

Appendix A: Universe of Projects

Table A1 Universe of Projects – Funded Projects

Community	Projects Included for Funding in RTP
Amesbury	Reconstruction of South Hunt Road/Route 150/I-495 NB Ramps Intersection
Amesbury	Elm Street Reconstruction
Andover	Route 133 (Lowell St.) Reconstruction : Lovejoy Rd. to Shawsheen Square
Boxford	Route 133 (Washington St.) N. Andover T.L. to Main Street, 1.45 miles
Boxford	Border to Boston Rail Trail
Georgetown	Route 97 from Moulton Street to Groveland T.L.
Georgetown-Boxford	Border-to-Boston Rail Trail Segment from Georgetown Road in Boxford to West Main Street
Georgetown-Newbury	Border-to-Boston Rail Trail North Segment to Byfield
Groveland	Groveland Community Trail
Haverhill	Bradford Rail Trail (Phase II)
Haverhill	North Ave. from Marsh Avenue to MA/NH Boundary
Haverhill	Rt. 108 /Route 110 Intersection Reconstruction
Haverhill	Reconstruction of Water St. from Mill St. to Lincoln Blvd./Riverside Ave.
Lawrence	Intersection improvements at Broadway/Mt. Vernon St./McKinley St.
Lawrence	Amesbury St. Corridor Improvements: Merrimack River to Lawrence St. - Return to Two-Way Operation
Lawrence	M&L Branch Multi-use Trail: Methuen Line to Merrimack St.
Law./N, Andover	Route 114 Reconstruction: I-495 to Waverly Rd.

Table A1 Universe of Projects – Funded Projects Continued

Community	Projects Included for Funding in RTP
Merrimac	Resurface Bear Hill Rd. from NH Line to Old Bear Hill Rd. /Replace Culvert
Methuen	Reconstruction of Howe St. from Marston's Corner to Washington St./Improve Howe St./Rt. 213 Ramps Intersection
Methuen	Intersection Improvements at Jackson St./Pleasant St./Howe St./Pleasant Valley St.
Methuen	Route 110 Reconstruction: Green St. to Woodland Rd.
Newbury	B2B Rail Trail: Byfield to Scotland Road (Off Road)
Newburyport	Intersection Improvements: Merrimac St. at Route 1 NB/SB ramps
Newburyport	Rt. 1 Rotary Reconfiguration with improved bike/ped/trail access
North Andover	Rt. 114 (Turnpike Street) improvements from Andover Street to Stop & Shop
North Andover	Rt. 133/Route 125 Intersection Improvements
Rowley	Rt. 133 @ Route 1 Intersection Improvements
Rowley	Rt. 1 @ Central Street/Glen Street Resurfacing of Rt. 1
Newbury/Newburyport/Salisbury	
Rowley	Reconstruction of Central St. & Glen St.: Main St. (Rt. 1A) to the Mill River.
Salisbury	Rt. 1 Reconstruction from Salisbury Square to MA/NH line
Regionwide	MVRTA Capital Improvements

Table A2 Universe of Projects – Unfunded Projects

Community	Unfunded Project
Unfunded Projects	
Amesbury	Powwow Riverwalk and Bikeway (Phase III)
Amesbury	Route 150 Resurfacing from I-495 to Route 110
Amesbury	South Hunt Road Reconstruction from West of Route 150 to Buttonwood Rd.
Amesbury	Beacon Street/Route 150 Reconstruction from Merrimack Street to I-495
Amesbury	Reconstruction of Market Street from Amesbury Square to NH State Line
Amesbury	Merrimack Street Reconstruction from Main St. to Beacon Street
Andover	Shawsheen River Pedestrian Trail
Andover	Bridge (A-09-001) Route 28 over Shawsheen River
Andover	Reconstruction of Railroad Street from Route 28 to Essex Street
Andover	Dascomb Road Reconstruction
Andover/ Lawrence/ North Andover/ Methuen/ Haverhill	I-495 Corridor Reconstruction from Tewksbury Line to Route 97 in Haverhill
Boxford	Route 97 Resurfacing from Georgetown to Topsfield T.L. (2 miles)
Boxford	Route 133 Resurfacing (Washington St./Willow Rd.) Main St. to Georgetown Line
Georgetown	Route 133 (Chestnut Street to Carlton Drive)
Georgetown	Route 133 (Clark Street to Boxford TL)
Haverhill	Bradford Rail Trail (Phase III): Ferry Street to Former Paperboard site.
Haverhill	Bradford Rail Trail (Phase IV): Former Paperboard Site to Groveland Line

