

Final Report

November 2016



Table of Contents

		Page
Exe	Study Overview	
1	Introduction Everett in Context Study Methodology and Report Organization	1-2
2	Public Engagement and Community Goals	2-1
3	Challenges and Opportunities Existing Conditions Market Analysis Service Analysis	3-1 3-2
4	Project Development and Evaluation	4-1 4-4
5	Recommendations Service and Route Improvements Major Transit Investments & Pedestrian and Bike Access Recommendations for Projects Under Planning and Design Additional Projects.	5-3 5-26 5-36
App App App	pendix A: Existing Conditions pendix B: Market Analysis pendix C: Route Profiles pendix D: Prescreen Table pendix E: Feasibility Sheets pendix F: Public Meeting Notes	
Tal	ble of Figures	Paga
Figu	re 1 Service and Route Improvements Recommendations Map	Page
Figu Figu	re 2 Overview of Service and Route Improvements Recommendations	4
	Recommendations	9

Figure 8 Everett Transit Facts	1-5
Figure 9 Everett Transit Action Plan Website	2-2
Figure 10 Feedback at Everett Village Fest	2-2
Figure 11 Bus Stop Surveys in Everett Square	2-2
Figure 12 Online Feedback on Initial Project Ideas	2-3
Figure 13 Community Outreach throughout the Project	2-4
Figure 14 Participation of Goal Prioritization Exercise and Results	2-5
Figure 15 Projects Goals and Evaluation Criteria	2-6
Figure 16 Current MBTA Service in Everett	3-2
Figure 17 Everett Population Density	3-3
Figure 18 Everett Pedestrian Barriers	3-4
Figure 19 Everett Routes Ridership Activity	3-5
Figure 20 Bus Connections to Cambridge and Somerville from Sullivan Square	3-6
Figure 21 Project Evaluation and Analysis	4-2
Figure 22 Example of Project Development	4-3
Figure 23 Prescreen Results	4-4
Figure 24 Short Term Recommendations Map	5-3
Figure 25 Major Transit Investments & Pedestrian and Bike Access Recommendations	
Figure 26 Neighborhoods with One-Seat Ride to South Boston Waterfront	5-28

EXECUTIVE SUMMARY

STUDY OVERVIEW

The Everett Transit Action Plan is an initiative to develop near and long-term solutions to improve transit for the residents and workers of Everett. Despite being less than two miles from downtown Boston, the City of Everett is almost unique among municipalities inside of Route 128 in lacking direct access to rapid transit, commuter rail, the Key Bus Network, or even direct bus connections to central Boston. By itself, Everett's existing demand for public transportation service warrants a review of current MBTA bus services—the legacy of a route network that has remained largely unchanged for decades. However, several recent planning initiatives in and around the City have made the need for a comprehensive analysis of future needs, and how best to serve them, even more imperative.

The Plan sought to develop specific, feasible and implementable recommendations to address existing and foreseeable transit issues, grounded in concrete analysis and direct community feedback. A multi-step process was undertaken, which included a thorough review of existing service and the underlying markets that it served. With robust community feedback, taken in multiple venues, MassDOT viewed the public transportation system with an Everett lens, to understand the challenges faced by residents, employees and visitors. A complete set of goals were developed which spoke to the daily challenges and growing aspirations of all aspects of the Everett community. These were turned into evaluation criteria, which were used to test individual solutions.

Beyond the current challenges, the Plan further looked at expected changes in Everett. Building from known development, and ongoing planning efforts, MassDOT worked with the City to identify where additional growth is targeted and likely to occur. Public transportation changes, from altered routes, stop and corridor improvements, access enhancements, and even entirely new services were developed and tested against existing conditions and anticipated future conditions. Ridership, travel time, reliability, and other transit benefits were calculated and used to help evaluation. These were augmented by analysis that looked at how alternatives best served other goals such as Advancing Equity or Improving Health and the Environment.

MassDOT refined alternatives based on continued analysis and community feedback. Feasibility analysis was conducted which looked at costs, permitting, and physical challenges, as well as potential implementation partners or processes. All led to a series of recommended improvements which best serve to build a foundation of public transportation to support Everett, one of the most rapidly evolving communities in the Boston region. This report essentially follows the steps undertaken in the Everett Transit Action Plan. More detailed evaluations, maps, calculations and backup materials are included in the report's Appendices for further reference.





STUDY RECOMMENDATIONS

The Everett Transit Action Plan prioritizes fourteen investments designed to improve the mobility of Everett residents, workers, and visitors and support economic development throughout the City. Everett-focused recommendations were also developed for three projects currently under study by other planning processes. Everett Transit Action Plan recommendations were developed through consultation with stakeholders, evaluated using quantitative and qualitative metrics, and refined during a robust public outreach process. Final recommendations were categorized into two groups:

Service and Route Improvements: Short and medium term service changes, projects, and strategies designed to improve local bus service within Everett and provide better connections to major destinations for Everett residents.

Major Transit Investments and Pedestrian & Bike Access: Medium and long term capital investments designed to further integrate Everett into the Greater Boston high-capacity transit network.

Each recommended investment and strategy stands alone as a worthwhile investment that improves transit in Everett. Many of the recommendations have further compounding benefits when implemented alongside other proposed strategies. Together, the projects recommended in the Everett Transit Action Plan would:

- Establish Broadway as one of Greater Boston's best transit corridors and provide a strong pathway for future transit investments.
- Make local bus service faster, more reliable, and easier to use, while providing enhanced connections to Lower Broadway, Cambridge, and Somerville.
- Make Everett one of the only communities with a one-seat ride to Logan Airport and the South Boston Waterfront.
- Increase connectivity with the Orange Line.
- Transform the Northern Strand into the highest quality bike facility in Greater Boston, providing a safe and easy path to the Orange Line (and potentially entirely off-street route to Downtown Boston).





SERVICE AND ROUTE IMPROVEMENTS

Service and route improvements include short and medium term service changes, projects, and strategies designed to improve local bus service within Everett and provide better connections to major destinations for Everett residents. Many of these recommendations are dependent upon further analysis and implementation as part of the MBTA Service Plan, which will look at service changes on a garage by garage basis.

Figure 1 | Service and Route Improvements Recommendations Map

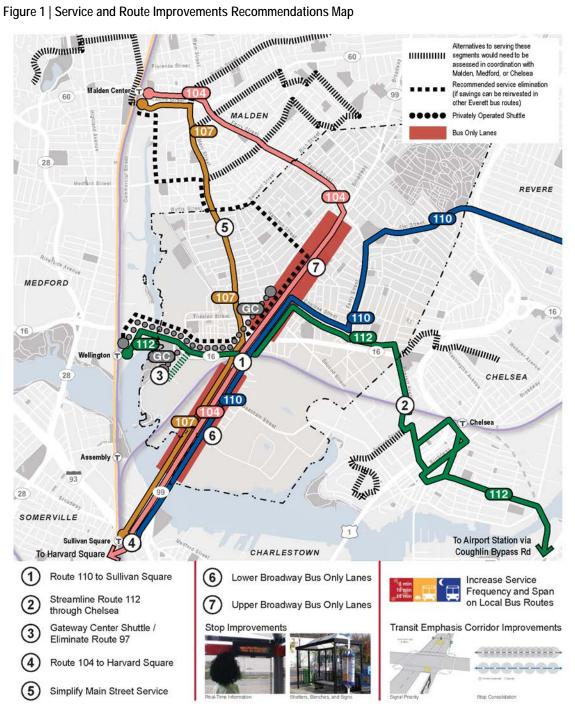






Figure 2 | Overview of Service and Route Improvements Recommendations

Project	Description	Benefits	Initial Cost Estimate ¹	Implementation Timeframe ²	Responsible Agencies
Upper Broadway Bus Only Lanes	Peak period, peak direction bus only lanes on Broadway between Glendale Square and Sweetser Circle, using existing parking lanes.	 Improves speed and reliability of high ridership bus lines Maintains parking on both sides of Broadway during majority of the day Further study and implementation can occur as part of Everett Square redesign process By 2040, ridership on Upper Broadway bus lines is projected to increase over 25% 	\$	6 months for pilot; 1-3 years for permanent installation	City of Everett; MBTA; MassDOT
Lower Broadway Bus Only Lanes	Establish bus only lanes on Lower Broadway from Sweetser Circle to Dexter Street.	 Reduces the cost of operating more service from Everett to Sullivan Square and Cambridge Improves speed and reliability of high ridership bus lines Potential benefits for privately operated transit on Lower Broadway, such as casino shuttles 	\$\$	5+ years	MassDOT, City of Everett, City of Boston, MBTA, Landowners





¹ \$: \$1 million or less; \$\$: \$1 to 10 million; \$\$\$: Over \$10 million

² How long it would take to complete the recommendation once implementation process has commenced, provided available funding.

Project	Description	Benefits	Initial Cost Estimate ¹	Implementation Timeframe ²	Responsible Agencies
Transit Emphasis Corridor Improvements	Strategies designed to increase bus service speed and reliability, including transit signal priority/re-timing, bus stop consolidation, and improved fare collection and boarding practices.	 Makes Everett routes among the highest quality bus services in the Boston area Improves speed and reliability of high ridership bus lines Potential to attract new riders 	\$	1 – 2 years	City of Everett; MBTA; City of Boston; City of Malden; City of Medford
Increase Service Frequency and Span on Local Bus Routes	Increase service frequency and add additional early morning and late night service on Everett's local bus routes.	 Reduce overcrowding on Everett's bus lines Increase the mobility of residents making early morning or late night trips 	\$ - \$\$	1-2 years (if operating funds are transferred from other services)	МВТА
Simplify Main Street Service	Consolidate all Main Street bus routes into a single bus route operating between Malden Center and Everett. Extend all Main Street service to Sullivan Square.	 Faster trips with fewer transfers between Everett and Cambridge/Somerville Easier to understand service design Potential improvements to service reliability More consistent frequency 	\$	1+ years	MBTA; City of Malden; City of Medford





Project	Description	Benefits	Initial Cost Estimate ¹	Implementation Timeframe ²	Responsible Agencies
Route 110 to Sullivan Square	Change Route 110's western terminus from Wellington to Sullivan Square.	 Faster trips with fewer transfers between Everett and Cambridge/Somerville Saves Everett residents traveling to Cambridge up to 10 minutes in each direction 20%-30% projected ridership increase 	\$	1+ years	МВТА
Streamline Route 112 through Chelsea	Streamline Route 112 by removing deviations and extending service to Airport Station.	 Up to 50% reduction in travel time between Everett Square and Downtown Chelsea One seat ride to Logan Airport shuttles 5%-10% projected ridership increase 	\$	1+ years	MBTA; City of Chelsea
Stop Improvements	Install new bus stop amenities, such as real time information, shelters or benches, and enhanced bus stop signage.	 Makes transit more attractive for both existing and potential new riders 	\$	6-24 Months	City of Everett; MBTA





Project	Description	Benefits	Initial Cost Estimate ¹	Implementation Timeframe ²	Responsible Agencies
Route 104 to Harvard Square	Extend Route 104 from Sullivan Square to Harvard Square via existing Route 86 alignment on Washington Street and Kirkland Street.	 Increases the range of destinations accessible from Everett with no transfers or one transfer Provides a one seat ride to the Red Line 15%-25% projected ridership increase on existing Route 104 segment 	-	1+ years	МВТА
Gateway Center Shuttle/Eliminate Route 97	Initiate a privately operated shuttle service to Gateway Center. Eliminate Route 97 and reinvest savings into improving service on other Everett bus routes.	 Designed to meet the specific needs of Gateway Center visitors and workers Eliminates unproductive and duplicative Route 97 service 	-	1-2 years	MBTA; City of Everett; Gateway Center





MAJOR TRANSIT INVESTMENTS & PEDESTRIAN AND BIKE ACCESS

Medium and long term capital investments designed to further integrate Everett into the Greater Boston high-capacity transit network.

Figure 3 | Major Transit Investments & Pedestrian and Bike Access Recommendations Map

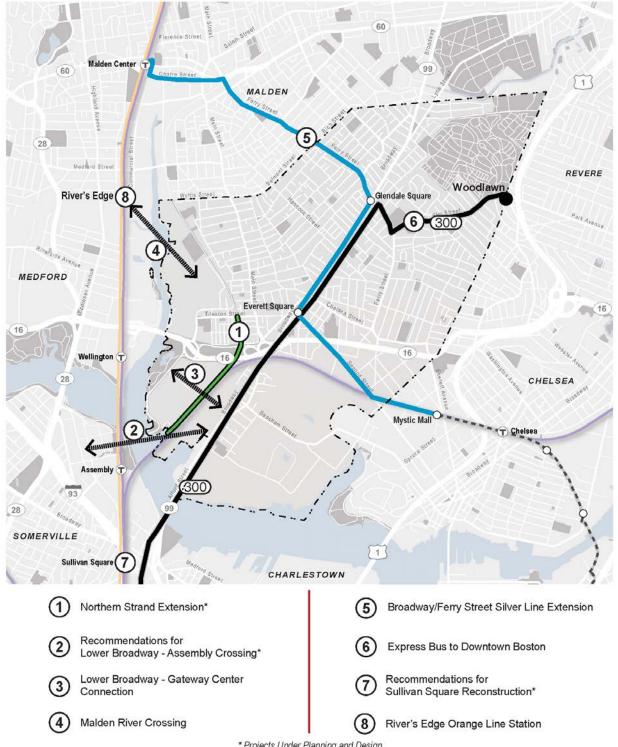








Figure 4 | Overview of Major Transit Investments & Pedestrian and Bike Access Recommendations

Project	Description	Benefits	Initial Cost Estimate ³	Implementation Timeframe ⁴	Responsible Agencies
Broadway/Ferry Street Silver Line Extension	Extend Silver Line Gateway service from Market Basket to Malden Center Orange Line Station via Second Street, Broadway, and Ferry Street.	 Frequent one-seat ride to South Boston Waterfront, Logan Airport, and Chelsea Will provide access to 75,000+ jobs by 2040 Reduces travel time between Everett and South Boston Waterfront by up to 40% Projected to more than double Silver Line Gateway ridership 	\$\$\$	5+ Years	MassDOT; MBTA; City of Everett
Express Bus to Downtown Boston	Implement an express bus service between Woodlawn in Everett and Downtown Boston via Ferry Street, Broadway, and Rutherford Avenue.	 One-seat ride between Everett and Downtown Boston Travel time do Downtown reduced by up to 10 minutes each way Up to 4,000 projected daily boardings 	\$-\$ \$	3+ Years	МВТА





 $^{^3}$ \$: \$1 million or less; \$\$: \$1 to 10 million; \$\$\$: Over \$10 million

⁴ How long it would take to complete the recommendation once implementation process has commenced, provided available funding.

