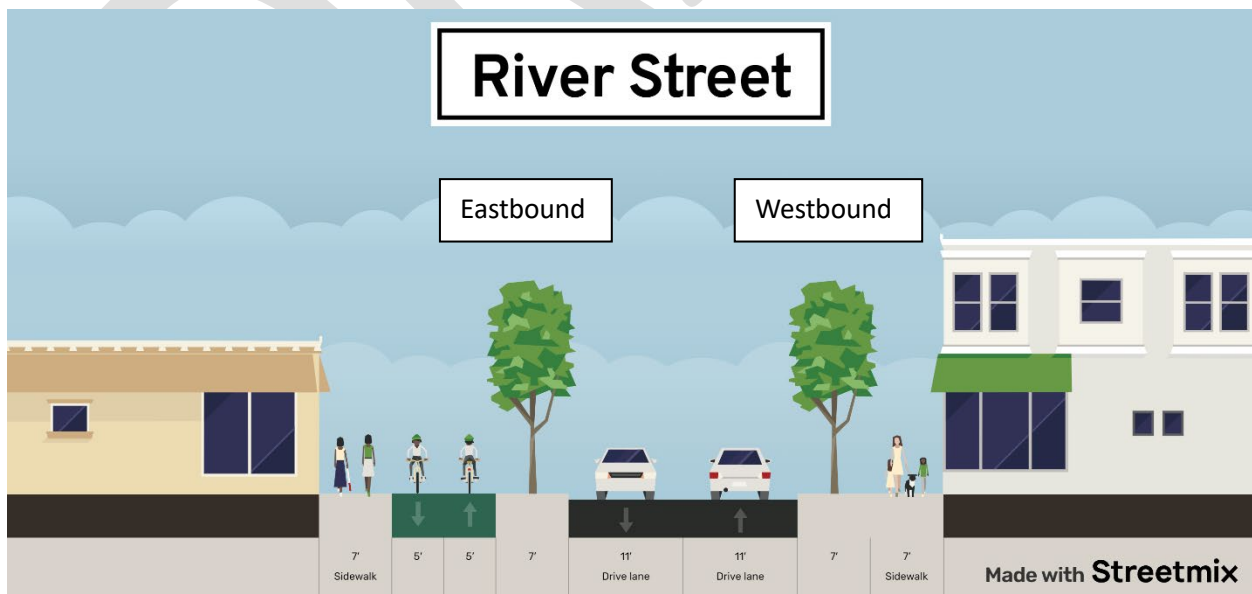


Figure 32. River Street Multimodal Corridor – Cross Section 1

Alignment 2 features a 6' bike lane on each side of the street with a 2' buffer between the bike lanes and the travel lanes (see Figure 8).

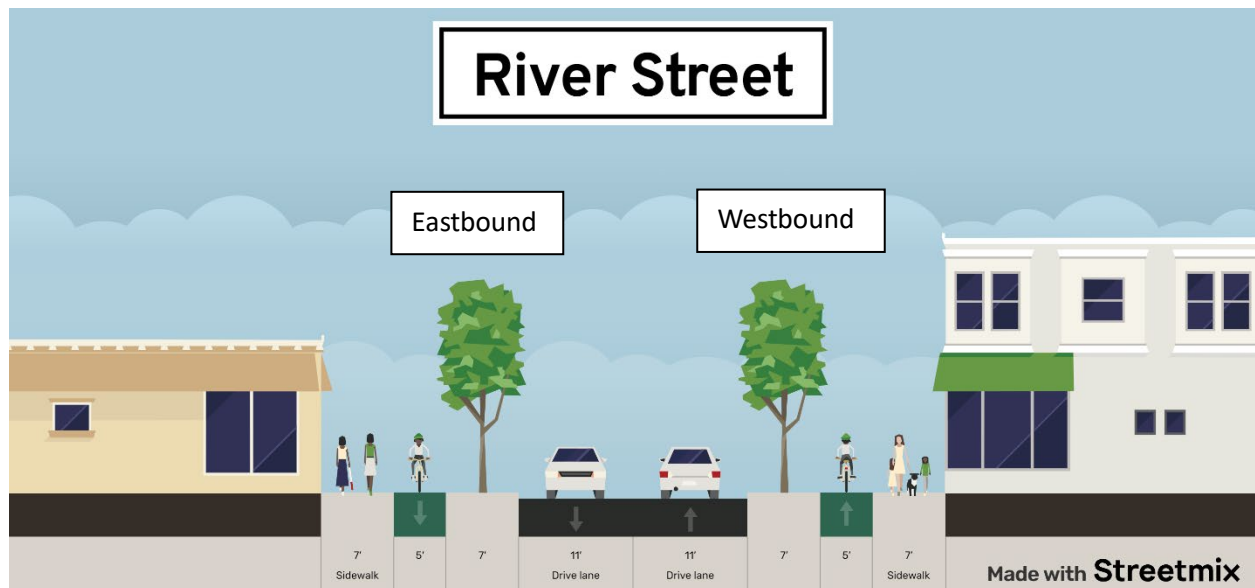


Figure 33. River Street Multimodal Corridor - Alignment 2

The alignments will have to accommodate the future implementation of bus stops along the corridor. The bus stops will feature a shelter and traffic calming features to slow approaching bicycles and mitigate potential crashes between vulnerable road users. Bus shelters can be positioned in the tree panels and partially extrude into the sidewalk, assuming ADA minimums are met at 3' of clear passing space. This said, greater passing space for pedestrians is preferred where possible.

Next Steps

The City of Haverhill has identified the River Street Corridor as a priority transportation improvement project and is seeking federal discretionary funding to design the project. MVPC will continue to support the city with project development and will gather the necessary information to support grant applications for various programs that would suit the project. The city should also review their complete streets prioritization list to ensure River Street and the intersection with the Comeau Bridge is indexed. MVPC will also support the city with public engagement to familiarize the community with the project and the elements that would change the character of the street from a car-oriented environment to a multimodal corridor.

Since parking may be a concern for a section of the corridor, MVPC suggests that the city conduct a short parking study to determine utilization of on street and off-street parking. If removal of parking is required to ensure safety of vulnerable road users, there may be opportunities for shared off-street parking agreements or other configurations that reduce the impact of lost parking.