Table A2 Universe of Projects – Unfunded Projects Continued

Community	Unfunded Project
Haverhill	Merrimack Riverwalk (Phase II) between Haverhill Bank and Boardwalk behind TAP Restaurant
Haverhill	Route 97, Research Drive to Computer Drive
Haverhill	Bicycle/Pedestrian Trail from Comeau Bridge to MVRTA Railroad Avenue Facility
Lawrence	Reconstruction of Merrimack Street (Broadway to Amesbury St)
Lawrence	Replace Daisy Street Bridge over Spicket River
Lawrence	Replace Short Street Bridge over Spicket River
Lawrence	Bridge (L-04-025) Amesbury St over South Canal
Lawrence	Jackson Street Corridor Improvements
Lawrence	Marston St./East Haverhill St./Hoffman St. intersection improvements
Lawrence	Repair/Replace Union St. Bridge over North Canal
Lawrence	Union street Corridor Signal Improvements
Lawrence	South Broadway/Mt. Vernon St. intersection improvements
Lawrence	Reconstruction of Manchester Street / Cross Street / Washington Street intersection
Lawrence	Reconstruction of Oregon Ave./ Floral St. / Doyle St./ Hancock St/ School St. intersection
Lawrence	Salem St./Newton St. Intersection Reconstruction
Methuen	Route 28 (Broadway)/ Rosewood Rd. Intersection Improvements
Methuen	Merrimack St. Reconstruction: Myona St. to Simone Farm
Methuen	Route 110 Resurfacing from I-93 to Dracut Town Line
Methuen	Route 28 / Route 213 Westbound Ramps
Methuen	Intersection of Pleasant Valley Street (Route 113)/Milk Street/Loop Driveway
Methuen	Broadway/Osgood Street Intersection Improvements

Table A2 Universe of Projects – Unfunded Projects Continued

Community	Project
Methuen	Intersection Improvements at Railroad St./Hampshire St./Pelham St./Osgood St./Lowell St
Newburyport	Bridge (N-11-002) Route 113 over MBTA/Clipper City Rail Trail Phase II
Newburyport	Bridge (N-11-004) High Street/Route 113/Route 1A over Phase II Clipper City Rail Trail
Newburyport	Bridge (N-11-014) US-1A (High Street) over US-1
Newburyport	Bridge (N-11-011) Route 1 over Merrimack River: recoating and repairs of middle spans
Newburyport	Bridge (N-11-015) Washington Street over U.S. Route 1 - and potentially whole system of retaining walls in this corridor
Newburyport	Low Street bicycle and pedestrian accommodations (Hale Street to Route 1)
Newburyport	High Street/Rt 113/Rt 1A Traffic Calming (Allen Street to Marlboro Street)
Newburyport	Merrimac Street Pedestrian, Bicyclist, Parking Accommodations at Lower Atkinson Common
Newburyport	Three Roads Intersection Reconstruction (Rt. 113-Storey Ave./Ferry Rd./Moseley Ave.)
Newburyport	Hale Street Pedestrian and Bicyclist Accommodations
North Andover	Route 125 Reconstruction
North Andover	Intersection Improvements: I-495 Ramps/Massachusetts Ave.
Rowley	Route 133 Reconstruction from Georgetown Line to Newburyport Turnpike (US-1)
Salisbury	Resurfacing & Sidewalks on Route 1A: North End Blvd. to NH Line
Salisbury	Route 110 from Merrill Street to Salisbury Square
Salisbury	Route 1 Reconstruction from Square south to Newburyport Line
Salisbury	Raise Rte. 1A (Beach Road) at Blackwater River to eliminate flooding
West Newbury	Replacement of Middle Street/Plummer Springs Bridge
West Newbury	Route 113 Reconstruction: Garden Street to Pentucket High School
West Newbury	Main Street, South Street, Moulton Street intersection Improvements