Project	Description	Benefits	Initial Cost Estimate ³	Implementation Timeframe ⁴	Responsible Agencies
River's Edge Orange Line Station and Malden River Crossing	Construct an infill station on the Orange Line in Malden near the River's Edge Area and build bridge between station and Everett.	 10-20 minute walk from River's Edge and West Everett to high frequency Orange Line service One-seat ride to Downtown Boston, Back Bay, and Longwood Medical Area 	Station: \$\$\$ Crossing: \$\$\$	7+ Years	MBTA; City of Everett; City of Medford; City of Malden; Potential Private Partners
Northern Strand Extension	Extend the Northern Strand pedestrian and bicycle path under Route 16 and along MBTA commuter rail to Gateway Park.	 Safe and direct pathway under Route 16 for people walking and biking Increased connectivity between Everett residential neighborhoods and Lower Broadway Key component in path between Everett and the Orange Line (and potentially Downtown Boston) 	N/A	Will be further evaluated by Lower Mystic Regional Working Group	City of Everett; MassDOT; MBTA; DCR
Recommendations for Lower Broadway – Assembly Crossing	Ensure that crossing is integrated with Northern Strand Extension and provides a clear pathway for people walking and biking.	 Direct, less than 10 minute walk from Lower Broadway to Assembly Key link between Everett neighborhoods and all Lower Mystic developments Component of potential direct path from Everett to Downtown Boston 	N/A	Will be further evaluated by Lower Mystic Regional Working Group	City of Everett; City of Somerville, MassDOT; DCR, Landowners





Project	Description	Benefits	Initial Cost Estimate ³	Implementation Timeframe ⁴	Responsible Agencies
Recommendations for Sullivan Square Reconstruction	Expand busway capacity to meet future demand and ensure that buses have direct and/or exclusive path from Alford Street Bridge to the busway.	 Reduces future limitations on increased bus service from Everett to Sullivan Square Reduces delays for buses due to congestion Decreases operating costs for bus routes running to Sullivan 	N/A	Will be further evaluated by Lower Mystic Regional Working Group	City of Boston; City of Somerville; MBTA; MassDOT

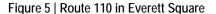




1 INTRODUCTION

The Everett Transit Action Plan is an initiative to develop near and long-term solutions to improve transit for the residents and workers of Everett. Despite being less than two miles from downtown Boston, the City of Everett is almost unique among municipalities inside of Route 128 in lacking direct access to rapid transit, commuter rail, the Key Bus Network, or even direct bus connections to central Boston. By itself, Everett's existing demand for public transportation service warrants a review of current MBTA bus services—the legacy of a route network that has remained largely unchanged for decades. However, several recent planning initiatives in and around the City have made the need for a comprehensive analysis of future needs, and how best to serve them, even more imperative.

The Wynn Casino development and planning efforts underway in the Lower Broadway and Commercial Triangle areas envision a dramatic reshaping of industrial property in the City's southern neighborhoods. An effective transit plan will help support these changing land uses and spur economic growth in a way that capitalizes on Everett's proximity to downtown Boston and leverages its own opportunities and potential. The Massachusetts Department of Transportation (MassDOT) recognizes that Everett is in need of higher quality transit, and this report lays out the public planning process and recommendations that resulted from this plan.









EVERETT IN CONTEXT

The City of Everett is home to dense residential neighborhoods and active businesses serving local needs and the greater Boston region. As one of several communities that form the Greater Boston region's core, Everett has experienced steady population growth alongside the economic growth in the area. Like many cities directly north of Boston, Everett's relatively affordable housing has fueled expanded growth in population, which has generally attracted families, young professionals, and a substantial immigrant population. Today, Everett has a population of approximately 42,000 people living in a city of less than 3.5 square miles. With the residential areas of the city making up only about 2.0 square miles in total, Everett is one of the most densely populated communities in Massachusetts.

Everett is also home to an active industrial sector along both the Mystic River and former industrial uses along the Malden River. Everett also has a large commercial sector including a large retail complex at Gateway Center and a thriving local business district in both Everett and Glendale Square. Around 13,500 people work in Everett, making the City the 6th densest employment center in Greater Boston in terms of jobs per acre. However, in terms of total number of jobs, Everett falls far behind neighboring communities, including Medford (19,000 jobs), Somerville (25,000 jobs), and Cambridge (100,000 jobs).

Everett shares many characteristics with its neighbors as a diverse inner urban community, but the City faces unique transportation challenges, especially in regards to public transportation. Everett is the largest and densest city in the MBTA service area that lacks a widely accessible, direct transit connection to either Downtown Boston or Cambridge. Apart from Route 111, which has a single stop on the edge of the City, all of Everett's public transportation lines terminate east of Interstate 93. Many Everett residents must therefore rely on multi-seat transit rides to reach their jobs. Despite this relatively higher burden in riding transit to access jobs outside Everett, around 24% of Everett workers use transit for commuting trips. This rate is comparable to several communities with direct subway service, including Revere and Quincy. Figure 8 provides an overview of public transportation use and facilities in Everett.









STUDY METHODOLOGY AND REPORT ORGANIZATION

The Everett Transit Action Plan sought to develop specific and implementable recommendations, grounded in concrete analysis and direct community feedback. A multi-step process was undertaken, which included a thorough review of existing service and the underlying markets that it served. With robust community feedback, taken in multiple venues, MassDOT viewed the public transportation system with an Everett lens, to understand the challenges faced by residents, employees and visitors. A complete set of goals were developed which spoke to the daily challenges and growing aspirations of all aspects of the Everett community. These were turned into evaluation criteria, which were used to test individual solutions.

Beyond the current challenges, the Plan further looked at expected changes in Everett. Building on known development, and ongoing planning efforts, MassDOT worked with the City to identify where growth is targeted and likely to occur. Public transportation changes, from altered routes, stop and corridor improvements, access enhancements, and even entirely new services were developed and tested. Ridership, travel time, reliability, and other transit benefits were calculated and used to help evaluation. These were augmented by analysis that looked at how alternatives best served other goals such as Advancing Equity or Improving Health and the Environment.

Through continued analysis and community feedback, alternatives were developed further. Feasibility analysis was conducted which looked at costs, permitting, and physical challenges, as well as potential implementation partners or processes. All led to a series of recommended improvements which best serve to build a foundation of public transportation to support Everett, one of the most rapidly evolving communities in the Boston region. This report essentially follows the steps undertaken in the Everett Transit Action Plan. The sections, described below, lay out the overall report in a summary format. More detailed evaluations, maps, calculations and backup materials are included in the report's Appendices for further reference.

- Public Engagement and Community Goals (Chapter 2): An overview of the public outreach process and the community goals developed through this process. The meeting notes for each community meeting is included in Appendix F.
- Challenges and Opportunities (Chapter 3): A summary of the Everett transit market, challenges facing Everett transit riders, and opportunities to enhance resident's mobility. A full existing conditions analysis is included in Appendices A, B, and C.
- Project Development and Evaluation (Chapter 4): A roadmap for how projects were developed and evaluated, including an overview of the project prescreen, feasibility analysis, and final evaluation process. Products produced during these processes are included in Appendices D and E.
- Recommendations (Chapter 5): A project-by-project review of short, medium, and long term recommendations from enhancing transit in Everett.





Figure 7 | Project Timeline







Figure 8 | Everett Transit Facts



9 Bus Routes



112 Bus Stops



909 Trips per Weekday



7,400 Daily Boardings

Direct Transit Service To:



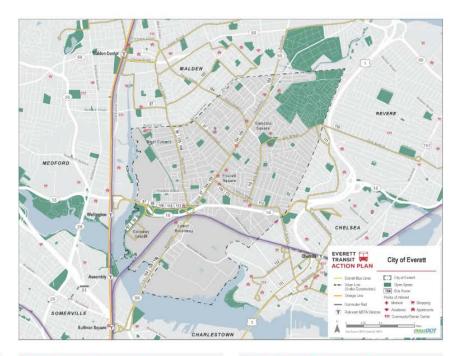
Sullivan Square, Wellington, Malden Center, Haymarket



Wonderland, Wood Island



Medford, Malden, Revere, Chelsea, East Boston, Charlestown, Downtown Boston



Major Transit Streets

- Broadway
- Main Street
- Ferry Street

High Ridership Stops

- Everett Square
- Glendale Square
- Woodlawn





2 PUBLIC ENGAGEMENT AND COMMUNITY GOALS

Over the course of the project, MassDOT embarked on a robust public engagement and outreach effort to help Everett residents define their vision and goals for Everett's transportation future. At the center of any visioning process is people, and this endeavor sought to empower and unite the Everett community under a common set of values that could serve as a framework for this process. By combining different tools and activities such as community meetings, focused outreach, and online engagement, the project team was able to directly engage the public in this process to help promote successful problem solving, yield diverse voices and new ideas, and foster a sense of ownership of the developed solutions.

PUBLIC ENGAGEMENT PROCESS

MassDOT developed a vigorous Public Outreach Program for the Everett Transit Action Plan with the following goals:

- Provide an interactive, collaborative, and credible public process that welcomes the communities of interest and provides a variety of ways for the public to be involved in, contribute to, and develop recommendations.
- Maximize turnout from community stakeholders, including direct outreach to MBTA bus riders, youth, and seniors.
- Provide methods to keep neighbors, residents, business owners, city, state and regional
 officials, and transit users involved and updated regularly on the development of the Plan.

MassDOT also keeps in mind the guiding principles of Environmental Justice (EJ) and Title VI:

- To avoid, minimize, and mitigate disproportionately high and adverse effects of alternatives on EJ and Title VI populations;
- To ensure the full and fair participation by all potentially affected communities; and
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

Outreach activities were tracked using spreadsheets that catalogue outreach methodology, specific meetings, and events and issues. These logs were reviewed regularly and used to assist project planning, including targeting the need for additional meetings/briefings, tracking stakeholder involvement, and the development of project alternatives.

MassDOT employed a wide variety of tools and activities to reach a diverse audience for the project.





Project Website

The project website

www.mass.gov/Massdot/EverettTransit

included reports, presentations, fact sheets and other project materials for review and download by the public. The project website also had a mechanism for individuals to sign up for the project email list. All of the meeting presentations for the project, as well as many other materials, were provided in English and Spanish.

Stakeholder Interviews

At the beginning of the project, MassDOT conducted stakeholder interviews with individuals and small groups, including city and elected officials, major employers and business leaders, social service agency directors, and advocates. These interviews



Figure 9 | Everett Transit Action Plan Website

helped the project team develop a clear understanding of stakeholder desires and expand the project distribution list.

Community Events and Briefings

Other in-person strategies and tools included interactive information sessions to bring the project to the people. These sessions have included Everett Village Fest (2015 and 2016), an Everett High School football game, and bus stop surveys/audits. At these events participants were provided information about the project and asked for feedback through a variety of mechanisms, such as comment cards and surveys. Many of these events included the presence of Spanish-language interpreters.



Figure 10 | Feedback at Everett Village Fest



Figure 11 | Bus Stop Surveys in Everett Square

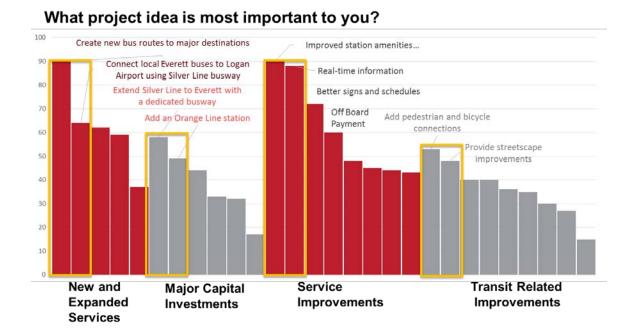




Online Survey and Public Engagement Tool

In addition to the bus stop surveys that were conducted in person, MassDOT also deployed an online survey in English, Spanish, Haitian Creole and Portuguese. This survey asked for feedback on project ideas by mode.

Figure 12 | Online Feedback on Initial Project Ideas



Public Meetings

In addition to these more informal events, there were several public meetings and open houses. The meeting notes for each of these can be found in Appendix F.

- Meeting #1: November 16, 2015 Introduction to Study, Identifying Community Goals, and Existing Conditions
- Meeting #2: February 11, 2016 Alternatives Development
- Meeting #3: April 13, 2016 Alternatives Evaluation
- Meeting #4: September 21, 2016 Project Recommendations

To publicize these meetings, MassDOT developed meeting flyers in English, Spanish, Portuguese and Haitian Creole. Electronic versions of these flyers were posted on the project website and shared via email to community groups and other stakeholders. Print versions of the flyers were shared for posting at local libraries and community health centers, posted on MBTA buses, and posted at key MBTA bus shelters in Everett. MassDOT also distributed flyers at events and key locations like Sullivan Square MBTA station. Email notifications in English and Spanish were also sent directly to the project distribution list, which includes previous meeting attendees and anyone who has signed up directly.

Presentations and display boards from these meetings were posted on the project website so individuals who did not attend the meeting in person can review the material. These materials were available in English and Spanish. Also, a detailed meeting summary was posted to the





project website after each meeting. The meeting summary was also used by MassDOT to track feedback received at each meeting.

Figure 13 | Community Outreach throughout the Project

Everett Village Fest '15 / '16

Reached more than 250 people



Sullivan Square Surveying

Surveyed over 100 riders



Bus Stop Surveys / Audits

Reached over 200 riders



Crimson Tide Football Game

Reached over 20 people (in the rain)!



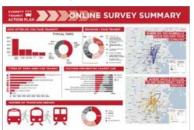
Four Open Houses

Over 150 Attendees



Online Surveys

Over 250 Responses



STUDY GOALS

During the November 16th public meeting, MassDOT and the City of Everett hosted an event that provided attendees with the opportunity to understand the overall Everett Transit Action Plan effort. Meeting attendees participated in an exercise to rank and rate a series of draft project vision and goals. These initial goals were formed based on the review of past city-wide and local plans. Upon refinement, these goals were further operationalized to form the base of evaluation criteria to test the later projects. This methodology is described further in Chapter 4.