Canal and Jackson Active Transportation Paths

Project Vision

The ATC's envision Canal Street and Jackson Street with a north-south and east-west connection, respectively, that complements the Spicket River Greenway and the future Lawrence Rail Trail. Canal and Jackson are part of the wider regional vision to connect the communities north of the Merrimack River by an active transportation spine that runs along Route 110 and into urban and village centers. Canal Street connects with the future Lawrence Trail at Broadway and is a relatively calm street between Amesbury Street and Union Street. Jackson Street features many local businesses, connects to Campagnone Common, and eventually connects to the Spicket River Greenway. Creating active transportation routes along these two streets will not only enhance mobility and address safety issues for Lawrence residents, but also serve as segments along the regional active transportation network that invite people into the city.

MVPC recommends the project be broken into two phases by street and proposes the Canal Street corridor be the first segment of focus because the condition of the street is more amenable to active modes of transportation. Jackson Street hosts many on-street parking spaces and local businesses that will require coordination and engagement.

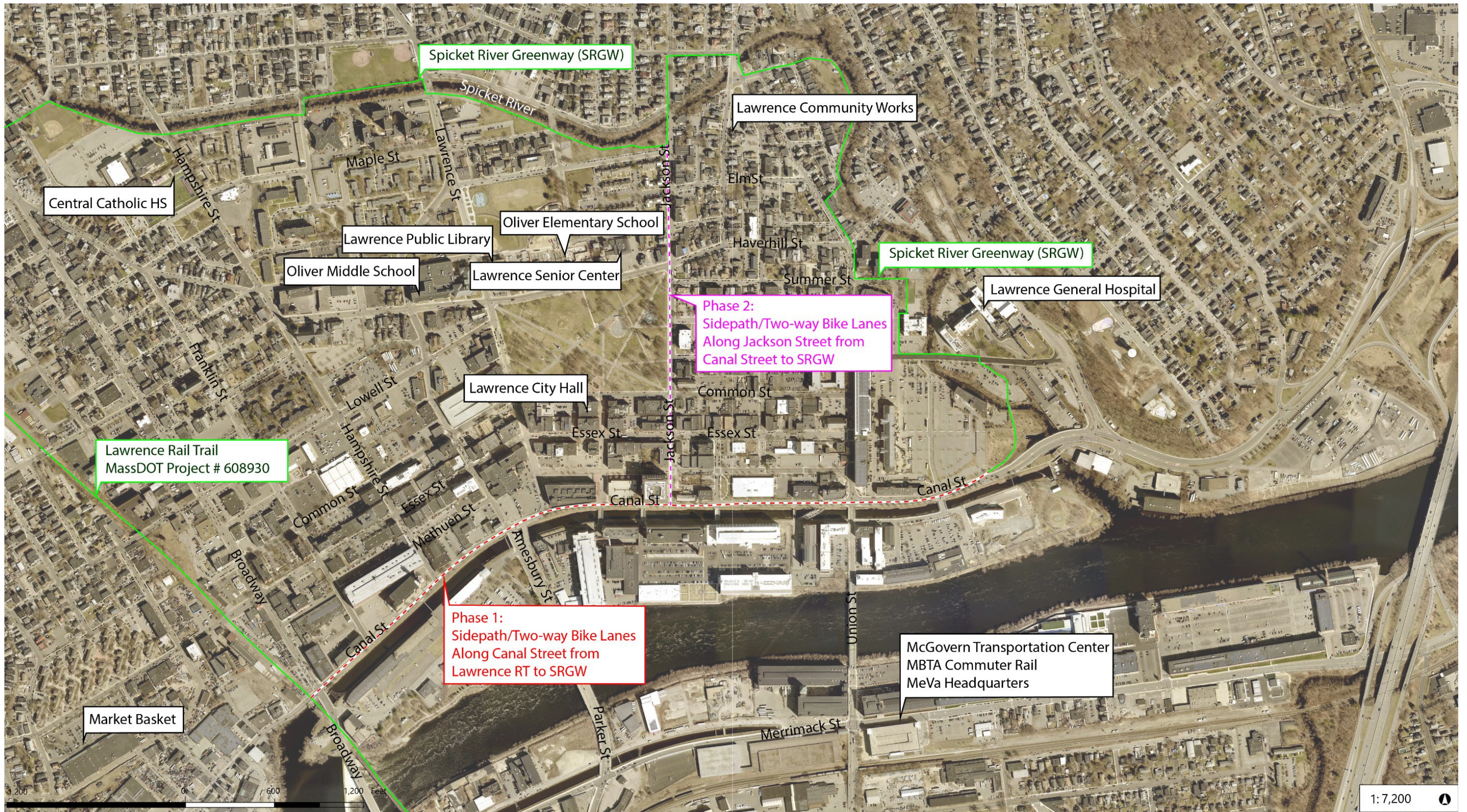


Figure 34. Lawrence Canal Street and Jackson Street Map.

Planning and Project Development

The June 4, 2024 site visit provided an occasion to review and discuss existing conditions, needs, and opportunities along Canal Street and Jackson Street. Review of the existing conditions on the ground and mapping services show that there is an opportunity to use existing pavement width and sidewalk infrastructure to design active transportation an active transportation corridor.

Opportunity/Need

There is a need to address safety along Canal and Jackson as both streets have a history of crashes on the regional trends based high injury network (HIN) (see Figure 35). In particular, three crashes have occurred at the intersection of Canal and Union that have involved vulnerable road users (people using active modes of transportation). During the site visit, there were many people riding bicycles along the street's sidewalks and on the street (see Figure 36). The need for people using active modes of transportation to have protection from cars is very clear.



Figure 35. Canal Street and Jackson Street HIN.



Figure 36. Person Biking on a Sidewalk on Union.

The pedestrian infrastructure along Canal Street is in good condition and runs along the canal which offers a pleasant environment. On Jackson Street, the pedestrian infrastructure is in poor condition and there are broken pedestrian signals that force people to cross busy intersections without signal protection (see Figures 37 and 38).



Figure 37. Crumbling ADA Ramp and a Dumpster Blocking the Sidewalk at the Corner of Jackson and Methuen.



Figure 38. Broken Pedestrian Push Button at the Intersection of Jackson and Haverhill.

Lawrence has been the center of economic activity throughout the history of the Merrimack Valley. Since the inception of the interstate highway system, the rest of the region has been cut-off from Lawrence, which stymies the potential of Lawrence's economy. Creating active transportation routes that run through the urban center and connect to neighboring communities opens opportunities for more people to interact with the Lawrence economy. Canal and Jackson are vital corridors for regional connectivity.