Appendix B Equity Maps

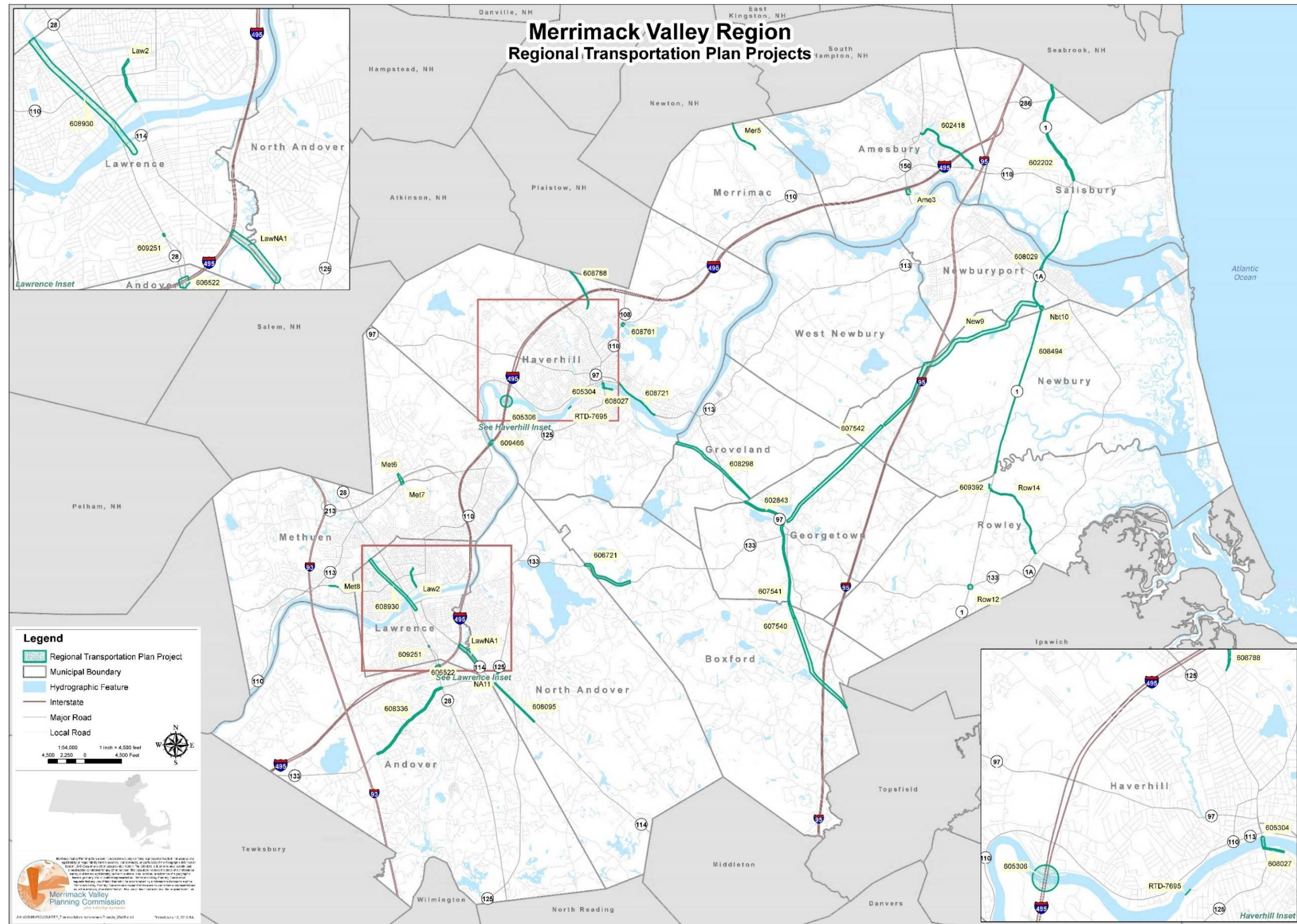


Figure 1: B1 Map of RTP-Funded Projects

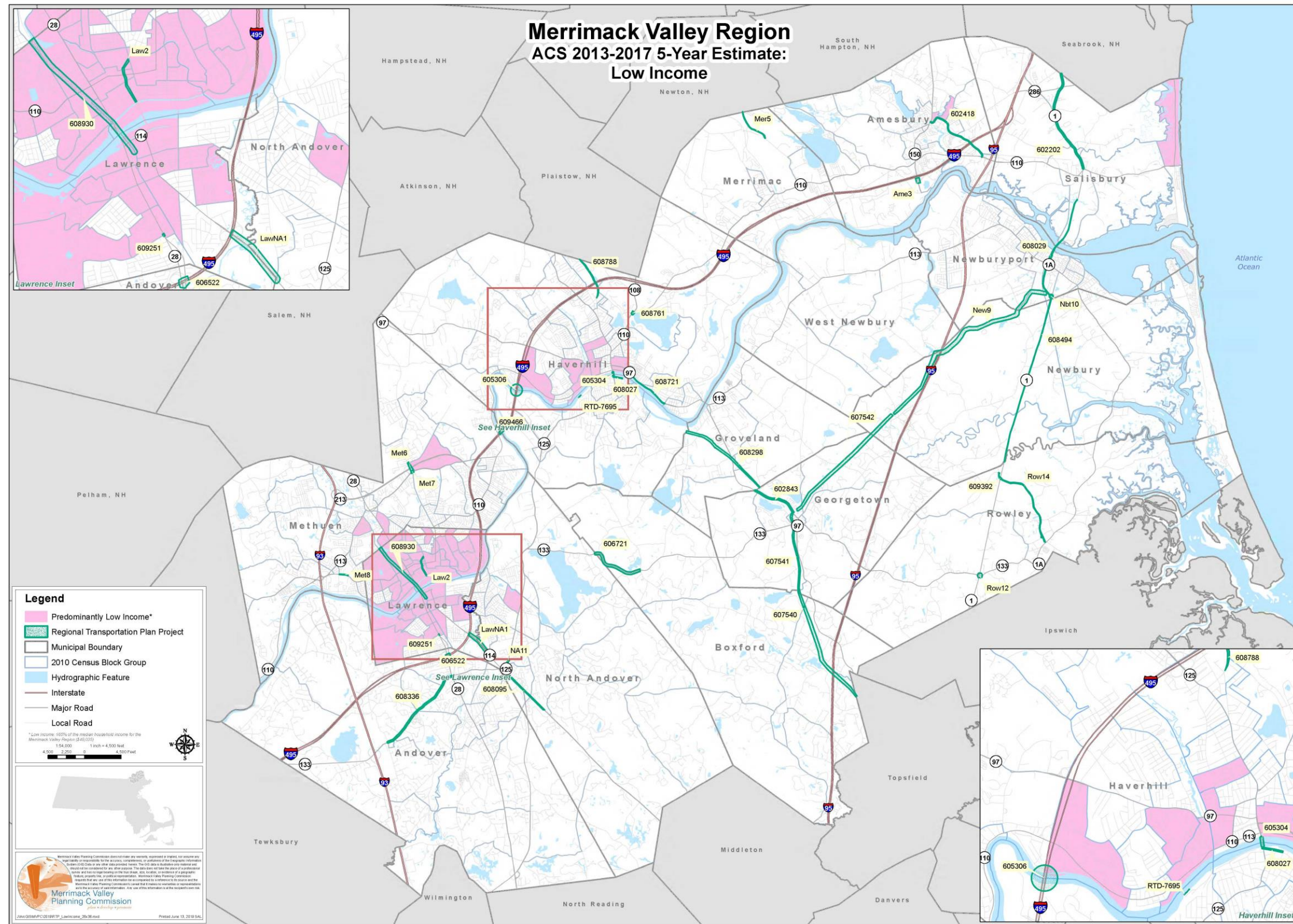


Figure B2: Map of RTP-Funded Projects and Low-Income Populations

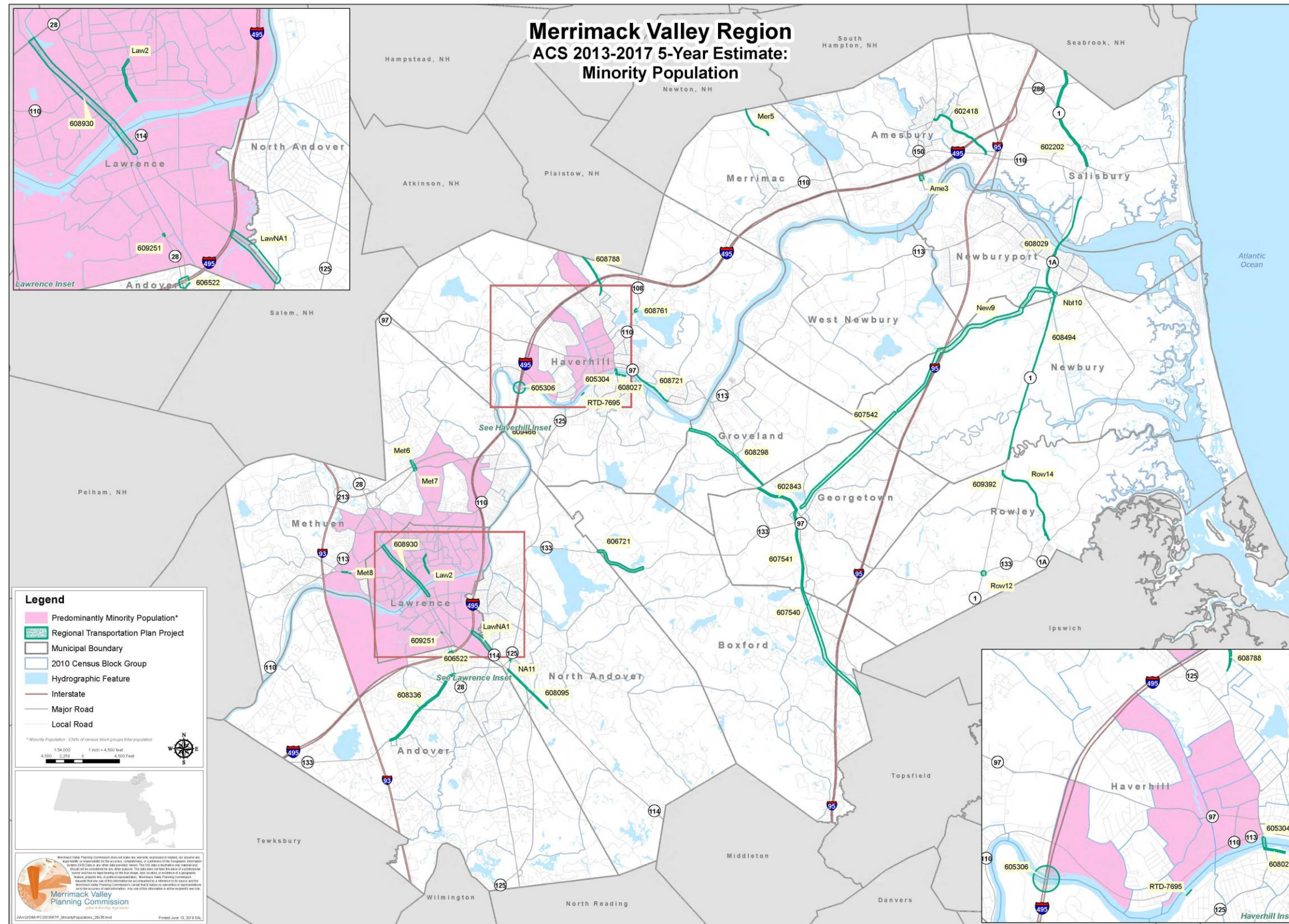


Figure B3: Map of RTP-Funded Projects and Minority Populations

Table B1: Map Key – Projects

Project Number	Community	Project
Ame3	Amesbury	Reconstruction of South Hunt Road/Rt. 150/I-495 NB Ramps Intersection
602418	Amesbury	Elm St. Reconstruction
608336	Andover	Rt. 133 (Lowell St.) Reconstruction: Lovejoy Rd. to Shawsheen Square
606522	Andover	Bridge Rehabilitation I-495 over Route 28 and Railroad
606721	Boxford	Rt. 133 (Washington St.) N. Andover T.L. to Main St., 1.45 miles
607540	Boxford	Border to Boston Rail Trail
602843	Georgetown	Rt. 97 from Moulton St. to Groveland T.L.
607541	Georgetown-Boxford	Border-to-Boston Rail Trail Segment from Georgetown Road in Boxford to West Main St.
607542	Georgetown-Newbury	Border-to-Boston Rail Trail North Segment to Byfield
608298	Groveland	Groveland Community Trail
608027	Haverhill	Bradford Rail Trail (Phase II)