Initial Draft List of Project Vision and Goals

The following set of vision and goals were developed based on a comprehensive review of existing local and regional plans for the City of Everett.

- Accelerate: Ensure faster service through Everett
- Connect: Maximize connections using transit
- Reach: Create a broader range of direct connections from Everett
- Thrive: Make Everett a more attractive place to live and work
- Transform: Use transit investments to foster development and change
- Sustain: Transit as a part of a greener Everett
- Do: Find and complete investments immediately
- Support: Uses and users through Everett
- Integrate: Transit with overall transportation system





Enhance: Improve the user experience for riders

Goal Prioritization Exercise

A hands-on prioritization exercise was included at the first public meeting to provide an interactive way to visualize vision and goal tradeoffs. There were a set of ten jars that represented the various visions and goals and a collection of colored poker chips. Participants were asked to collect five poker chips and allocate chips to each goals jar based on their priority. The results of this exercise are show in the table below.

Figure 14 | Participation of Goal Prioritization Exercise and Results

Goal	Count
Reach	28
Accelerate	28
Thrive	25
Connect	24
Sustain	23
Enhance	20
Do	19
Transform	18
Support	17
Integrate	15



Final List of Project Visions and Goals

A final list of vision and goal statements were crafted based on the feedback and results of the public engagement process. The final list was created through consolidating and refining the initial draft list of ten goals down to six. Based on the feedback from the online survey and public meeting activities, a majority of the goals were recommended, however a handful of goals naturally overlapped and could be combined into one goal. This process included consolidating "Reach," "Accelerate," and "Connect" goals into the "Expand Mobility" goal. "Thrive" and "Transform" also consolidated into the "Support Economic Development" goal. Other goals statements were refined to be more specific so that criteria could be developed to measure them.

As part of the goal setting process, MassDOT also formed an initial list of potential evaluation metrics for each of these goals. These evaluation criteria were developed with data emerging from a variety of tools (GIS, CTPS travel demand models, health impacts, best practice research, etc.). Transportation projects were ultimately tested against this set of criteria and citywide metrics to deter which best serve community needs. The table below (Figure 15) provides an initial list of these evaluation metrics, while Chapter 4 details the use of these metrics in evaluating the projects.





Figure 15 | Projects Goals and Evaluation Criteria

Goals	Definition / Vision	Objectives / Measures
Expand Mobility	Ensure faster service to integrate Everett in the metro Boston region and transportation network	Provide direct (one seat ride) service to additional locations Decrease overall travel time for transit riders Provide greater range of options from Everett neighborhoods Enhance service outside typical service peaks
Support Economic Development	Transit investments support identified growth areas, employment centers, and foster new opportunities to make Everett a more attractive place to live, work, and play	Does the Project Create or enhance transit service in identified growth areas Support Everett's job centers Improve infrastructure for all users Support local/ regional plans
Enhance Comfort and Safety	Improve the transit experience for riders in Everett	Does the Project Improve the quality of facilities in Everett Improve bicycle and pedestrian connections to transit Reduce wait times Reduce crowding
Advance Equity	Provide a range of transportation options that are socially and economically equitable and accessible for all transit riders	Does the Project Benefit Everett's Environmental Justice (EJ) populations Improve transit access to education, healthcare, and shopping. Reduce or minimize cost to the user
Improve Health and the Environment	Support sustainable transportation strategies aimed to reduce resource consumption, improve the environment and support active transportation and public health initiatives	Does the Project Reduce Single Occupancy Vehicle(SOV) trips in Everett Contribute to improved public health in line with identified needs and vulnerable populations Create or enhance active transportation facilities Reduce greenhouse gas (GHG) emissions Reuse or improve existing infrastructure
Invest Strategically	Prioritize transportation investments that can be implemented quickly, sustained long term, and maximize overall travel benefits	Does the Project





3 CHALLENGES AND OPPORTUNITIES

As part of the Everett Transit Action Plan, MassDOT has identified specific public transportation challenges and opportunities unique to Everett. The full Existing Conditions report, which can be found in Appendices A, B, and C, provides the details and complete insight into Everett's diverse communities and their transportation needs. The Existing Conditions report includes two major elements:

- A Market Analysis, focused on travel and transit potential of Everett's residents, based on demographics and land use.
- A Service Analysis, which examines the nature and use of transit services in and around the City.

This information was used to identify gaps and prioritize potential transportation investments to enhance the mobility of Everett residents. The following findings identify and summarize the major challenges and opportunities from both the Market Analysis and the Service Analysis.

EXISTING CONDITIONS

As an initial step towards developing these solutions, MassDOT undertook an in-depth analysis of existing transit services in the City. Analysis focused on understanding how Everett riders use the MBTA system, the level to which services meet existing needs, and what barriers residents face to using transit. MassDOT assessed the condition of bus routes serving Everett, how they interact with the broader MBTA system, and how the City's local infrastructure affects access to transit services.

Everett is served by nine MBTA bus routes, which primarily connect the City to MBTA subway stations located in neighboring municipalities. The City of Everett is directly served by routes 97, 99, 104, 105, 106, 109, 110, 111, and 112 (Figure 16). Each of these routes is anchored to at least one MBTA subway station, and nearly 30,000 customers in total board the nine bus routes that serve Everett each weekday. Approximately 7,400 of these boardings occur within Everett city limits. Unlike neighboring cities and towns, Everett has only limited direct service to Downtown Boston. No express bus services or subway lines pass through the City, and the Rockport/Newburyport commuter rail line bisects Everett without stopping.

While this gives an overview of the existing transit within Everett, MassDOT completed further analysis on both the potential transit market and the specific characteristics within each of the nine MBTA bus routes. The following sections give highlights of this analysis, while the complete reports can be found in Appendices A, B, and C.





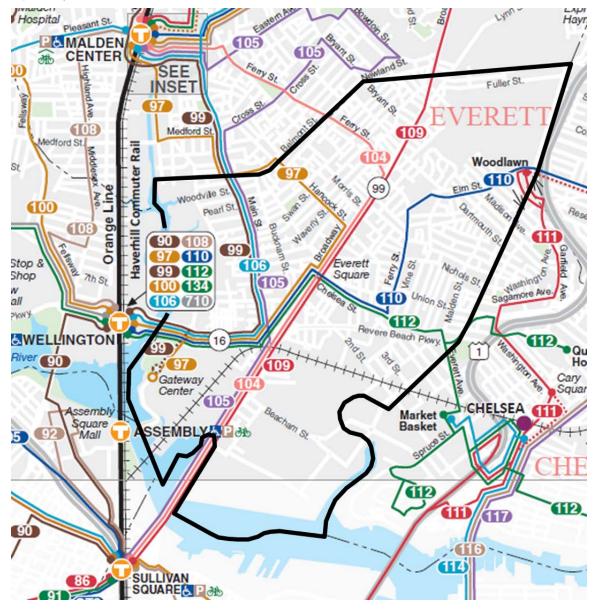


Figure 16 | Current MBTA Service in Everett

MARKET ANALYSIS

As the City of Everett, the MBTA, and MassDOT prioritize long-term transit investments, service changes and capital investments must be made in support of and response to current and future market conditions. The purpose of the market analysis is to understand existing market conditions as they relate to the need for transit service. This market analysis provides an assessment of potential demand for transit service based on such factors as development patterns, location of major employment centers, population and employment, socio-economic characteristics, and travel flows. All of these factors are primary drivers of transit demand, and as such, help explain the magnitude and composition of existing transit usage, as well as help identify potential transit demand that is not being met by today's services.





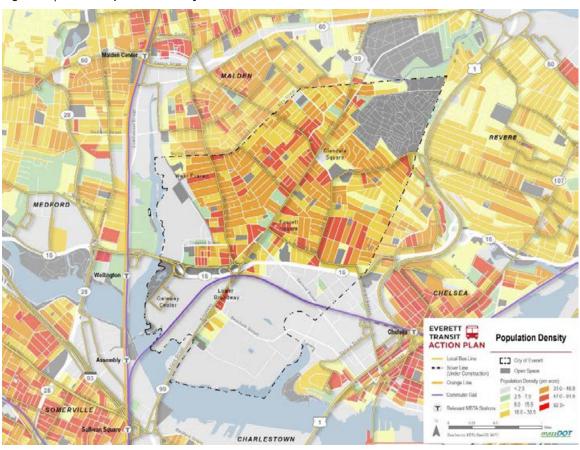
The City of Everett can support more frequent transit service.

- Everett is one of the most densely populated communities in Massachusetts, with over 42,000 people living in an area of less than 3.5 square miles (19.2 people per acre). See the relative population densities within Everett in Figure 17.
- Everett is denser than several communities with direct access to the subway, such as Revere and Quincy.
- Everett has more residents likely to rely on transit than similar surrounding communities. The City has the 2nd highest density of disabled residents, the 2nd highest density of foreign-born residents, and the 5th highest density of seniors all populations that tend to be more transit dependent than average.

Everett's current and future employment centers are difficult to access using public transportation.

- Most of Everett's major employers are located west of Main Street and Lower Broadway, including at Gateway Center and in the River's Edge area. These locations, along with the Commercial Triangle, are also Everett's primary focus for future development.
- These neighborhoods are located near streets with frequent bus service, but the bus stops are difficult to access. Riders are blocked by railroad tracks and difficult to cross streets that significantly increase the time it takes to access transit (Figure 18).

Figure 17 | Everett Population Density







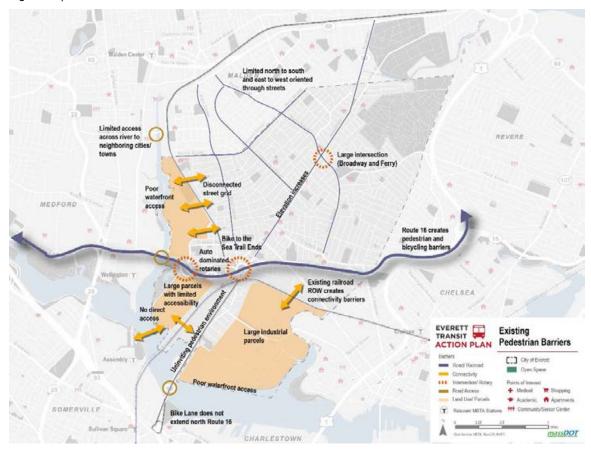


Figure 18 | Everett Pedestrian Barriers

Most Everett trips are local and are oriented to the north. Transit riders, however, are more likely to travel to destinations south of the Mystic River.

- Over 20% of all trips beginning in Everett end in Everett.
- Almost 70% of all Everett trips are headed to destinations north and east of the Mystic River, including to destinations within City limits.
- Over 40% of trips made using transit are to destinations south and west of the Mystic River, including Downtown Boston, Cambridge, and Somerville.

SERVICE ANALYSIS

As part of the existing conditions analysis, MassDOT undertook an in-depth analysis of existing transit services in the City. Analysis focused on understanding how Everett riders use the MBTA system, the level to which services meet existing needs, and what barriers residents face to using transit. MassDOT assessed the condition of bus routes serving Everett, how they interact with the broader MBTA system, and how the City's local infrastructure affects access to transit services.

Broadway and Main Street are the major transit streets in Everett.

- During rush hour, buses run every 7.5 minutes on Broadway and every 10 minutes on Main Street in each direction.
- The highest ridership stops in Everett are on Broadway, especially near Everett Square and Glendale Square.



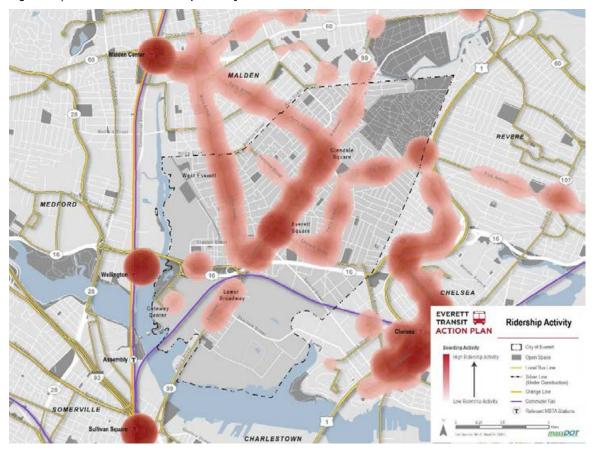


 Woodlawn, the only stop in Everett served by Route 111, is among the highest ridership stops.

Many Everett bus routes are overcrowded.

- Many Everett riders are traveling to the Orange Line. Buses in the inbound direction often reach capacity before serving stops in Everett's southern residential neighborhoods.
- Everett has high transit ridership early in the morning, late at night, and on weekends.
 Most routes run less frequently during these times, and many trips are severely overcrowded or leave passengers behind.

Figure 19 | Everett Routes Ridership Activity



Trips to common destinations like Downtown Boston and Cambridge are complex and time consuming.

- Everett is one the few communities in the inner core without easily accessible direct transit service to Downtown Boston.
- Almost all trips to Downtown Boston, as well as to Cambridge and Somerville, require at least one transfer.

Sullivan Square offers better access to destinations in Cambridge and Somerville than Wellington.

- Sullivan Square and Wellington, which are major transfer points for Everett transit riders, offer connecting services to different destinations.
- Sullivan Square riders can transfer to buses serving Cambridge and Somerville.



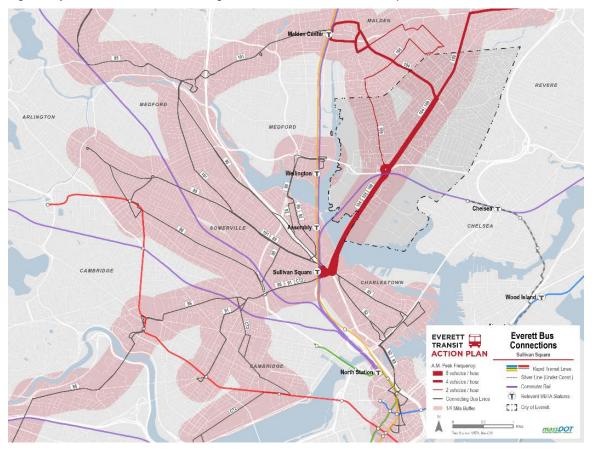


- Wellington bus routes mostly serve Medford with limited access to Davis Square.
- While there is frequent service to Sullivan Square along Broadway, only one route on Main Street and no routes on south Ferry Street serve Sullivan Square.
- Riders living near Main Street and south Ferry Street thus have less access to bus routes serving Sullivan Square, and therefore have more difficulty travelling to Cambridge and Somerville.