Context Sensitivity

The City of Lawrence is pursuing ways to boost the local economy and quality of life for residents. Reallocating space for cars to space for people walking and biking may boost foot traffic for local businesses. MVPC proposes studying the parking utilization along the two corridors and implementing a pilot project that temporarily creates bike infrastructure to understand its impact. Stimulating a conversation about congestion, parking, and active transportation before any permanent installation may produce a design that balances the needs and desires of stakeholders along the corridor.

Preliminary Cross Sections

MVPC and the City of Lawrence worked with Toole Design to develop various preliminary cross sections for four segments along Canal Street from the Lawrence Rail Trail to the Spicket River Greenway (see Figure 39).

- Segments 1 and 3 feature two 10' travel lanes. On the westbound side it features an 8' sidewalk with a 7' tree pit. On the Eastbound side there is a 4' buffer between the travel lanes and a 11' two-way bike lane, a 7' tree pit and a 7' sidewalk.
- Segment 2 features a curbless street between Jackson Street and Mill Street. The curbless street prioritizes pedestrians and bicyclists and features outdoor dining and public seating along the canal, and limits car access to the driveways. Beyond the Jackson Street to Mill Street block, Canal Street would remain one-way west bound with an 11' travel lane, two 8' sidewalks on both sides, a 10' two-way bike lane with a 3' buffer, and an 8' tree pit on the south side of the street.
- Segment 4 features a straight, right, and left turn lane at the westbound approach and a single travel lane eastbound. The westbound side features an 8' sidewalk. The eastbound side features

an 11' two-way bike lane with a 3' buffer between the bike lane and the travel lanes. Next to the bike lane is an 7' tree pit and an 6' sidewalk.

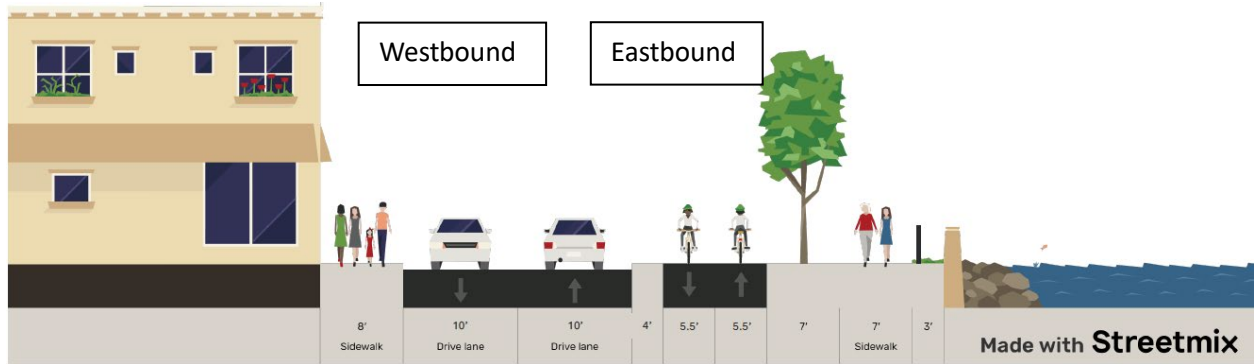


Figure 39. Canal Street – Segments 1 and 3 Cross Section.

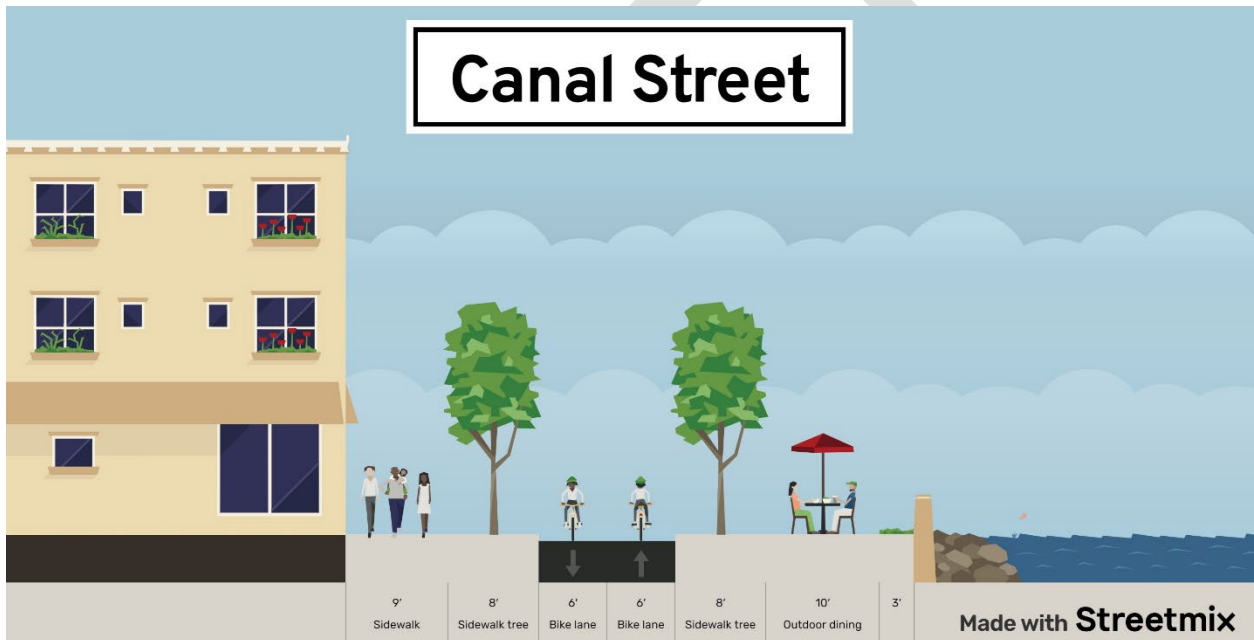


Figure 40. Canal Street - Segment 2 Jackson Street to Mill Street Block Cross Section