608788	Haverhill	North Ave. from Marsh Avenue to MA/NH Boundary
608761	Haverhill	Rt. 108 /Rt. 110 Intersection Reconstruction
608721	Haverhill	Reconstruction of Water St. from Mill St. to Lincoln Blvd./Riverside Ave.
605306	Haverhill	Bridge Replacement H-12-039, I-495 (NB & SB) over Merrimack River
605304	Haverhill	Bridge Replacement H-12-040, I-495 (NB & SB) over Merrimack River at Methuen Townline
609466	Haverhill	Bridge Replacement H-12-007 & H-12-005 Bridge St. (Rt.125) over Merrimack River and Abandoned B & M RR (Proposed Bikeway)
609251	Lawrence	Intersection improvements at Broadway/Mt. Vernon St./McKinley St.
Law2	Lawrence	Amesbury St. Corridor Improvements: Merrimack River to Lawrence St. - Return to Two-Way Operation

Table B1 C Map Key – Projects ontinued

Project Number	Community	Project
608930	Lawrence	M&L Branch Multi-use Trail: Methuen Line to Merrimack St.
LawNA1	Law./N. Andover	Rt. 114 Reconstruction: I-495 to Waverly Rd.
Mer5	Merrimac	Resurface Bear Hill Rd. from NH Line to Old Bear Hill Rd. /Replace Culvert
Met6	Methuen	Reconstruction of Howe St. from Marston's Corner to Washington St./Improve Howe St./Rt. 213 Ramps Intersection