It is easier for Everett transit riders to get to the Orange Line than it is to get back to Everett.

- Almost all Everett bus routes begin or end at an Orange Line station.
- In the morning, Everett transit riders can board almost any inbound bus to reach the Orange Line with frequency of as little as 3.5 minutes in Everett Square.
- In the evening, Everett riders must choose an Orange Line station, reducing bus choice and frequency to between 7.5 and 30 minutes.

Figure 20 | Bus Connections to Cambridge and Somerville from Sullivan Square







4 PROJECT DEVELOPMENT AND EVALUATION

MassDOT utilized a multi-step evaluation process to develop the final Everett Transit Action Plan project recommendations (Figure 21). Using findings from the Existing Conditions and Market Analysis, as well as input from local stakeholders, a range of transportation issues facing Everett residents was identified. MassDOT then developed broad improvement concepts and refined these concepts into specific projects and programs. These potential recommendations were then prescreened using a variety of qualitative and quantitative metrics directly related to goals developed during the initial public outreach process.

Projects that passed the prescreen then underwent a feasibility analysis to develop general cost projections and development timelines, as well as identify critical issues that could complicate implementation. The Central Transportation Planning Staff (CTPS) travel demand model was also used to provide insight into potential ridership and travel flow impacts. Using data from these analysis, the potential project list was further refined into an initial set of draft recommendations. These recommendations were presented to local stakeholders, whose input guided the final set of recommendations presented in this report.

PROJECT DEVELOPMENT

To develop potential projects, MassDOT first conducted an in-depth existing conditions analysis (described in Chapter 3) as well as a robust public outreach effort (described in Chapter 2). These processes helped identify major transportation challenges facing Everett residents, as well as a wide range of transportation projects that had been recommended in previous studies. MassDOT then developed more specific concepts for transportation improvements, which were presented to the public for feedback at the second open house. These concepts included:

- Leveraging the Silver Line Gateway Extension
- Providing new direct service to surrounding communities
- Improving and reconfiguring existing local bus routes
- Invest in projects and strategies that enhance transit access

Based on feedback on these initial concepts, MassDOT developed more specific project recommendations grouped based on projected implementation timeline (short range and medium/long range). The project development process is shown in Figure 22.





Figure 21 | Project Evaluation and Analysis

Advance Equity Project Evaluation Criteria Metrics are created based off project goals identified by the City and public for the study Project Prescreen Project ideas are evaluated against an initial set of basic evaluation criteria Project ideas were scored based on evaluation criteria developed during earlier public outreach process Mix of quantitative and qualitative evaluations Based on relative benefits to the Everett community Scoring System: A FAIR Lesser benefit for Everett. (Did not pass pre-screen) Achieves community goals. (Passes pre-screen) WBEST Greatest benefit for Everett. (Passes pre-screen) A FAIR / Passes pre-screen in response to community outreach **Travel Demand Modeling Project Evaluation** Projects are grouped into test scenarios to model An in-depth qualitative and quantitative assessment change in travel conditions in Everett of projects based on evaluation metrics Scenario 1 Scenario 2 **Project Recommendations** High scoring projects from the project evaluation are prioritized for recommendations



Figure 22 | Example of Project Development

Generate Ideas (Ideas collected on the street, on an online survey, and stakeholder interviews)





"More Direct Connections to from Everett to Cambridge!"

Develop Ideas (Recommended for further development)



- Interline and combine existing routes provide more direct service to Cambridge and Somerville
- Enhanced off-peak service (early AM, late night, weekend)

Specify Projects (Projects divided based on cost and time feasibility)



Short Term (0-3 years)

Connect to Harvard Square Extend Route 104 to Harvard Square
Connect to Central Square Extend Main Street service to Central Square

Mid-Term (4-10 years) and Long Term (10 or more years)
Additional Off-Peak/Peak Service





PRESCREEN

During the first open house, MassDOT worked with local residents to identify six primary project goals. Chapter 2, Public Engagement and Community Goals, outlines the goal development process. These goals were then operationalized into a variety of specific objectives and measures that could be quantitatively and qualitatively evaluated. Each project idea was then screened using these specific objectives and measures.

Projects received a rating of Fair, Good, or Best based on their relative success at achieving each primary goal. Short-term projects were evaluated relative to other short-term projects, and medium/long term projects were evaluated relative to other medium/long term projects. The scores for each goal were then consolidated into a final overall rating, used to determine which projects should be prioritized for advancement to the feasibility analysis.

MassDOT evaluated 32 projects during the prescreen phase. Of these, twenty-seven (27) projects were advanced to the feasibility analysis (Figure 23). Twenty-five projects that passed the prescreen received a Best or Good rating. Two (2) Fair rated projects passed to the next evaluation phase based on feedback from local stakeholders (Orange Line Extension and Express Bus Service to Downtown Boston). The full results of the prescreen analysis can be found in Appendix D.

Figure 23 | Prescreen Results

Rating	Description	Number of Projects
₩ BEST	Best Rating (Passes prescreen)	10
✓ GOOD	Good Rating (Passes prescreen)	15
✓ G00D ×	Good Rating; Lower Rated Alterative* (Did not pass prescreen)	2
▲ FAIR	Fair Rating (Did not pass prescreen)	3
▲ FAIR ✓	Fair Rating; Community Priority (Passes prescreen)	2

^{*}Two Silver Line design options that received Good ratings were not advanced to the feasibility analysis due to higher rated alternative options.

FEASIBILITY ANALYSIS

MassDOT next conducted a feasibility analysis of each project that passed the prescreening process. The feasibility analysis focused on critical issues that could affect project implementation, and included basic cost assumptions and implementation schedules. For projects with a significant infrastructure component, an engineering team analyzed basic footprint and structural requirements as well as right-of-way impacts. For projects that would primarily affect operations, the feasibility analysis focused on potential operational and institutional barriers to implementation. For example, the feasibility analysis for bus route modifications worked to identify potential negative impacts to transit reliant riders as well as corridors where congestion may affect reliability. The CTPS travel demand model was also used to provide insight into how





potential projects would affect transit ridership and travel flows between Everett and surrounding communities.

The feasibility analysis for each potential project can be found in Appendix E and included the following components:

- Project Description: An overview of the potential project.
- **Timeline:** A step-by-step implementation timeline for the project once funded.
- Cost Estimates: Analysis of the relative cost for project implementation.
- Implications and Tradeoffs: Overview of the benefits and drawbacks of the project, including potential issues that could impact implementation. Includes potential ridership and travel flow impacts when applicable.
- Potential Funding Sources: Identification of agencies or partners that could potentially provide funding for the project (FTA, Other Federal, State, Local, Private).
- Permitting Required: Potential review processes required to implement the project (Local, MEPA, NEPA).
- Property Impacts: Review of potential need for property acquisition and other right-ofway modifications or impacts.
- Paired Projects: Related projects that alter or compound the benefits of the project being analyzed.





5 RECOMMENDATIONS

The Everett Transit Action Plan has prioritized fourteen investments that best meet community goals and maximize the mobility of Everett residents, workers, and visitors. Three additional projects that are currently in various stages of design were reviewed to ensure that they will be implemented in a manner that best serves Everett's transit needs. A few additional projects were assessed and are not being recommended at this time, but may warrant further consideration in regional planning processes.

As described in Chapter 4, all recommendations were developed through consultation with stakeholders, evaluated using quantitative and qualitative metrics, and refined during a robust public outreach process. Recommendations were categorized into two groups:

- Service and Route Improvements: Short and medium term service changes, projects, and strategies designed to improve local bus service within Everett and provide better connections to major destinations for Everett residents.
- Major Transit Investments and Pedestrian & Bike Access: Medium and long term capital
 investments designed to further integrate Everett into the Greater Boston high-capacity transit
 network. Recommendations are also provided for several projects in this category that are
 currently in various stages of planning and design by other entities.

In addition, this section contains a third category of projects that are not being recommended in this plan, but could be considered in the future or as part of regional planning and policy efforts.

Each recommended strategy stands alone as a worthwhile investment that improves transit in Everett. Many of the recommendations have further compounding benefits when implemented alongside other proposed strategies. Together, the projects recommended in the Everett Transit Action Plan would:

- Establish Broadway as one of Greater Boston's best transit corridors and provide a strong pathway for future transit investments.
- Make local bus service faster, more reliable, and easier to use, while providing enhanced connections to Lower Broadway, Cambridge, and Somerville.
- Make Everett one of the only communities with a one-seat ride to Logan Airport and the South Boston Waterfront.
- Increase connectivity with the Orange Line.
- Transform the Northern Strand into the highest quality bike facility in Greater Boston, providing a safe and easy path to the Orange Line (and potentially entirely off-street route to Downtown Boston).

A full profile of each recommendation is included below. The profiles include the following:

- Recommendation: Description of the recommended project.
- Existing Conditions: Overview of issues that directly influenced the development of the recommendation.
- Benefits: Details of how the project would improve transit for Everett residents, workers, and visitors.





- Challenges: Potential issues that may affect implementation of the recommendation.
- **Implementation:** Guide to the process of implementing the recommendation.
 - Cost Estimate: How much capital investment or continued operating funding the recommendation requires.
 - \$: \$1 million or less
 - \$\$: \$1 to 10 million
 - o \$\$\$: Over \$10 million
 - Timeframe: How long it would take to complete the recommendation once implementation process has commenced, provided available funding.
 - Responsible Agencies: Which agencies are responsible for completing further analysis, identifying funding sources, and implementing the recommendation.
 - Planning Processes: Ongoing studies and capital programs under which further implementation steps would be completed.
 - Implementation Procedure: Step-by-step process for further analysis, funding, and completion of the recommendation.
 - Parallel Recommendations: Related Everett Transit Action Plan recommendations that alter or compound the benefits of the described recommendation.

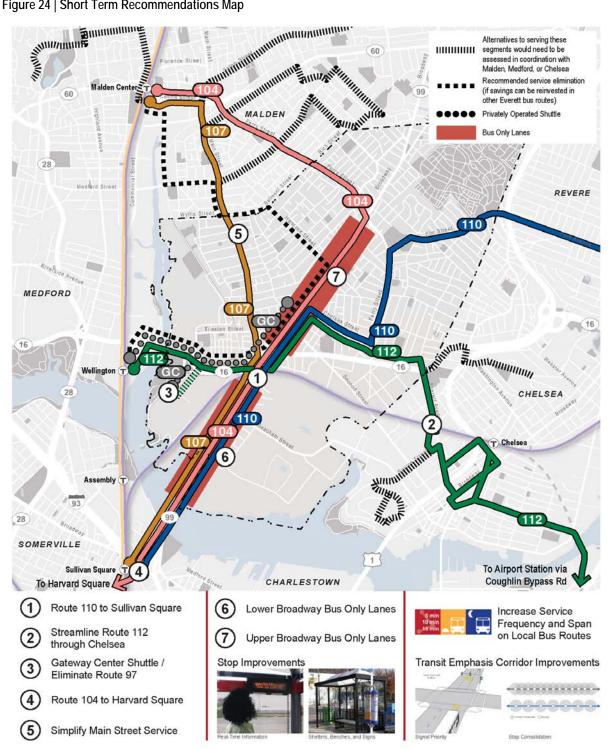




SERVICE AND ROUTE IMPROVEMENTS

This section includes short and medium term service changes, projects, and strategies designed to improve local bus service within Everett and provide better connections to major destinations for Everett residents. Many of these recommendations are dependent upon further analysis as part of the MBTA Service Plan, which will look at service changes on a garage by garage basis.

Figure 24 | Short Term Recommendations Map

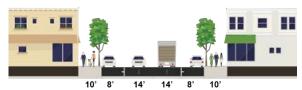




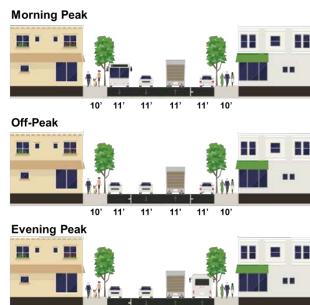


Upper Broadway Bus Only Lanes

Existing



Recommended



11

10'

11'

11[']

11' 10

Recommendation

Establish peak period, peak direction bus only lanes on Broadway between Glendale Square and Sweetser Circle, using existing parking lanes.

Existing Conditions

Upper Broadway is one the highest ridership transit streets in Greater Boston, with between 9,000 and 10,000 people boarding and alighting or riding through the corridor each weekday on four different bus routes (104, 109, 110, 112). On weekdays, up to 17 buses per hour in each direction operate between Everett Square and Sweetser Circle. During rush hour, there can be as many bus riders on Upper Broadway as people traveling in cars. Routes 104 and 109, the primary routes on Broadway, serve over 7,500 passengers daily. In combination, these routes are among the top 15 highest ridership MBTA bus services.

Severe congestion on Upper Broadway frequently slows down buses and decreases reliability, making transit a less attractive option for Everett residents and visitors. Congestion is caused in part by curbside friction, one-way streets that force general traffic from Everett's neighborhoods onto Broadway, high traffic volumes in Sweetser Circle, and conflicting turning movements at major intersections. During rush hour, bus trips on Broadway between Glendale Square and Sweetser Circle are scheduled to take as much as nine minutes longer than during off-peak service. The longest trips have an average speed of less than five miles per hour, including stop dwell times. Despite adding time to the schedule to account for congestion, Routes 104 and 109 run late on around 40% of trips each day.





Benefits

Establishing peak period, peak direction bus only lanes contributes to making Broadway one of the most attractive transit streets in Greater Boston. Bus only lanes on Upper Broadway would significantly improve on-time performance and could increase the average speed of buses operating during rush hours. More reliable service with reduced travel times will likely attract additional riders to Broadway's bus routes. Bus only lanes could also improve the overall traffic flow on Broadway, as the general travel lane in the peak direction would no longer be blocked by buses and cars pulling in and out of the parking lane.