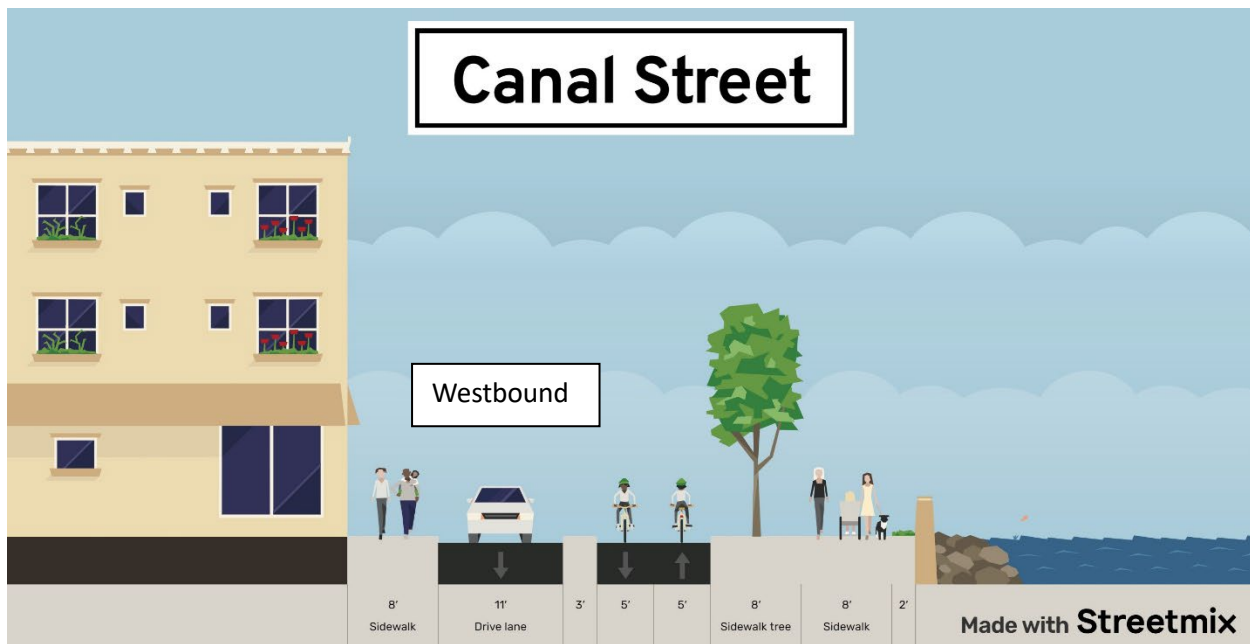


Figure 41. Canal Street – Segment 2 Cross Section.

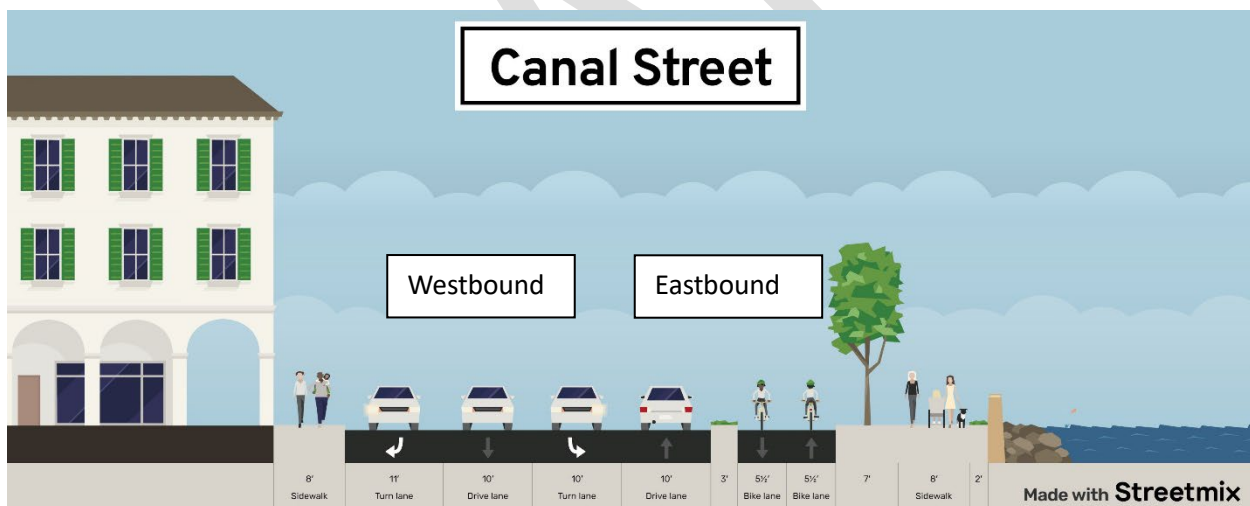


Figure 42. Canal Street - Segment 4 Cross Section.

Next Steps

The next steps for the Canal and Jackson Street Corridors are to engage the community in conversations about potential designs that improve vulnerable road user safety. MVPC will work with the Mayor’s Office and the Planning Department to support the development of an active transportation plan that uses these corridors as primary routes. Having an active transportation plan will allow the city to look holistically at their transportation network and prioritize projects that improve mobility and access for people walking and biking. MVPC will also support the identification of funding opportunities for a

parking utilization study of the two corridors to better understand the impact of parking reconfigurations.

MVPC will work with the city to develop plans for pilot projects to implement temporary active transportation infrastructure. Demonstration pilots can potentially be funded through the federal Safe Streets and Roads for All discretionary grant program.

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Amesbury Riverwalk Extension

Project Vision

The Amesbury Riverwalk Extension was first conceptualized in the 1990s as the first phase of the existing Amesbury Riverwalk. This project would continue a path into Market Square and create an active transportation loop that would enliven economic development opportunities for the community. (see Figure 43). There are between 200 and 220 businesses within a quarter mile of Market Square. The Amesbury Riverwalk Extension would enhance access to those businesses for employees, business owners, clients, and patrons. In essence, this project finalizes the connection to and enhances downtown Amesbury. As part of the coastal trails network, completing this project would likely drive greater usage by creating a destination that is fully integrated into the active transportation network.

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Figure 43. Amesbury Riverwalk Extension Map

Planning and Project Development

The June 5, 2024 site visit provided an occasion to understand the existing conditions and to discuss the needs and opportunities with stakeholders. Since the project has been discussed for many years, many ideas have been generated. The ATC was charged with determining which opportunities were regionally significant. As part of the larger coastal trails network, expanding the Riverwalk through Amesbury's downtown and creating a destination path, like the Newburyport Clipper City Rail Trail, will enhance the overall network. As such, the ATC deemed the project regionally significant, even though the new extension will serve users predominantly in Amesbury.

Opportunity/Need

The opportunity to extend the Riverwalk into downtown Amesbury and enhance the connection for people using the existing path network is the most apparent opportunity. Currently, the Riverwalk ends in a place where, unless one is familiar with Amesbury, one would not know that downtown is only a short walk or ride up Water Street. Enhancing the connection to downtown will not only invite visitors using the coastal trails to arrive in downtown Amesbury, but also invite more Amesbury residents to use the coastal trails. There is a need to enhance the connection to the path for Amesbury residents on the north and west sides of the Powwow River. Connecting the Riverwalk to the west side of the Powwow River creates an opportunity for an active transportation route to Amesbury Middle School for students on the east side of the river.