Met7	Methuen	Intersection Improvements at Jackson St./Pleasant St./Howe St./Pleasant Valley St.
Met8	Methuen	Rt. 110 Reconstruction: Green St. to Woodland Rd.
New9	Newbury	B2B Rail Trail: Byfield to Scotland Road (Off Road)
608029	Newburyport	Intersection Improvements: Merrimac St. at Rt. 1 NB/SB ramps
Nbt10	Newburyport	Rt. 1 Rotary Reconfiguration with improved bike/ped/trail access
608095	North Andover	Rt. 114 (Turnpike St.) improvements from Andover St. to Stop & Shop
NA11	North Andover	Rt. 133/Rt. 125 Intersection Improvements
Row12	Rowley	Rt. 133 @ Rt. 1 Intersection Improvements
Row13	Rowley	Rt. 1 @ Central St./Glen St.
608494	Newbury/ Newburyport/ Salisbury	Resurfacing of Rt. 1
Row14	Rowley	Reconstruction of Central St. & Glen St.: Main St. (Rt. 1A) to the Mill River.
602202	Salisbury	Rt. 1 Reconstruction from Salisbury Square to MA/NH line
RTD-7695	MVRTA	Riverbank Stabilization
	Regionwide	MVRTA Capital Improvements

Appendix C: Hazard Mitigation Projects

Table C1 – Hazard Mitigation Projects

Merrimack Valley Potential Hazard Mitigation Projects

PROJECT NAME/DESCRIPTION	COMMUNITY	PRIORITY	SOURCE/NOTES	Fed Aid Rd	Transportation Performance	Status
Spicket River @ rail trail bridge crossing —redesign to reduce bottleneck of stream flow	Methuen	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	NA	stream impediment	
Hampshire Road bridge —Rehab Structurally Deficient bridge	Methuen	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		
Sea Level Rise Areas of Vulnerability: Buildings & infrastructure projected to be impacted by sea level rise at Merrimac Street., Lower Main Street, Evans Place and Pleasant Valley Road to be designed for protection from flooding and to minimize risk.	Amesbury	Low/ Long Term	Amesbury Natural Hazards Pre-Disasters Mitigation Plan, 2016	y		
Capital Improvement Drainage Projects: Create additional flood storage capacity at areas including North Main Street and Riverina Road.	Andover	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		
Main St/Bennet Road —clean pipe & install headwalls	Boxford	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		Not complete
Main Street by Bayns Hill —Repair headwalls and remove tree	Boxford	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		Not complete