The recommended Upper Broadway bus only lanes would be utilized only during rush hour in the peak direction (towards Sweetser Circle in the morning and away from Sweetser Circle in the evening). On-street parking would be maintained on at least one side of Broadway during all times, and on both sides of the street for much of the day. This design ensures that buses move smoothly when they are most crowded, while also providing continued access to on-street parking for Everett residents and visitors.

Challenges

In order to implement peak period, peak direction bus only lanes, the curbside lanes on Upper Broadway must be designed to alternatively handle free-flowing bus traffic and parked cars. To function as a bus only lane, the curbside lanes must be free of any permanent physical obstructions, such as bump-outs and curb extensions, which may otherwise be desirable streetscape improvements for placemaking.

When being used as parking, the lanes cannot be physically separated from the general traffic lane so that drivers can easily enter and exit the spaces. Robust and rapid enforcements of travel restrictions is thus required to maintain free-flowing traffic for buses when in use as a bus only lane.

Implementation

Cost Estimate: \$

Pavement markings

Adjustments to curbs and bus stops

Timeframe: 6 months for pilot; 1-3 years for permanent installation

Responsible Agencies: City of Everett, MBTA, MassDOT

Planning Processes: Local Planning Processes

Implementation Procedure:

- Establish inter-agency working group to study potential pilot and requirements for permanent installation
- Conduct temporary pilot implementation
- Study pilot impacts and conduct public outreach
- If permanent installation is recommended, identify capital funds, design, and construct, potentially as part of upcoming streetscape improvement process

- Transit Emphasis Corridor Improvements
- Bus Stop Improvements





- Broadway/Ferry Street Silver Line Extension
- Express Bus to Downtown Boston
- Route 104 to Harvard Square





Lower Broadway Bus Only Lanes

Recommended







Source: NACTO Transit Street Design Guide

Recommendation

Establish bus only lanes on Lower Broadway from Sweetser Circle to Dexter Street.

Existing Conditions

Lower Broadway has severe traffic congestion during rush hour. The MBTA has built its schedule assuming buses are traveling as slow as 5 miles per hour on this corridor. Often, buses are actually travelling at even slower speeds.

Traffic delays during rush hour increase scheduled travel times on Routes 104, 105, and 109 by as much as 15 minutes, or 250%, compared to off-peak service. Long rush hour travel times increase the cost of transit operations, and limit potential opportunities to provide additional service between Everett and Sullivan Square.

The number of people traveling on Lower Broadway, both in private vehicles and on buses, is expected to grow significantly with new development on the corridor and in surrounding neighborhoods. By 2023, without any changes to MBTA service, about 25% of people traveling on Lower Broadway will be riding public and private transit vehicles⁵. Additional changes in routes from Everett to Sullivan Square, as well as increased frequency on existing routes, will likely significantly increase the proportion of transit riders on the corridor.

 $^{^{5}}$ Based on projections from the Wynn Casino Environmental Impact Report and MBTA ridership data





Benefits

Adding bus only lanes on Lower Broadway will increase the reliability of transit services, while also reducing travel times, especially during rush hours. These benefits decrease the cost of adding transit service on the corridor, such as shifting routes from Wellington to Sullivan Square. Bus lanes could further be used by private buses and shuttles, which will likely run most frequently during off-peak service, encouraging transit use among visitors to Lower Broadway destinations.

Challenges

Lower Broadway will be reconstructed as part of the Wynn Boston Harbor project. While bus lanes in various forms were explored as part of the reconstruction, the limited right of way would not permit a bus lane at this time. Provisions for future bus lanes should be incorporated into the reconstruction project, which could be implemented as right of way becomes available as the corridor redevelops.

Implementation

Cost Estimate: \$\$

Limited property acquisition

Roadway widening

Pavement markings

Adjustments to curbs and bus stops

Timeframe: 5+ years

Responsible Agencies: MassDOT, City of Everett, City of Boston, MBTA, Landowners

Planning Processes: Lower Mystic Regional Working Group, Focus40

Implementation Procedure:

- Everett and Wynn work to include provisions for bus only lanes, in the final Lower Broadway reconstruction designs
- Recommend bus lanes for further analysis as part of the Lower Mystic Regional Working Group and Focus40
- Everett to explore rezoning and requiring increased setbacks of property or other opportunities for acquiring additional ROW for a bus lane as the corridor redevelops
- MassDOT, the MBTA, and Everett to monitor bus operations with the transit signal priority and added roadway capacity that will be implemented with Wynn's reconstruction of Lower Broadway

- Route 110 to Sullivan Square
- Simplify Main Street Service (Route 107)
- Recommendations for Sullivan Square Reconstruction
- Transit Priority Corridor Improvements
- Stop Improvements
- Express Bus to Downtown Boston
- Route 104 to Harvard Square





Transit Emphasis Corridor Improvements

Existing





Recommended









Recommendation

Invest in strategies designed to increase bus service speed and reliability, including transit signal priority/re-timing, bus stop consolidation, and improved fare collection and boarding practices. Advertise these benefits, and add routes to the MBTA Rapid Transit/Key Bus Routes Maps. Potential transit priority corridors include Broadway, Main Street, Chelsea Street, and Ferry Street.

Existing Conditions

Running times on Everett bus routes are significantly longer during rush hour than during off-peak service. Trips on Routes 104 and 109, for example, take over 20 minutes, or 140%, longer during rush hour than during early morning and late night service. Increased running times during rush hour service are caused in part by congestion, but also by high bus ridership, closely spaced bus stops, inefficient fare payment and boarding practices. For example, Everett bus routes have as many as ten stops per mile (one stop every 500 feet), or about twice as many as recommended for high ridership corridors in the MBTA Bus Stop Design Guidelines. Increasing ridership and on-street activity will likely further decrease average transit speeds and reduce service reliability in Everett, especially along Broadway.

In 2006, the MBTA initiated the Key Bus Route Improvement Program, which used transit priority strategies to reduce travel times and increase service quality on the 15 busiest bus routes in the system. Strategies included bus stop relocation and consolidation, queue jump lanes, enhanced bus stop amenities, curb extensions, and transit signal priority. Key Bus Routes were also placed on the official MBTA Subway Map, signifying a higher level of service than other local bus routes. Everett, Broadway and Main Street have similar levels of service as many Key Bus Routes, with between six and ten trips per hour during peak periods. However, neither street initially qualified as a Key Bus Route, as service is split between multiple lower frequency routes operating on the same corridor.





Benefits

Transit emphasis corridor improvement strategies can increase bus speeds and reliability, especially when ridership is greatest. Transit signal priority helps keep buses on schedule, reducing delays and overcrowding due to bus bunching. Reducing the number of bus stops and ensuring even stop spacing increases service reliability and average bus speeds. New fare collection practices that allow riders to board through the front and back doors reduce the amount of time buses speed at each stop. Unique branding highlighting these service improvements will attract additional riders to Everett's bus routes, further justifying additional investments in transit.

Challenges

Implementing transit emphasis corridor improvements requires a series of tradeoffs, regional investments in new technologies, and new intergovernmental partnerships. Ridership on Everett bus routes is distributed relatively evenly across a large number of closely spaced bus stops. Implementing stop consolidation will require some riders to walk a few minutes farther to access transit services. Initiating new fare collection practices, such as all-door boarding, will require investments in new fare collection technologies, as the current CharlieCard system has limited capabilities. The MBTA is currently pursuing a replacement to the CharlieCard system, which should be operational within the next three years.

Installing transit signal priority currently requires a link to a centralized signal control system. The City of Everett would therefore likely need to coordinate with the Boston Transportation Department to provide signal priority for Everett bus routes because they are the only municipality with a central control system.

Implementation

Cost Estimate: \$

- New or modified traffic signals
- Pavement markings
- Adjustments to curbs and bus stops
- Bus stop amenities

Timeframe: 1-2 years

Responsible Agencies: City of Everett; MBTA; City of Boston; City of Malden; City of Medford **Planning Processes:** MBTA Key Bus Route Improvement Program; MBTA Service Plan; MBTA Accessibility Improvements; Focus40; Local Planning Processes

Implementation Procedure:

- Lower Broadway will receive transit signal priority as part of the Wynn Section 61 requirements, which will be implemented by the opening of the casino
- MBTA, City of Everett, and City of Boston study and develop agreement to implement transit signal priority in additional locations where applicable
- City of Everett and MBTA identify short term opportunities and funding sources to implement transit emphasis corridor improvements
 - For example, stop consolidation can be implemented on Upper Broadway as part of peak period bus only lanes implementation





 MBTA evaluates Everett transit corridors for inclusion in future phase of Key Bus Route Improvement Program

- Bus Stop Improvements
- Increase Service Frequency and Span on Local Bus Routes
- Recommendations for Sullivan Square Reconstruction





Increase Service Frequency and Span on Local Bus Routes



Recommendation

Increase service frequency and add additional early morning and late night service on Everett's local bus routes.

Existing Conditions

Everett local bus trips throughout weekday and weekend service frequently have standing passengers. The most crowded trips typically occur during early morning and midday service, as well as on weekends. Overcrowding during these periods most likely occurs because demand for service is decreasing less than the decrease in service frequency compared to rush hour service.

During weekday off-peak service, at least 25% of trips on Routes 104 and 111 regularly have standing passengers. On Saturdays and Sundays, at least 20% of trips on Routes 104, 109, and 111 regularly have standing passengers. Numerous trips during off-peak and weekend service have few empty seats, indicating the near-term potential for more consistent overcrowding throughout Everett's local bus network.

By 2040, ridership on Everett local bus routes is projected to increase by over 35%. Without additional capacity, such increases will likely result in significant overcrowding on most bus routes in the city.

Benefits

In general, increased service frequency makes transit a more appealing mobility option, often leading to greater ridership. Targeted increases in service frequency will reduce overcrowding on Everett's bus lines. Increases to service span will enhance the mobility of riders making early morning or late night trips.





In some circumstances, significant improvements to local bus speeds and reliability can result in enough travel time savings to allow the same bus to complete more trips within the same service period. In these cases, additional service frequency can be provided at no additional cost.

Challenges

Future local bus capacity needs are highly dependent on Everett's growth and development characteristics, as well as how residents adapt to both new transit services and changing congestion conditions. Determining where additional service would be most beneficial is thus often a reactive process. Given the limited resources available for increase bus service hours, adding more service on one route often requires reducing service on another route.

If operated by the MBTA, adding additional service during peak periods may require the purchase of new buses and expansion of bus maintenance and storage facilities.

Implementation

Cost Estimate: \$ - \$\$

Additional operating costs

Additional vehicles (if service is added during peak periods)

Timeframe: 1-2 years (if operating funds are transferred from other services); 3+ years (if additional operating funds are required)

Responsible Agencies: MBTA

Planning Processes: MBTA Service Plan, Focus40

Implementation Procedure:

- Monitor Everett bus routes to identify regular violations of the MBTA load standard
- Identify Everett routes and trips that could be eliminated or consolidated to provide targeted increases in service on other routes (such as Route 97 as discussed below)
- Recommend Everett-specific changes to frequency and span that could be incorporated into the MBTA Service Plan
- Collaborate with private funding partners to supplement local bus services provided by the MBTA (such as the Gateway Center Shuttle as discussed below)

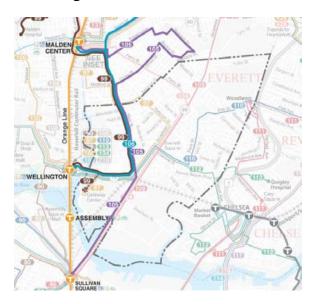
- Gateway Center Shuttle / Eliminate Route 97
- Upper Broadway Bus Only Lanes
- Lower Broadway Bus Only Lanes
- Transit Emphasis Corridor Improvements
- Recommendations for Sullivan Square Reconstruction





Simplify Main Street Service (Route 107)

Existing



Recommended



Recommendation

Consolidate all Main Street bus routes (Routes 99, 105, 106) into a single bus route operating solely between Malden Center and Sullivan Square (or Wellington). Establish new transit services in Malden and Medford in areas currently served by Main Street bus routes.

Existing Conditions

Main Street is currently served by three different bus routes, Routes 99, 105, and 106. Each of these bus routes connect Everett to Wellington and Malden Center, but operate at different frequencies and with different service hours. North of Everett, all three routes provide service to neighborhoods that are vastly different markets with limited demand for service through Malden Center. For example, less than 30% of Route 99 riders travel through Malden Center Station during their trip.

Operating three separate bus routes on Main Street also makes it difficult for the MBTA to coordinate schedules, result in lower quality transit that is difficult for riders to understand. For example, both Route 99 and 106 inbound trips serve Main @ West at 8:23 am followed by a 15-minute gap in service. At 8:38 am, Main @ West is served by Route 106, followed one minute later by a Route 105 bus. With coordinated schedules and regular headways, buses could arrive at Main @ West as frequently as every five minutes during peak service.

Benefits

Operating a single Main Street route would allow the MBTA to provide service at even (e.g. 10 minute) intervals during rush hour service, reducing the amount of time riders have to wait for a bus and improving reliability. Serving Sullivan Square, rather than Wellington, increases access to both the Lower Broadway Redevelopment Area and connecting bus services to Cambridge and





Somerville. Consolidated Main Street service was projected to serve up to 5,000 passengers per day, which would be among the top 15% of all MBTA bus routes. The MBTA could also work with the cities of Malden and Medford to design alternative transit services that best meet the needs of local residents and visitors.

Challenges

Serving Sullivan Square, rather than Wellington, increases the length of recommended Main Street service by about ¾ miles in each direction. Absent other physical improvements, service frequency on the new route may have to be reduced in order to remain cost neutral. Without bus lanes on Lower Broadway, travel times on the new Main Street service may further increase due to congestion. However, the roadway improvements and transit signal priority on Lower Broadway may result in some decreased travel times. Potential service to Sullivan Square may also be limited by Sullivan Station busway capacity constraints.

Implementation would also require coordination between the MBTA and the cities of Malden and Medford to develop alternative bus services on the fractured segments of existing Main Street routes.