Context Sensitivity

Amesbury is a historic mill city that has experienced economic downturns and a recent revival of their local economy. The Riverwalk Extension would abut buildings that were constructed in the late 1890s and the early 1900s. The design of the pedestrian bridge and active transportation paths will respect the historic nature of the built environment.

As the name suggests, the Riverwalk abuts the Powwow River which, in its past, provided power for the industrial mills in the city. Amesbury has since capitalized on the natural amenity with a pedestrian bridge over the river near the Mill Yard. This project would require environmental review to understand the impacts of a bridge and what is required to limit project impacts.



Figure 44. Pedestrian Bridge over the Powwow River in Amesbury, MA.

Preliminary Cross Sections

The Riverwalk Extension is a phased project that includes a bike and pedestrian bridge over the Powwow River, enhanced bike and pedestrian accommodations on Water Street, and pedestrian and bicycle accommodations on Mill Street.

Water Street

During a June 5, 2024 site visit, attendees discussed a few different alignments for Water Street that would both accommodate economic activity and facilitate mobility between the existing Riverwalk and downtown Amesbury. Survey and a feasibility study will determine what is possible within the right of way (ROW). On the ground assessment and online property maps show a possible 50' ROW along Water Street. A 50' ROW could accommodate 12' sidewalks with a 7' tree pit buffer on the southbound side, two 10' travel lanes, and a 11' shared use path on the northbound side (see Figure 45). Wide sidewalks on the southbound side of the street would accommodate outdoor dining and pedestrian mobility. People biking downhill on the northbound side of the street are separated from pedestrian activity. Narrowing the travel lanes to 10' could enhance the comfort of the street by encouraging slower speeds.

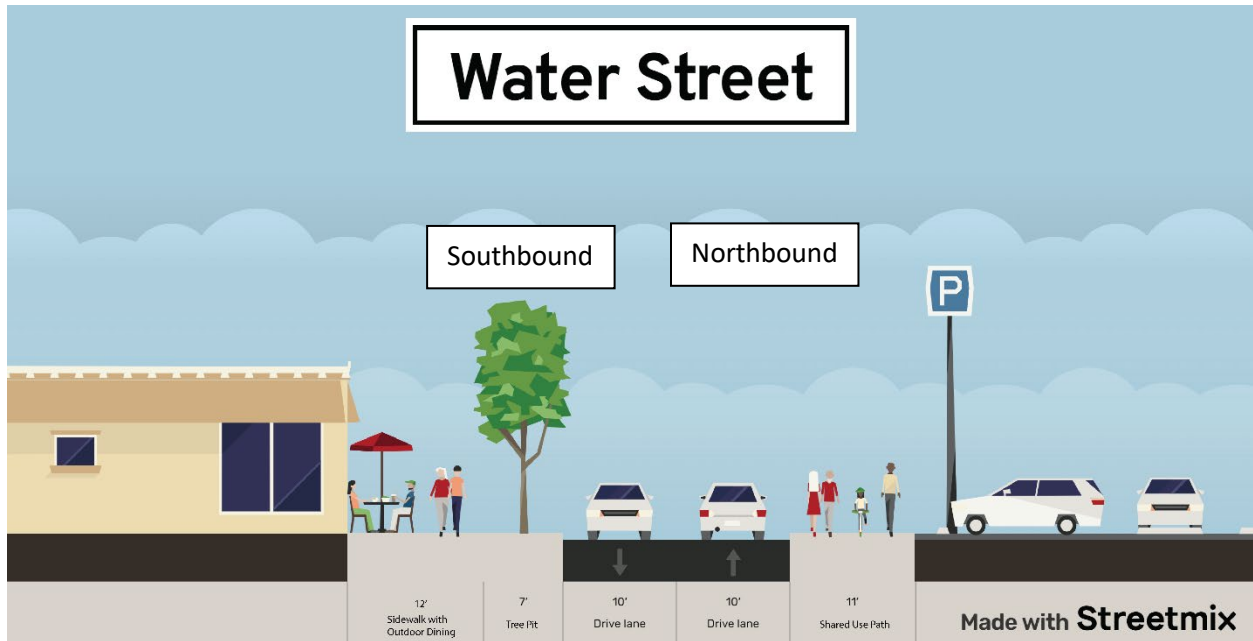


Figure 45. Potential Typical Cross Section for Water Street.

Mill Street

Mill Street, on the west side of the Powwow River, has ample on-street parking (both parallel and pull-in), a sidewalk on the southbound side, residential land uses, and a soon to be decommissioned National Grid site. There is an opportunity to create a linear park with a shared use path along the northbound side of the street ending at Main Street.

Next Steps

The next step for the Amesbury Riverwalk Extension project will be to obtain funding for a feasibility study of the pedestrian bridge over the Powwow River and land survey to understand the impacts to surrounding properties. Along with this engineering work, the Town of Amesbury and MVPC will continue engaging the public in a dialogue about the project to gather input and ensure community input is incorporated through the design process. The MassTrails grant and the MassWorks programs are good fits for funding this type of work.

Shawsheen River Path

Project Vision

The Shawsheen River Path is a phased project that creates an active transportation spine through southeast Lawrence. Phase 1 enhances the existing paths that connect the South Common neighborhood to Costello Park, Lawrence High School, Spark Academy, and the Breen School. The existing path along the Shawsheen River is partially hidden behind overgrown invasive vegetation and is not visible from Shawsheen Road. The vision for the project is to enhance the path so that it responds to the natural environment and provides comfortable mobility for people walking and biking (see Figure 46 Phase 1A). There are also opportunities to reconfigure on-street parking along Shawsheen Road to providing traffic calming and a shared use path that overlooks the Shawsheen River Path (see Figure 46 Phase 1B).

Phase 2 of the project continues through the school campuses where there are opportunities to enhance the surroundings and invite more people to use the amenity (see Figure 46 Phase 2A). There may be resistance to having a publicly accessible path running through the high school campus, so another option would be to utilize Osgood Street as an active transportation route through the neighborhood to Route 114 (see Figure 46 Phase 2B).

Phase 3 of the project envisions a connection to Merrimack Street and the McGovern Transportation Center (see Figure 46 Phase 3A and 3B). MeVa has refocused its transportation services in the McGovern Center which, with the Lawrence Commuter Rail Station, now functions as Lawrence's intermodal transportation hub.