Table C1 Hazard Mitigation Projects Continued

PROJECT NAME/DESCRIPTION	COMMUNITY	PRIORITY	SOURCE/NOTES	Fed Aid Rd	Transportation Performance	Status
Replace collapsed Middleton Road culvert at Crooked Pond stream (FEMA grant awarded)	Boxford	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y	culvert	Complete
Drainage System Improvements and stream barriers removal. Priority areas are Parker River dredging from Bailey Lane to Rock Pond; Parker River at West Main Street as part of road improvement (in RTP)	Georgetown	High/ Medium	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		In 2016 RTP
Andover Street drainage improvement	Georgetown	Medium	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y	drainage	Universe of Projects for RTP
Main Street/School Street outfall replacement capacity project. Estimated cost of \$150k	Georgetown	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		
Route 125 Basiliere Bridge -Rehab deficient bridge	Haverhill	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		
North Avenue bridge and dam at Snow's Brook — Reconstruction to provide more flow capacity.	Haverhill	High	Project in design w MassDOT/DCR Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		Part of the North Avenue project. 2023 TIP
Amesbury Street Bridge over South Canal — reconstruct/replace structurally deficient bridge	Lawrence	Medium	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		

Table CI Hazard Mitigation Projects Continued

PROJECT NAME/DESCRIPTION	COMMUNITY	PRIORITY	SOURCE/NOTES	Fed Aid Rd	Transportation Performance	Status
Daisy Street bridge —Reconstruct and reconfigure to eliminate Spicket River flow bottleneck	Lawrence	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y	stream impediment	
Bridge: 114 over Shawsheen River	Lawrence	not rated	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016 (pg 157)	Y	flooding	Will be part of Future Route 114 Corridor Improvement Project
Bear Hill Road at Back River —replace undersized culvert;	Merrimac	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y	Culvert	In 2016 RTP
Route 110 by DPW/Public Safety facilities —replace undersized culvert;	Merrimac	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y	Culvert	
Replace undersized culvert at Willowdale/Church St. ;	Merrimac	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y	culvert	
Replace undersized culvert at Winter St. ;	Merrimac	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y	Culvert	
Reconfigure inlet structure at Locust St. ;	Merrimac	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y	stream impediment	
Bloody Brook at Swan/Jackson St area —Design & construct drainage capacity improvements	Methuen	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		

Table CI Hazard Mitigation Projects Continued

PROJECT NAME/DESCRIPTION	COMMUNITY	PRIORITY	SOURCE/NOTES	Fed Aid Rd	Transportation Performance	Status
Plum Island Turnpike from Joppa Flats Nature Center to Sunset Drive: (See below in Newburyport)	Newbury	High	Great Marsh Coastal Adaptation Plan, 2017	y		
Newburyport Turnpike/Route 1: Flooding occurs at area north of Old Newbury Golf Course near Plum Island Eco Research Center. Short-term strategies are: Increased communication between MassDOT and City; Creating an early warning system to alert residents regarding flooding and alternate route; Coordinated evacuation planning and Monitoring frequency/depth of flooding events.	Newbury	High	Great Marsh Coastal Adaptation Plan, 2017	y		
Long term strategy is redesign of elevated roadway incorporating stormwater best management practices.	Newbury	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		
Newman Road at Little River between Old Town Hill Reservation & Hay St.: Approx. half mile of the western end of road is overtopped at high tide; Currently an inconvenience but problem projected to worsen with sea level rise. Short-term strategies: Create an early warning system and monitor flood frequency; Long term strategy of roadway redesign and elevation.	Newbury	High	Great Marsh Coastal Adaptation Plan, 2017 Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		Recommended to be abandoned by Environmental roundtable
Hanover Street at Little River: Flooding impacts businesses, MBTA tracks and access road to elementary school used as emergency shelter. Short-term strategies: Relocate emergency shelter; Assess cost/benefit of raising road and new bridge crossing over Little River	Newbury	High	Great Marsh Coastal Adaptation Plan, 2017; Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		