Implementation

Cost Estimate: \$

Potential additional operating costs

Timeframe: 1+ years

Responsible Agencies: MBTA; City of Malden; City of Medford

Planning Processes: MBTA Service Plan

Implementation Procedure:

- Recommend for further analysis as part of MBTA Service Plan
- Explore opportunities to add capacity to the Sullivan Square Station Busway as part of Wynn reconstruction efforts
- Conduct public outreach in affected communities (Everett, Malden, and Medford) as part of MBTA Service Plan
- Implement as part of MBTA Service Plan changes

- Lower Broadway Bus Only Lanes
- Transit Emphasis Corridor Improvements
- Increase Service Frequency and Span on Local Bus Routes
- Recommendations for Sullivan Square Reconstruction





Route 110 to Sullivan Square

Existing

Madden Central South Control of the Control of the

Recommended



Recommendation

Reroute Route 110 service from Wellington to Sullivan Square via Broadway.

Existing Conditions

Route 110 is one of the few high ridership crosstown routes operated by the MBTA, connecting the east side of Everett with Orange Line service at Wellington and Blue Line service at Wonderland. Just over half of trips on Route 110 begin or end at Wellington Station, where most riders are transferring to and from the Orange Line. As both Route 110 and 112 serve Wellington, the east side of Everett lacks direct access to the robust transfer options available at Sullivan Square.

To reach Cambridge and Somerville, transit riders on the east side of Everett and in Revere have to transfer multiple times during their trip. For example, residents traveling between the Winthrop Road Apartments in Everett to Technology Square in Kendall Square must currently transfer twice during their trip (110, Orange Line, CT2). This trip takes at least 50 minutes, and can take over an hour if buses are late and riders miss a transfer.

Benefits

Moving Route 110 service from Wellington to Lower Broadway and Sullivan Square provides enhanced access to both a quickly growing employment center and robust transfer opportunities. Ferry Street residents would no longer need to transfer multiple times to reach destinations in Cambridge and Somerville, saving riders up to 10 minutes in each direction. Trips between Winthrop Road Apartments to Kendall Square, for example, would be reduced from 50-60 minutes to between 40-50 minutes (depending on transfer times). Travel times on this trip would also be more reliable, as riders would only have to transfer once at Sullivan Square. Residents on the east side of Everett





would also have one-seat access to employment opportunities along the growing Lower Broadway corridor. Combined, these benefits were projected to increase Route 110 ridership by as much as 25%, or 600-800 additional riders per weekday.

Challenges

Serving Sullivan Square, rather than Wellington, increases the length of Route 110 by about ¾ miles in each direction. Absent other physical improvements, service frequency on the new route may have to be reduced in order to remain cost neutral. Without bus lanes on Lower Broadway, travel times on the rerouted Route 110 service may further increase due to congestion. Potential service to Sullivan Square may also be limited by Sullivan Station busway capacity constraints.

By eliminating Route 110 service to Wellington, some riders traveling from Everett to Malden and Medford may have to transfer more than once to reach their final destination, increasing travel times.

Implementation

Cost Estimate: \$

Potential additional operating costs

Timeframe: 1+ years

Responsible Agencies: MBTA

Planning Processes: MBTA Service Plan

Implementation Procedure:

- Recommend for further analysis as part of MBTA Service Plan
- Explore opportunities to add capacity to the Sullivan Square Station Busway as part of Wynn reconstruction efforts
- Conduct public outreach in affected communities (Everett and Revere) as part of MBTA Service Plan
- Implement as part of MBTA Service Plan changes

- Lower Broadway Bus Only Lanes
- Transit Emphasis Corridor Improvements
- Increase Service Frequency and Span on Local Bus Routes
- Recommendations for Sullivan Square Reconstruction





Streamline Route 112

Existing



Recommended



Recommendation

Streamline Route 112 to create a more frequent and direct connection between Everett Square and Downtown Chelsea. Service would also extend to Airport Station instead of Wood Island. Plans would eliminate the current deviations. New local service that best meets the needs of Admiral's Hill and Soldiers' Home would have to be implemented in place of the 112 service to these locations.

Existing Conditions

According to model results, there are nearly 20,000 overall trips between Everett and Chelsea each day. Significant growth in trips is expected in the near future as more jobs and housing are created in both cities. Less than 5% of trips between the two cities are made using transit despite the fact that Everett and Chelsea are among the most transit reliant communities in the Commonwealth.

Route 112, the primary bus connection between Everett and Chelsea, is slow, circuitous, unreliable, and operates infrequently. Due to diversions to Admiral's Hill and Soldiers' Home, Route 112 currently takes 30 minutes to run between Everett Square and Downtown Chelsea, about the same amount of time as walking.

About 13% of total Route 112 boardings occur along diversions to Admiral's Hill and Soldiers' Home. These diversions, however, account for about 25% of Route 112's running time and force nearly half of riders to travel out-of-direction from their final destinations. The long diversions reduce the attractiveness of transit and provide subpar service to all Route 112 riders, including those boarding and alighting at Admiral's Hill and Soldiers' Home.





Benefits

Streamlining Route 112 would cut travel times between Everett Square and Downtown Chelsea by over half, making transit a more realistic option for people traveling between the two communities. Everett residents would have fast and reliable access to Silver Line Gateway service, as well as major retailers and employers near the border of Everett and Chelsea. Extending Route 112 to Airport Station also provides a one-seat ride to the Logan Airport shuttle system, making Everett one of the few communities in Greater Boston with direct transit access to the airport.

Eliminating deviations to Admiral's Hill and Soldiers' Home was projected to increase Route 112 ridership by up to 10%, despite the elimination of boardings on the former deviations. Furthermore, Everett and Chelsea were projected to have the greatest short-term growth in transit trips of any evaluated origin and destination pair, indicating a strong demand for better Route 112 service.

Cost savings from streamlining Route 112 could be used to provide alternative service to Admiral's Hill and Soldiers' Home that best meets the needs of residents, employees, and visitors of those locations.

Challenges

Providing faster and more reliable service between Everett and Chelsea requires that alternative service be provided to Soldiers' Home and Admiral's Hill. These alternative services may require additional operating funding to be implemented. Moving service from Wood's Island to Airport would also eliminate direct transfer between Route 112 and Routes 120 and 121 in East Boston.

Implementation

Cost Estimate: -

- Cost neutral
- Potential additional operating costs depending on design of alternative services to Soldiers' Home and Admiral's Hill

Timeframe: 1+ years

Responsible Agencies: MBTA; City of Chelsea Planning Processes: MBTA Service Plan

Implementation Procedure:

- Recommend for further analysis as part of MBTA Service Plan
- Determine alternative service options for Admiral's Hill and Soldiers' Home
- Conduct public outreach in affected communities (Everett and Chelsea) as part of MBTA
 Service Plan
- Implement as part of MBTA Service Plan changes

- Upper Broadway Bus Only Lanes
- Transit Emphasis Corridor Improvements
- Increase Service Frequency and Span on Local Bus Routes





Bus Stop Improvements

Existing



Recommended







Recommendation

Add new amenities at bus stops in Everett, such as real-time next bus arrival screens, shelters or benches, and enhanced bus stop signage.

Existing Conditions

Many bus stops in Everett, especially off of Broadway, lack customer amenities typical of higher ridership stops in the MBTA system. For example, the inbound stop at Woodlawn, which serves over 350 riders each day, has no customer amenities apart from a bus stop sign. Several Everett Square stops have inaccurate signage that does not include all routes that serve the corridor. Numerous stops throughout the city also lack rear stop signs that indicate where parking restrictions begin and end.

Benefits

Enhanced stop amenities make transit more attractive during poor weather or when routes operate less frequently. Stop improvements further establish a sense of permanence that increases the public profile of transit services. Accurate and visible bus stop signage can reduce confusion about available services, making transit easier to use for less experienced riders. Improved sidewalks and stop areas increase the accessibility of bus service for riders of all abilities. Installation of stop amenities can be coupled with streetscape plans or coordinated with other streetscape improvement efforts.

Challenges

Some stop locations do not have adequate sidewalk width to add shelters or other amenities. Furthermore, some stops may need to be relocated in order to be made fully accessible under the MBTA Bus Stop Design Guidelines.





Implementation

Cost Estimate: \$

Bus stop amenities

Adjustments to curbs and bus stops

Timeframe: 6 months – 2 years

Responsible Agencies: City of Everett, MBTA

Planning Processes: Local Planning Processes; MBTA Key Bus Route Improvement Program;

MBTA Accessibility Improvements; Focus40

Implementation Procedure:

 MBTA and City of Everett audit current bus stops to identify locations where enhanced stop amenities could be provided and/or stops that do not meet MBTA Bus Stop Design Guidelines

- City of Everett upgrades stop amenities and accessibility as part of ongoing streetscape improvement projects
- MBTA upgrades stop amenities and accessibility as part of MBTA Key Bus Route
 Improvement Program (where applicable) or through other stop improvement processes

- Transit Emphasis Corridor Improvements
- Broadway/Ferry Street Silver Line Extension
- Recommendations for Sullivan Square Reconstruction





Route 104 to Harvard Square

Existing



Recommended



Recommendation

Extend Route 104 from Sullivan Square to Harvard Square via existing Route 86 alignment on Washington Street and Kirkland Street.

Existing Conditions

Cambridge and Somerville are major destinations for Everett residents, with over 15,000 daily trips to and from Everett daily. Demand for transit services between these communities are projected to increase with new development and job growth. Everett transit riders must currently transfer at least once to reach Union Square, Harvard Square, and destinations in between. Everett residents also lack a one-seat ride to the Red Line, forcing many riders to travel out-of-direction via Downtown Boston.

Benefits

Extending Route 104 to Harvard Square significantly expands the range of destinations accessible from Everett with a one-seat ride. The route would provide direct access to major employers in Harvard Square, as well as the Red Line. Everett residents would also be able to directly transfer to 17 additional bus routes, reducing travel times to communities such as Watertown. These new opportunities contribute a projected 15%-25% ridership increase on the Everett segment of the recommended Route 104 service.





Challenges

Route 104 service to Harvard Square would face many of the challenges that affect existing Route 86 service. The combined route from Malden Center to Harvard Square would be approximately seven miles long in each direction, slightly longer than existing Route 86. Routes of this length are typically less reliable than shorter routes, especially when operating through congested areas such as Sullivan Square and Harvard Square. The new route would also face a continued ridership imbalance, as the Sullivan to Harvard segment has much lower ridership than both Route 104 from Sullivan through Everett and Route 86 west of Harvard. Additionally, about 15% of existing Route 86 riders would have to transfer at Harvard Square to complete their trip.

Implementation

Cost Estimate: -

Cost neutral, if Route 104 frequency is maintained on entire route

Timeframe: 1+ years

Responsible Agencies: MBTA

Planning Processes: MBTA Service Plan

Implementation Procedure:

- Recommend for further analysis as part of MBTA Service Plan
- Conduct public outreach in affected communities (Everett, Somerville, Cambridge, Boston, and Brookline) as part of MBTA Service Plan
- Implement as part of MBTA Service Plan changes

- Upper Broadway Bus Only Lanes
- Lower Broadway Bus Only Lanes
- Transit Emphasis Corridor Improvements
- Increase Service Frequency and Span on Local Bus Routes
- Recommendations for Sullivan Square Reconstruction



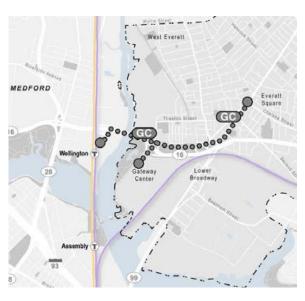


Gateway Center Shuttle / Eliminate Route 97

Existing



Recommended



Recommendation

Initiate a privately operated shuttle between Gateway Center and an adjacent major transit stop(s), such as Wellington or Everett Square. Eliminate Route 97 only if savings could be reinvested into improving service on other Everett bus routes.

Existing Conditions

Route 97 operates infrequently (every 30-60 minutes) and primarily serves neighborhoods that have walkable access to more frequent bus routes on Main Street and Broadway. Only three Route 97 stops within Everett and Malden neighborhoods are more than a five-minute walk from an existing bus stop with more frequent service. As a result, Route 97 serves only 850 riders per day, fewer than any other Everett bus route.

Transit ridership at Gateway Center is highest on Saturdays, when about 190 people board Route 97 and 99. Providing service to Gateway Center, however, requires a mile-long deviation from Route 16. Thus any route that does not begin or end in Gateway Center forces riders going to other destinations to travel out-of-direction, increasing travel times by as much as 5 minutes each way. Additional service to Gateway Center cannot be added without providing excess service on Route 97, or initiating complex deviations, such as current weekend-only service on Route 99.

The MBTA does not currently have funding to add additional local bus service. Additionally, providing more service during rush hour may require purchase of new buses and expansion of bus maintenance and storage facilities. Providing additional service on Everett's busiest transit corridors would thus likely require the reduction or elimination of local bus service elsewhere in the system. Route 97, the least productive route in Everett, would be the best candidate within the City for elimination.





Benefits

A Gateway Center shuttle would be designed to fit the specific needs of Gateway Center workers and visitors, providing higher quality service to the complex without inconveniencing other Everett transit riders. The new service could be privately operated, allowing the MBTA to reinvest savings from eliminating Route 97 into enhancing service on other Everett routes.

Challenges

Implementing shuttle service requires the participation and ongoing support from Gateway Center ownership or another private entity.

Some Route 97 stops on Hancock Street are further than ¼ mile from the nearest MBTA service. There is currently an average of 111 boardings at these stops each weekday. Riders using these stops would have to walk around 10-15 minutes to access high frequency bus services on Main Street or Broadway. The MBTA could provide alternative service to these locations as part of the recommended redesign of Main Street bus routes.