Connecting the South Common Neighborhood from Merrimack Street to Route 114 will encourage project development of Route 114 from Waverly Road northward through the I-495 interchange. Eliminating the existing barriers between Lawrence, Andover, and North Andover for vulnerable road users is a priority of the Merrimack Valley Active Transportation Committee. Creating a safe and comfortable route from McGovern through Route 114 would grant Lawrence residents access to the North Andover Mall which has a highly desirable Market Basket location as well as Den Rock Park. MVPC believes I-495 creates a significant barrier between communities and is currently seeking resources to study how pedestrian and bicycle facilities could be accommodated under I-495's 114 underpass through USDOT's Reconnecting Communities Program.



Figure 46. Phased Vision for the Shawsheen River Path Project.

Planning and Project Development

The May 28, 2024 site visit provided an occasion to review and discuss existing conditions, needs, and opportunities along the Shawsheen River Path, Shawsheen Road, and Salem Street. Review of the existing conditions on the ground and mapping services suggest that there is opportunity to enhance the existing path and reconfigure neighborhood streets to accommodate active transportation infrastructure.

Opportunity/Need

The greatest opportunity for this project is to initiate a route from Merrimack Street south to the North Andover Mall. This goal involves reconfiguring interstate infrastructure and would likely require a great deal of political buy-in, time, and money. While the Merrimack Valley advocates for the removal of barriers for safe passage of vulnerable road users between Lawrence and North Andover, there are other opportunities to pursue that would enhance the quality of life for Lawrence residents while resources are identified to address the interchange.

The existing path from Costello Park to the Breen School and Spark Academy is used by students, but often the path is a dumping location for unwanted goods and is overgrown with invasive vegetation. The path is along the Shawsheen River and currently blocks water from flowing naturally. There is an opportunity to relocate the path to the edge of the hill to allow for the water to flow freely. Clearing invasive vegetation to improve the visibility of the path from the street is crucial to creating a sense of safety for path users. The addition of lighting and wayfinding will also encourage people to use the path at different times of the day.

As the path continues through the school campuses, there are opportunities to enhance the park adjacent to the path to offer more uses. Currently the park features baseball fields but lacks other meaningful spaces. The project may consider adding trees, native plantings, public seating, tables, lawn games, or other amenities to create a linear park to invite people to linger as they move through space. There is also poor drainage along the path, suggesting green stormwater infrastructure to enhance infiltration could prove beneficial (see Figure 47).



Figure 47. Puddling Water Along Path Adjacent to Baseball Fields

Shawsheen Road currently features informal pull-in parking spaces off the side of the road (see Figure 48). There is an opportunity to redesign the street and reconfigure the parking spaces to allocate some space to a safe path for vulnerable road users. The design should include traffic calming to encourage slow speeds through the neighborhood. The sidepath along the street could offer opportunities to stop and look out over the Shawsheen River Path and the natural features below.



Figure 48. Informal Parking Spaces Along Shawsheen Road.

The intersection of Loring and Salem is difficult for vulnerable road users to navigate and presents challenges for anyone traveling from Costello Park north. There are opportunities to reconfigure the intersection to shorten the crossing distances for people walking and biking (see Figure 49).



Figure 49. Long Crosswalk at the Intersection of Loring and Salem.

Salem Street is a relatively calm street with many mature trees and sidewalks in good condition. The street may feel safe enough for people to bike in the street without any physical separation from people driving. It also offers a pocket park that overlooks the Shawsheen River (see Figure 50). There is an opportunity to identify Salem Street as a shared street that prioritizes pedestrian and bicycle mobility.



Figure 50. Pocket Park Along Salem Street.

Context Sensitivity

Since the path runs along the Shawsheen River, there is inherent environmental sensitivity. The project could enhance the natural environment but will require environmental review. This will require working with the local conservation commission and the state environmental agencies to understand the impact, necessary mitigation, and process for approval.

There may also be concern from the neighborhood about removing parking to allow for a sidepath along Shawsheen Road. There will likely also be sensitivity about creating a publicly accessible path through school campuses. Working with both neighbors and school administrators to design a path that is safe and fits in the appropriate context will be crucial.

Preliminary Cross Sections

The Shawsheen River Path from Costello Park to the Breen School and Spark Academy could be moved to the edge of the hill to allow for the natural flow of water to be restored.

On Shawsheen Road, there is about 60' of space utilized by pull-in parking on the northbound side, two travel lanes, on-street parking on the southbound side, and a sidewalk. Alternative 1 eliminates on-street parking on the southbound side and reconfigures the northbound side for on-street parking. This allows for an 7' sidewalk on the southbound side and a 12' shared use path on the northbound side (see Figure 51).



Figure 51. Shawsheen Road - Alternative Alignment 1

Alignment 2 keeps the on-street parking on the southbound side of the street and eliminates the tree pit on the northbound side (see Figure 52).

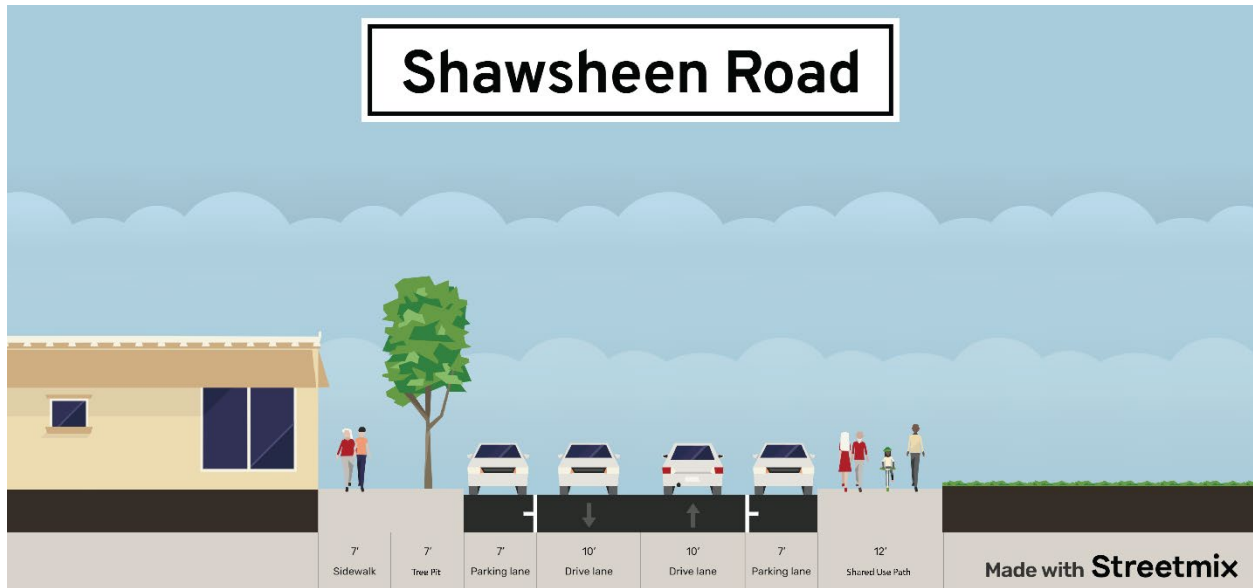


Figure 52. Shawsheen Road - Alternative Cross Section2

Next Steps

The next step for the Shawsheen River Path project will be to obtain funding for a feasibility study and land survey for reconfiguring the existing path along the Shawsheen River. Along with the engineering work, the City of Lawrence and MVPC will continue engaging the public in a dialogue about the project to gather input and ensure community input is incorporated through the design process. The MassTrails grant program is a good fit for funding this type of work.

Newbury Parker Street Sidepath Extension

Project Vision

The Newbury Parker Street Sidepath Extension is a 3-phase project that serves as a spur off the Clipper City Rail Trail (see Figure 53). Phase 1 connects the historic Newbury Upper Green to the coastal trails network. Phase 2 will address pedestrian and bike mobility and safety through the two intersections on Route 1A. Phase 3 creates safe and comfortable active transportation infrastructure, potentially along Rolfe's Lane or through Little Lane on the Spencer Pierce Little Farm to Ocean Avenue to the Plum Island Turnpike. This path expands upon the recreational, public health, cultural, economic, social, and civic opportunities that have been realized through the development of the coastal trails network.

Beyond the immediate connections this project would make, the larger vision for this segment of the active transportation network is two-fold:

1. The creation of an active transportation route to Plum Island;
2. The creation of an active transportation route from the East Coast Trails network along Route 1A to Rowley.



Figure 53. Phased Vision for the Parker Street Sidepath Extension Project.

Planning and Project Development

Stakeholders reviewed and discussed existing conditions, needs, and opportunities along Parker Street with stakeholders during a May 21, 2024 site visit. Review of the existing conditions on the ground and through mapping services show that a sidepath may be possible along the Parker Street corridor.

Opportunity/Need

The project presents opportunities to improve pedestrian and bicycle connections from the center of Newbury to the Clipper City Rail Trail and the destinations it connects to. Currently, there is no sidewalk for most of the corridor and the existing sidewalk is in poor condition. The travel lane widths vary between 12' and 13' with no edge lines (see Figure 54). Designing a sidepath along the corridor presents an opportunity to narrow the lane width to encourage slower travel speeds.



Figure 54. Existing Conditions on Parker Street in Newbury

Context Sensitivity

Newbury is a rural coastal community with low densities relative to neighboring Newburyport. The integration of a sidepath would modernize the transportation network in Newbury. With such modernization, the design should respect the historic character of the town. There are historical sites in the project area, including the Upper Green, Anna Jaques Homestead, and the Noyes House that require sensitivity. It will be important to show how the sidepath will improve access to historic sites and allow for safe and comfortable interaction with such sites by people walking and biking.

Preliminary Cross Sections

The existing sidepath in Newburyport is on the westbound side of Parker Street. In Newbury, the westbound side has the greatest width between the travel lanes and obstructions such as mature trees or utility poles. The eastbound side does not have as many utility poles, but there are many mature trees, fences, and rock walls close to the travel lanes. Catch basins are located on both sides of the street (see Figure 55). It is unclear if the catch basins are leaching or connected to a piped system.



Figure 55. Catch Basin on the Westbound Side of Parker Street near 2 Parker Street

Based on early assessment, it seems as though the westbound side of Parker Street would be best suited for a sidepath (see Figure 56). A feasibility study and survey work are needed to fully understand which alignment would be preferred.



Figure 56. Illustration of Typical Cross Section for Parker Street Sidepath.

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Next Steps

The next step for the Parker Street Sidepath Extension project will be to obtain funding for a land survey along the corridor, a feasibility study, and a concept design. Along with the engineering work, the Town of Newbury and MVPC will continue engaging the public in a dialogue about the project to gather input and make sure that community needs are met through the design process. The MassTrails grant program is a good fit for funding this type of work.

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Georgetown to Groveland Connector

Project Vision

The Georgetown to Groveland Connector creates a shared use path, or rail trail, along the abandoned railroad right of way (ROW) to connect the Groveland Community Path to the future Border to Boston (B2B) segments in Georgetown (see Figure 57). This path not only ties Groveland into the B2B, but upon the completion of the Bradford Rail Trail Phase 3 also connects Haverhill to the east coast path. Originally envisioned as the Tri-Community Path between Haverhill, Groveland, and Georgetown, this path project is part of a larger regional vision to connect the region's communities south of the Merrimack River.