Implementation

Cost Estimate: -

Revenue positive due to elimination of Route 97

Timeframe: 1-2 years

Responsible Agencies: MBTA; City of Everett; Gateway Center

Planning Processes: MBTA Service Plan

Implementation Procedure:

- City of Everett, MBTA, and Gateway Center ownership (or other private entity) coordinate on the design and funding process for private shuttle service to Gateway Center
- If an operating agreement for a private Gateway Center shuttle is reached, recommend reinvestment of Route 97 operating funds into other Everett bus services as part of MBTA Service Plan
- Conduct public outreach in affected communities (Everett, Malden, and Medford) as part of MBTA Service Plan
- Implement as part of MBTA Service Plan changes

Parallel Recommendations:

Increase Service Frequency and Span on Local Bus Routes

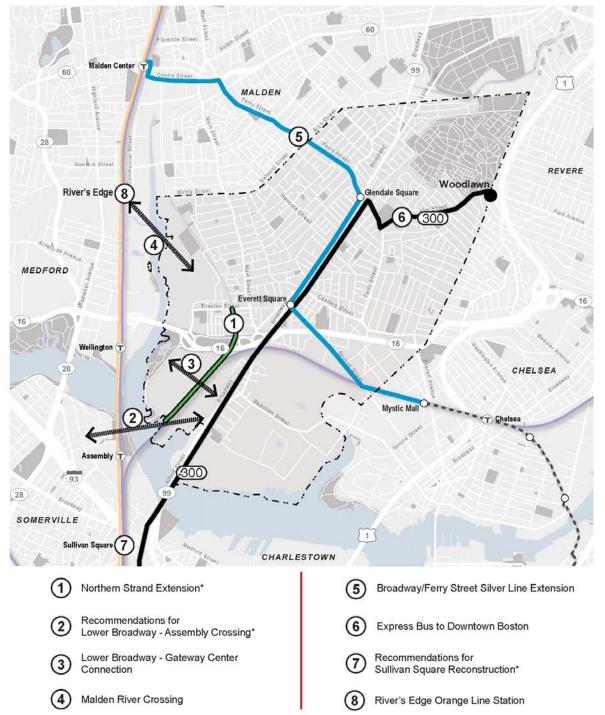




MAJOR TRANSIT INVESTMENTS & PEDESTRIAN AND BIKE ACCESS

Medium and long term capital investments designed to further integrate Everett into the Greater Boston high-capacity transit network.

Figure 25 | Major Transit Investments & Pedestrian and Bike Access Recommendations Map







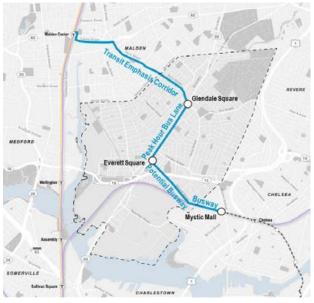


Broadway / Ferry Street Silver Line Extension

Existing

Recommended





Recommendation

Extend Silver Line Gateway service from Market Basket in Chelsea through Everett Square to Malden Center Station via Second Street, Broadway, and Ferry Street. The extension would include a busway extension from Market Basket to Second Street along the commuter rail right-of-way, as well as transit priority enhancements and improved stop amenities along Second Street, Broadway, and Ferry Street. With limited right-of-way acquisition, the dedicated busway could potentially be extended further along Second Street to Revere Beach Parkway (Route 16).

Existing Conditions

In early 2018, the MBTA will begin service on the Silver Line Gateway bus rapid transit line. Silver Line Gateway is an extension of existing Silver Line service from South Station to Mystic Mall in Chelsea via the South Boston Waterfront and Airport Station on the Blue Line. The new service will run in a dedicated bus-only roadway through Chelsea and have three new Silver Line stations in the city. The second phase of the extension will include an additional infill Silver Line Station in Downtown Chelsea, as well as a new commuter rail station at Mystic Mall.

Both the Commercial Triangle in Everett and the South Boston Waterfront are growing residential and employment centers. The Commercial Triangle Redevelopment Plan found that the neighborhood could support up to 3,800 new housing units and over 2,500 new jobs. Neighboring properties in Chelsea are also rapidly being redeveloped into an expanding mixed-use district. The South Boston Waterfront Sustainable Transportation Plan found that the number of jobs and residents in the area will more than double by 2040, growing to over 60,000 jobs and 25,000 residents.

Route 112 is the only route currently connecting Everett to the Commercial Triangle and future Silver Line Gateway service to the South Boston Waterfront. Most Everett residents must therefore transfer





at least once to access Silver Line Gateway. For example, trips between Glendale Square and Market Basket/Mystic Mall (end of Silver Line Gateway service) take at least 30 minutes and require a transfer between Routes 104/104 and Route 112. Once Silver Line Gateway opens, trips between Glendale Square and the South Boston Waterfront will take more than 50 minutes and require two transfers.

Benefits

The recommended Silver Line Gateway Extension will make Everett one of the only communities in Greater Boston with a one-seat ride to the South Boston Waterfront and Logan Airport (Figure 26). The service would allow Everett residents to quickly access employment and recreational opportunities in the South Boston Waterfront, while also significantly increasing access to Everett's regional destinations and major employers. From Glendale Square, riders would be able to access the Commercial Triangle in 15 minutes and the South Boston Waterfront in 30-35 minutes. Neither trip would require a transfer. The Everett extension was projected to more than double Silver Line Gateway ridership to around 28,000 boardings per weekday by 2040, though some riders in Everett would be diverted from other local bus services.

The Silver Line Gateway Extension would leverage an existing MassDOT investment, as well as transit priority investments recommended in the Everett Transit Action Plan. On Broadway, the service could utilize the recommended Upper Broadway Bus Only Lanes during peak periods. On both Broadway and Ferry Street, Silver Line service quality would be enhanced by recommended transit priority corridor improvements and stop improvements. Any additional upgrades made for Silver Line Service on either of these corridors could also be utilized by local bus routes.

Malden

Fiverett

Reverse

Chelsea

Che

Figure 26 | Neighborhoods with One-Seat Ride to South Boston Waterfront

Silver Line w/ Everett Extension





Challenges

Second Street, Broadway, and Ferry Street have limited right-of-way, restricting the range of potential transit priority and stop amenity improvements typically associated with Silver Line extensions. Much of the route would likely run in mixed-traffic, which may lead to reduced service reliability and increased operating costs. Longer running times would also increase vehicle requirements. The MBTA would need to acquire additional compatible buses to operate service from Everett through the South Boston Piers Transitway.

If no bus only lanes or transit priority investments are made on Upper Broadway or Ferry Street, Silver Line Gateway service could alternatively be extended only to Everett Square. This shorter extension would maintain significantly reduced travel times between Everett and the South Boston Waterfront. Many trips from Everett's residential neighborhoods, however, would continue to require a transfer.

The Commercial Triangle Master Plan proposes closing portions of Second Street south of Revere Beach Parkway. These plans would need to be modified for both mixed-traffic or exclusive busway service on the corridor.

Implementation

Cost Estimate: \$\$\$

- Busway extension along MBTA Commuter Rail right-of-way to Second Street
- New or modified traffic signals
- Adjustments to curbs and bus stops
- Bus stop amenities

Timeframe: 5+ years

Responsible Agencies: MassDOT, MBTA, City of Everett **Planning Processes:** Focus40; Local Planning Processes

Implementation Procedure:

- Recommend for further analysis as part of Focus40
- Identify potential interim feeder bus services from Everett to Silver Line Gateway as part of MBTA Service Plan
- Identify opportunities to acquire additional right-of-way along Second Street

- Upper Broadway Bus Only Lanes
- Transit Emphasis Corridor Improvements
- Bus Stop Improvements



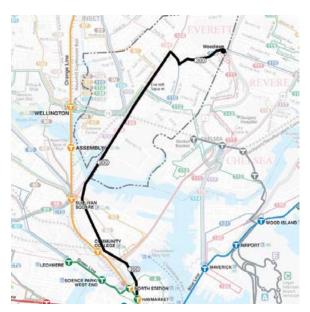


Express Bus to Downtown Boston

Existing



Recommended



Recommendation

Initiate a rush hour express bus service between Woodlawn in Everett and Downtown Boston via Ferry Street, Broadway, and Rutherford Avenue. The service would run express from Everett to Downtown Boston, bypassing Sullivan Station.

Existing Conditions

Nearly all neighborhoods in Everett lack a transit option providing a one-seat ride to Downtown Boston. Over 250 residents board Route 111 service at Woodlawn each day, which provides a direct connection between Everett and Downtown Boston but primarily runs through Chelsea.

Benefits

The recommended express bus service provides a one-seat ride between Broadway, Everett's highest ridership transit corridor, and Downtown Boston. By eliminating the need to transfer at Wellington or Sullivan Square, travel time to Downtown Boston would be reduced by as much as 10 minutes in each direction compared to existing transit options (assuming current roadway designs and traffic conditions). Express service could utilize proposed and recommended transit priority investments, including bus only lanes on Broadway and the North Washington Bridge bus only lane. This service would also divert some trips from the Orange Line along the portion of that line with the highest levels of crowding.

The route was projected to be among the highest ridership express bus services operated by the MBTA, serving up to 4,000 riders per weekday. In addition to serving Downtown commuters, the route could also potentially attract reverse commuters traveling to Everett's growing job centers.





Challenges

Congestion on Lower Broadway and Rutherford Avenue may reduce the appeal of express service to Downtown Boston for riders who would otherwise transfer to the Orange Line.

If operated by the MBTA, adding additional service may require the purchase of new buses and expansion of bus maintenance and storage facilities.

Implementation

Cost Estimate: \$ - \$\$

Additional operating costs

Additional vehicles

Timeframe: 3+ years

Responsible Agencies: MBTA

Planning Processes: MBTA Service Plan; Focus40

Implementation Procedure:

Recommend for further analysis as part of MBTA Service Plan

Identify potential requirements for additional vehicles or facilities

Implement as part of MBTA Service Plan changes

- Upper Broadway Bus Only Lanes
- Lower Broadway Bus Only Lanes
- Transit Emphasis Corridor Improvements
- Bus Stop Improvements
- Recommendations for Sullivan Square Reconstruction





River's Edge Orange Line Station

Existing



Recommended



Recommendation

Explore the potential for a public-private partnership to construct an infill Orange Line station near the River's Edge area to support increased transit oriented development in the station area.

Access between Everett and the new station would be enhanced by the recommended Malden River Crossing (described below).

Existing Conditions

River's Edge is a major redevelopment area surrounding the Malden River at the border of Everett, Medford, and Malden. Within Everett, the northern River's Edge area was the site of a General Electric (GE) facility and is now mostly undeveloped. The southern portion of River's Edge in Everett is home to numerous small businesses, microbreweries, and a large BNY Mellon office building. In Medford, several hundred new residential units have been built or are under construction. The Medford portion of River's Edge also has several large office buildings. Numerous lower density retail complexes, as well as the Malden City Yards, are located along the border of Malden and Medford.

The River's Edge area in Everett, as well as the West Everett neighborhood, are primarily served by bus routes running along Main Street. Most of the area is farther than ½ mile from an Orange Line station. While parts of River's Edge bordering Route 16 are near Wellington, many residents, workers, and visitors currently find it difficult to access the station due to poor conditions for walking and biking. While the Woods Memorial Bridge reconstruction project will improve access, the station itself is difficult to navigate as a pedestrian. Moreover, bus routes running to Wellington and Sullivan Stations have long running times and are often unreliable.





Benefits

Adding a new station at River's Edge increases access to the Orange Line from established residential neighborhoods in West Everett and Malden and adjacent development sites along the Malden River. Transit demand from this area is projected to grow significantly with new mixed-use development centered around the former GE site. West Everett and River's Edge area residents and visitors would be able access the Orange Line in a 10 to 20-minute walk, compared to a scheduled 15-minute bus ride to Wellington with currently less than 60% on-time performance.

The distance between Malden Center Station and Wellington Station is 1.75 miles, a greater distance than between any other Orange Line station pair and among the longest in the MBTA rapid transit system. An infill station between the two would result in station spacing that is consistent with the rest of the rapid transit network, opening up the Orange Line to both existing neighbors and significant development planned in the area. Our models indicate that planned and potential development, if completed in a manner that is consistent with transit oriented development, could support a transit station with comparable ridership to other more suburban Orange Line stations.

Challenges

The recommended station site, which could be located at-grade, is located approximately midway between Malden and Wellington stations. Additional pedestrian and bicycle connections across the Malden River would enhance access to the station from the former GE site and parts of West Everett. However, depending on station siting and the outcome of the Woods Memorial Bridge project, Wellington may be a comparable option for accessing the Orange Line on foot from those locations. Construction of a station at the recommended site would also potentially require some property acquisition along Commercial Street to accommodate a head house, drop off location, and parking.

Implementation

Cost Estimate: \$\$\$

Infill station

Property acquisition

Timeframe: 7+ years

Responsible Agencies: MBTA; City of Medford; City of Malden; City of Everett; Potential Private

Partners

Planning Processes: Lower Mystic Regional Working Group; Focus40

Implementation Procedure:

- Recommend for further analysis as part of the Lower Mystic Regional Working Group and Focus40
- Cities of Everett, Malden, and Medford work together to determine if a new rapid transit station aligns with their vision for the area's redevelopment
- Identify potential private funding partners

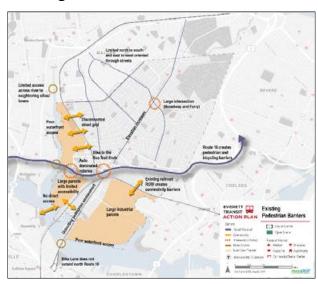
- Malden River Crossing
- Northern Strand Extension



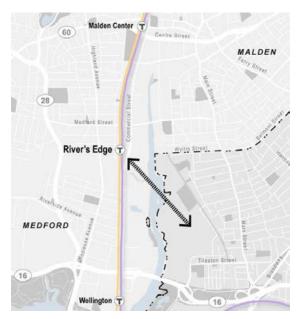


Malden River Crossing

Existing



Recommended



Recommendation

Construct a new pedestrian and bicycle bridge across the Malden River linking Everett to the Malden/Medford side of River's Edge, including the recommended infill Orange Line Station.

Existing Conditions

The Malden River separates the Everett and Malden/Medford portions of the River's Edge area. There are currently two Malden River crossings at Medford Street to the north and Revere Beach Parkway (Route 16) to the south. These crossings are located about one mile apart. Both bridges carry multiple travel lanes in each direction, are uncomfortable environments for pedestrians, and have no facilities for bicyclists. Improved facilities for people walking and biking are being constructed on Route 16 as part of the Woods Memorial Bridge Reconstruction.