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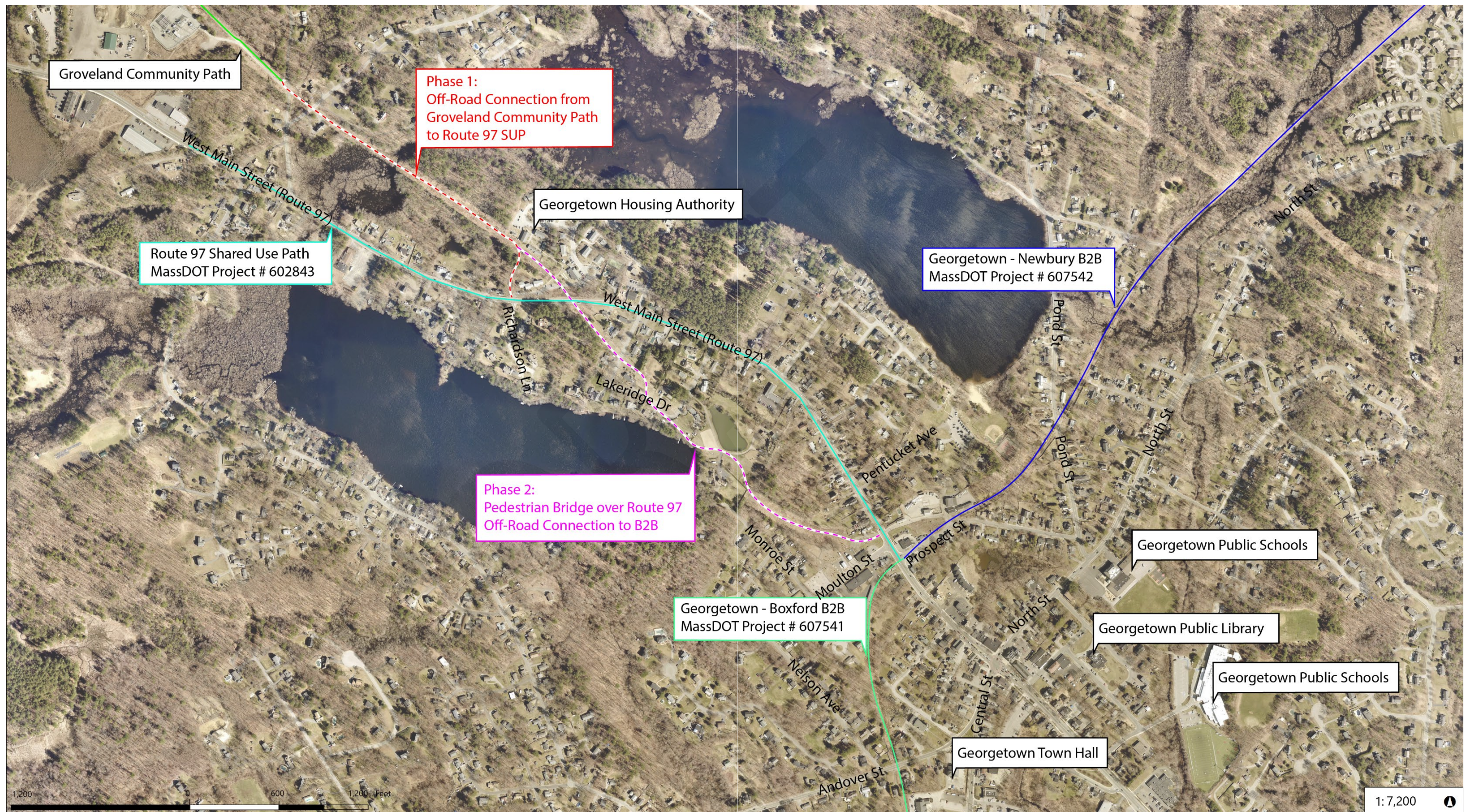


Figure 57. Phased Vision for the Georgetown to Groveland Connector.

Planning and Project Development

The May 23, 2024 site visit provided an occasion to review and discuss existing conditions, needs, and opportunities along the abandoned rail ROW with stakeholders. Review of the existing conditions on the ground and through mapping services show that a rail trail is possible.

Opportunity/Need

The opportunity to complete the connection between Haverhill, Groveland, and Georgetown is one reason to pursue this project. Beyond the completion of the Tri-Community Path, this project also serves as a spur off the B2B, connecting more destinations and providing access to the network for a greater number of people. This project fills a gap in the network that would otherwise force people to use a sidepath along Route 97. Continuing the nature-oriented Groveland Community Path along the abandoned rail corridor, over the Parker River, and into Georgetown's village center provides a safe, comfortable, and continuous environment for people of all ages and abilities.

Building the Georgetown to Groveland connector along with the Route 97 sidepath increases demand for the path. The off-road connection opens nature experiences and a pleasant recreational environment along with a more safe and comfortable setting for trips by bike. Creating active transportation connections to Haverhill is important for the region: reducing the need to drive to our urban centers relieves the pressure to build more parking, improves access to job opportunities, improves transit access, and supports the regional economy.



Figure 58. View of the Parker River and Wetlands from a Bridge over the Path Along the Rail ROW.

Context Sensitivity

The path would travel along an existing utility corridor that features mapped wetlands, the Parker River, and turtle habitats. Environmental sensitivity will be a prominent consideration as the project development process continues. The setting is quite like that of the Groveland Community Path, so the Town of Georgetown has a precedent and associated documentation of environmental procedures to reference as they pursue environmental review.

Georgetown has already been working on path projects with the development of the B2B that have brought forth abutters concerns. The extent of the concerns may differ from the B2B projects, but there will likely be abutters concerned about the impact to their properties. It will be important to show a significant buffer between the path and nearby homes as well as drainage systems that will handle the runoff from the additional impervious surface.



Figure 59. Turtle Spotted Along the Rail ROW near the Parker River in Georgetown by Site Visit Team on May 24, 2024.

Alternative Alignments

The phase 1 (see Figure 57) of the path from the Groveland Community Path to the Georgetown Housing Authority along the abandoned rail ROW. There is an opportunity to connect to and cross Route 97 through the Housing Authority property (see Phase 1 in Figure 57). Another alignment would carry the path along the abandoned rail ROW and require a bridge to cross a gap and potentially cross over Route 97. Once past Route 97, the path could continue to follow the utility corridor before reaching a short on-road segment along Lakeridge Drive. The path could then return to the utility corridor parallel with Monroe Street before connecting with the B2B at the intersection of Route 97.



Figure 60. Site Visit Team Discussion the Potential for a Bridge Along the Path of the Rail Trail.

Next Steps

The next step for the Georgetown to Groveland Connector project will be to obtain funding for a land survey along the corridor, a feasibility study, and a concept design. Along with the engineering work, the Town of Georgetown and MVPC will continue engaging the public in a dialogue about the project to gather input and make sure that community needs are met through the design process. The MassTrails grant program is a good fit for funding this type of work.

Conclusion: A Call to Action

The Merrimack Valley has made significant progress on building a high quality, safe, and comfortable active transportation network since the Amesbury Riverwalk was completed in 1999. MVPC, MassDOT, municipalities, and advocates have partnered together to see projects through. This plan is meant to facilitate direction for the next generation of projects to be initiated through those partnerships. Through the *MV Moves* planning process MVPC and the ATC strengthened those partnerships and identified where those partnerships should focus time and resources to continue building out the regional active transportation network. As the region builds this network out, residents will benefit from a transportation network that grants access to destinations previously unreachable by walking or biking. Once the regional network is built out, people living without access to a car will have enhanced mobility and have greater freedom of movement without fear of dangerous conflicts with cars.

MV Moves puts forth six highly impactful regional projects and outlines detailed considerations for how those projects should be designed. *MV Moves* presents a starting point for MVPC, MassDOT, municipalities, and advocates to take to the next steps of project development. *MV Moves* projects depicts a path toward a connected region.