Benefits

An additional Malden River crossing between the Medford Street Bridge and the Woods Memorial Bridge would provide significant benefits for people traveling both locally and across the region. Within the River's Edge area, the crossing would allow residents and visitors to more directly travel between local residences and businesses. The crossing would increase access to the recommended River's Edge Orange Line station, reducing travel times to and from West Everett and development sites along the Malden River. The Malden River crossing would also directly connect the west side of the River's Edge area with the Northern Strand path.





Challenges

A new Malden River Crossing would likely need to be built partially on privately owned land, and thus requires participation from adjacent land owners. Access paths to the crossing would also be located on private property. Most potential crossing sites include potentially sensitive land and may require a more extensive environmental permitting process.

Implementation

Cost Estimate: \$\$\$

Bridge

Paths connecting bridge to Northern Strand and Commercial Street

Timeframe: 5 years

Responsible Agencies: City of Everett, City of Malden, City of Medford, MassDOT; Potential Private

Partners

Planning Processes: Local Planning Processes; Lower Mystic Regional Working Group;

Massachusetts Bicycle and Pedestrian Advisory Board

Implementation Procedure:

- Recommend for further analysis by the Lower Mystic Regional Working Group and Massachusetts Bicycle and Pedestrian Plans
- Incorporate into any future planning efforts in support of River's Edge Station

- River's Edge Orange Line Station
- Northern Strand Extension



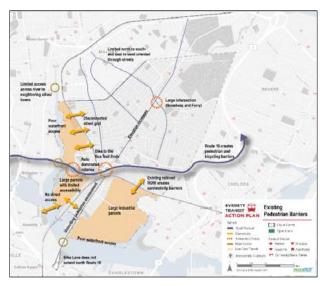


RECOMMENDATIONS FOR PROJECTS UNDER PLANNING AND DESIGN

Several projects that are currently in various stages of planning and design by other entities were raised and studied as part of the Everett Transit Action Plan. The purpose of the recommendations is to make sure that the transit service and access in Everett is adequately considered as part of these processes.

Northern Strand Extension

Existing



Recommended



Background

The City of Everett has received a grant from the Masscahuseetts Gaming Commission to study an extension of the Northern Strand pedestrian and bicycle path under Route 16 and along the MBTA commuter rail right-of-way to Gateway Park. As part of the Massachusetts Environmental Policy Act (MEPA), the owners of Gateway Center are committed to funding the Northern Strand Extension abutting their property.

Existing Conditions

The Northern Strand Community Path currently runs seven miles from Lincoln Avenue on the Saugus/Lynn border to Wellington Avenue in Everett. The path utilizes the former Saugus Branch Railroad, which was an active commuter railroad between North Station and Lynn until 1958. West Everett residents can enter the path from several access points located about ¼ mile west of Main Street. There are no dedicated bicycle facilities connecting the Northern Strand path to other destinations within Everett. Revere Beach Parkway is a major barrier at the southern end of the path, limiting opportunities to walk and bike from Everett neighborhoods to Lower Broadway and the Orange Line.





The former Saugus Branch Railroad had a junction with the MBTA Newburyport/Rockport commuter rail line just south of Revere Beach Parkway. A short segment of the railroad, which passes underneath the Parkway just south of the end of the Northern Stand, is actively used by the MBTA as a ballast yard.

Recommendations

The Northern Strand Extension should be designed to provide seemless access between Everett's established residential neighborhoods and Lower Broadway. The design should include access across the MBTA commuter rail tracks that is safe and accessible for people walking and biking. Ideally, this crossing should be located north of the MBTA Everett Main Repair Facility, allowing people to access Lower Broadway without diverting south through the Casino site. At its southern end, the extension should include a direct connection to a potential Lower Broadway-Assembly Crossing.

The Northern Strand Extension should be designed to accommodate a range of users, including people walking and biking. Bicylists should be able to ride from the existing Northern Strand path through the extension and any further facilities, such as the Lower Broadway-Assembly Crossing, without dismounting.

Benefits

Extending the Northern Strand underneath Revere Beach Parkway would eliminate a major barrier between Everett's residential neighborhoods and Lower Broadway. The path could be constructed at a relatively low cost using an existing railroad underpass. Once completed, people living throughout the North Shore could use the path to access Gateway Center, Wynn Boston Harbor, and other Lower Broadway developments.

The Northern Strand Extension, along with a potential Assembly Square – Lower Broadway Crossing, is a key link in the Greater Boston regional pedestrian and bicycle path network. To the north, the Northern Strand could eventually connect with a larger North Shore regional shared-use path network. To the south, the Northern Strand would connect with planned bicycle facilities through Sullivan Square and along Rutherford Avenue. In combination, these facilities would provide a mostly off-street shared path network from Everett and points north to the Orange Line and Downtown Boston.

Implementation

Responsible Agencies: City of Everett; MassDOT; MBTA; DCR

Planning Processes: Local Planning Processes; Lower Mystic Regional Working Group; Massachusetts Bicycle and Pedestrian Plans

Implementation Procedure:

- Incorporate recommendations as part of City of Everett's Gaming Commission Grant to study feasibility of Northern Strand Extension
- Recommend for further analysis by the Lower Mystic Regional Working Group and Massachusetts Bicycle and Pedestrian Plans





 In the FY17-21 MassDOT Capital Investment Plan, \$15 million per year for FY18-21 was allocated to recommendations that came out of the Massachusetts Pedestrian and Bicycle Plans

- Recommendations for Lower Broadway Assembly Crossing
- Recommendations for Sullivan Square Reconstruction
- Malden River Crossing



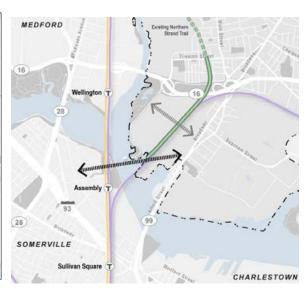


Recommendations for Lower Broadway – Assembly Crossing

Existing

Limited access all sea river to meet of control and the sea of contr

Recommended



Background

Wynn Boston Harbor has committed funding to study a potential Mystic River crossing between Lower Broadway and Assembly Station on the Orange Line.

Existing Conditions

Lower Broadway residents, workers, and visitors currently access the Orange Line using local bus services that run down Broadway (104, 105, 109) and circulate through Gateway Center (97, limited 99). Trips from Lower Broadway to Sullivan and Wellington Stations can often take over 10 minutes during rush hour. Both of these stations are farther from Lower Broadway than Assembly Station, but can be more directly accessed using the current roadway network.

Wynn Boston Harbor plans on operating shuttle services for the casino to both the Wellington and Malden Center Orange Line stations.

Recommendations

The Lower Broadway – Assembly Crossing should be designed to serve three primary functions:

- Provide direct and safe access for people walking and biking between Everett's neighborhoods and the Assembly Orange Line Station
- Connect Lower Broadway developments with jobs, residences, and retail establishments in Assembly Square.
- Serve as a key connection in a regional shared use path network between the North Shore and Downtown Boston.

To meet the needs of all of these functions, the Lower Broadway – Assembly Crossing should be integrated with existing, proposed, and recommended Lower Mystic shared use paths to the greatest





extent possible. In Everett, the entrance to the crossing should be directly connected to the recommended Northern Strand Extension, allowing people walking and biking to seamlessly move between the two facilities. The crossing pathway itself should be wide enough to accommodate people walking and biking in both directions and at different speeds. In Somerville, the crossing should provide direct access to both the Assembly Orange Line Station and shared use paths on either side of the station. At no point should people biking have to dismount in order to access the crossing or nearby shared use facilities (i.e. no stairs, doors, or otherwise unnavigable features).

Benefits

The Lower Broadway – Assembly Crossing would significantly enhance access between Lower Broadway and the Orange Line. The crossing would reduce walk time from Wynn Boston Harbor and Gateway Center to the Orange Line from 20 minutes to less than 10 minutes. If both Assembly Crossing and Northern Strand Extension are completed, bicyclists would be able to travel from River's Edge to Assembly Station in 8-10 minutes on an entirely grade separated pathway. These travel times are comparable to using the Minuteman Bikeway to access Alewife Station on the Red Line from Arlington Center, one of the most popular transit access routes for bicyclists in the United States.

The Lower Broadway – Assembly Crossing is also a key link in the regional shared use path network in Greater Boston. With completion of proposed bicycle paths through Sullivan Square and along Rutherford Avenue, the Assembly Crossing would facilitate a 20 to 25-minute bicycle trip from River's Edge to Downtown Boston.

Implementation

Responsible Agencies: City of Everett; City of Somerville, MassDOT; DCR, Landowners **Planning Processes:** Lower Mystic Regional Working Group; Massachusetts Bicycle and Pedestrian Plans

Implementation Procedure:

 Submit Everett-focused recommendations for Lower Broadway – Assembly Crossing to Lower Mystic Regional Working Group for consideration in ongoing study

- Northern Strand Extension
- Recommendations for Sullivan Square Reconstruction





Recommendations for Sullivan Square Reconstruction



Background

As part of a mitigation agreement with the Commonwealth of Massachusetts, Wynn Boston Harbor has committed to making traffic circulation improvements through Sullivan Square prior to its opening. As the circulation improvements have impacted the Sullivan Square Station busway, Wynn is also committed to reconstructing the busway to mitigate negative impacts to operations. The Lower Mystic Regional Working Group, along with the City of Boston and MBTA, are further analyzing the potential long term redevelopment of Sullivan Square and reconstruction of its broader transportation network.

Existing Conditions

Sullivan Square is a major transportation hub for people traveling between Everett and major destinations in Downtown Boston, Cambridge, and Somerville. Sullivan Station is a stop on the Orange Line and is served by 12 MBTA bus routes, including Routes 104, 105, and 109 from Everett. Over 600 buses serve Sullivan Square on a typical weekday, with as much as one bus arriving every minute during rush hour service. About 10,000 Orange Line boardings and 8,000 local bus boardings occur at Sullivan each weekday. Between 2009 and 2012, ridership on all but one local bus route serving Sullivan increased by at least 10%.

Roadways leading through Sullivan Square provide the most direct connections between Lower Mystic communities. Building a strong transit hub at Sullivan is thus ideal for Everett communities, as they otherwise have to travel out-of-direction to Wellington to cross the Mystic River. For similar reasons, however, Sullivan Square attracts significant local and regional pass-through traffic that exceeds the capacity of the existing roadway network. The speed and reliability of transit services through Sullivan Square is thus severely affected by roadway conditions.





Recommendations

Sullivan Station and the surrounding roadway network should be designed to ensure free-flowing and reliable local bus service to the greatest extent possible. As part of reconstruction efforts, the capacity of Sullivan Square station should be expanded to accommodate increased frequency on existing services, as well as on new services that are rerouted to the station. Short-term Everett Transit Action Plan recommendations, for example, could add at least 8 additional trips per hour to Sullivan during morning peak service. Roadways through Sullivan Square should be designed to prioritize bus movements, including bus lanes or bus only roadways where possible. To allow through services from Everett to bypass the busway, bus stops should also be installed on both sides Cambridge Street near the Interstate 93 off-ramp.

Any roadway modifications within Sullivan Square should be designed to accommodate a future shared-use path connecting the recommended Northern Strand Extension to the planned shared-use path along Rutherford Avenue.

Benefits

Given its position as a major and growing transit hub, improvements to Sullivan Square have compounding benefits throughout the local bus system. Increased reliability and decreased travel times on buses serving Sullivan will result in significant operational cost savings. Adding more capacity to the Sullivan Station busway will limit restrictions on future service frequency enhancements in one of the fastest growing transit markets in Greater Boston.

For Everett specifically, adding additional capacity and decreasing travel times will allow services that are currently diverted to Wellington to instead be rerouted to Sullivan Station. From Sullivan Station, Everett residents can make more direct connections to Cambridge and Somerville, leading to significantly decreased travel times. A new stop on Cambridge Street would facilitate new through routes from Everett, allowing residents to access more destinations via a one-seat ride.

Implementation

Responsible Agencies: City of Boston; City of Somerville; MBTA; MassDOT

Planning Processes: Lower Mystic Regional Working Group

Implementation Procedure:

- Submit Everett-focused recommendations for Sullivan Square Reconstruction to Lower Mystic Regional Working Group for consideration in ongoing study
- Coordinate with the City of Boston in their Rutherford Ave/Sullivan Square Redesign Study

- Lower Broadway Bus Only Lanes
- Transit Emphasis Corridor Improvements
- Increase Service Frequency and Span on Local Bus Routes
- Simply Main Street Service (Route 107)
- Route 110 to Sullivan Square
- Route 104 to Harvard Square
- Express Bus to Downtown Boston
- Northern Strand Extension





Recommendations for Lower Broadway – Assembly Crossing





ADDITIONAL PROJECTS

Several other projects were evaluated as part of this plan that are not being recommended at this time, but may warrant further consideration. While these projects were outperformed by others in terms of their benefits to current residents, feasibility, and cost, MassDOT recognizes that in the future and with the appropriate financing mechanism, these projects could provide benefits to Everett.

One such project was a potential Orange Line spur to Everett running along Broadway between Sullivan Square and Glendale Square, serving the current population center of Everett. The Everett Transit Action Plan conducted a market study and determined that downtown Everett has the density and demographics to support rapid transit levels of service and that an Orange Line Station on Broadway would provide major mode shift benefits. However, because the cost was orders of magnitude above other recommendations with similar benefits (such as separating buses from general traffic congestion on Broadway), this study did not recommend this project be pursued at this time. Due to the significant lead time required for such a project to be undertaken, the current planning processes that are soliciting such large scale project ideas from around the region, including Focus40 and the Lower Mystic Regional Working Group, are appropriate places for this project idea to be considered and balanced against other major expansion projects.

One other project that fell into this category was the Silver Line Extension along the rail right of way to Sullivan Square. While this plan found the Silver Line Extension through downtown Everett to Malden would better serve existing demand, while providing economic development opportunities in the Commercial Triangle, an alternative path along the rail right of way to better serve the casino and future development on Lower Broadway will be assessed as part of the Lower Mystic Regional Working Group.

Lastly, the potential benefits of Diesel Multiple Units (DMUs) were raised as part of this plan. Because DMUs, or any technology that could improve the frequency of service along the commuter rail would need to be implemented on a systemwide basis, this strategy for Everett will be contemplated as part of the Focus40 process.