Table CI Hazard Mitigation Projects Continued

PROJECT NAME/DESCRIPTION	COMMUNITY	PRIORITY	SOURCE/NOTES	Fed Aid Rd	Transportation Performance	Status
Crossings on Elm Street, School Street and Coleman Road: High risk crossings for flooding and road failure that could impact access to the Triton Regional High School. Conceptual designs of six crossings here have been completed as part of stream barrier assessment project. Short-term strategy calls for replacement of undersized culverts for increased stream flow capacity in compliance with MA Stream Crossing standards.	Newbury	High	Great Marsh Coastal Adaptation Plan, 2017	y	stream impediment	
Drainage improvements-study/design/construct at Scotland Road @ Wolf Brook; Highfield Road intersection; and at Pikul Field	Newbury	Medium	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		
Plum Island Turnpike from Joppa Flats Nature Center to Sunset Drive: Area vulnerable to road closure cutting off access to Plum Island.	Newburyport	High	Great Marsh Coastal Adaptation Plan, 2017 Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		
Plum Island Turnpike: Short-term strategies include creating early warning system for residents; establishing a joint Newbury/Newburyport working group; installing plastic road reflectors to improve visibility; monitor flood frequency and depth and incorporate into future road planning.	Newburyport	High	Great Marsh Coastal Adaptation Plan, 2017 Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		
Plum Island Turnpike: Long term strategies are road elevation and master plan development for Plum Island.	Newburyport	High	Great Marsh Coastal Adaptation Plan, 2017 Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		

Table C1 Hazard Mitigation Projects Continued

PROJECT NAME/DESCRIPTION	COMMUNITY	PRIORITY	SOURCE/NOTES	Fed Aid Rd	Transportation Performance	Status
Newburyport Business & Technology Center at Parker Street/Scotland road: Area at risk to flooding from Little River and inadequate stormwater capacity. Short term strategies include barrier assessments (underway by Newbury and Newburyport; building retrofits.	Newburyport	High	Great Marsh Coastal Adaptation Plan, 2017 Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		
Evaluate and correct drainage capacity structural problem at Market Square	Newburyport	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		
Roadway improvements including drainage at Merrimac St. in area of Mersen USA & pump station	Newburyport	Medium	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		
Water Street: Junction of Water and Union St to Ocean Avenue. Coastal & freshwater flooding. Road is too low & floods during storms with rain and E/NE winds. Road becomes impassable. Raise road. Raise seawall and extend flood wall length.	Newburyport		Great Marsh Coastal Adaptation Plan 2017	Y		
Flats Bridge culvert replacement at Great Pond Road by Raes Pond pump station—capacity upgrade	North Andover	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		
Route 133 at Bachelder Brook: Flooding in area of 312 Haverhill St/Route 133 caused by undersized culvert and exacerbated by beaver activity. Beaver deceiver has been installed and preliminary design of culvert replacement has been done as part of short-term strategies which also include stream debris clearance and ultimately replacement of culvert with bridge structure per design.	Rowley	High	Great Marsh Coastal Adaptation Plan, 2017 Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		

Table C1 Hazard Mitigation Projects Continued

PROJECT NAME/DESCRIPTION	COMMUNITY	PRIORITY	SOURCE/NOTES	Fed Aid Rd	Transportation Performance	Status
<p>Stackyard Road & Route 1A: Area subject to coastal flooding making roadway unpassable. Short-term strategy of early warning system; assess culverts and water flows and increase culvert size as needed; monitor flood frequency and depth. Long-term work with State to elevate Route 1A in low lying areas and incorporate best management stormwater practices and plan long-term retreat from Stackyard Road homes. Monitor and coordinate with MBTA/MassDOT on railbed management.</p>	Rowley	High	Great Marsh Coastal Adaptation Plan, 2017	y		
<p>Route 1A (Beach Road)—Tidal flooding & storm surge hazard; Long-term plan work with MassDOT to elevate roadway, build bridge and/or add culvert(s). Short-term advance study, engineering. Investigate culvert improvements and removal of tidal restriction at Old County Road; Private property drainage improvements incl. bioswales and rain gardens.</p>	Salisbury	High	Great Marsh Coastal Adaptation Plan, 2017 Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		
<p>U.S. Route 1 & Associated Infrastructure: Tidal restriction at Route 1 Town Creek area creates flooding risk and potential economic loss. Conditions improved with tide gate restoration in 2015 at bike path. Short-term strategies include design for improved Route 1 crossing; public education; green infrastructure for stormwater management; open space acquisition for flood storage; building retrofits.</p>	Salisbury	High/ Medium	Great Marsh Coastal Adaptation Plan, 2017 Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		
<p>Rt 1: Long term strategies include elevating roadway to restore hydrology and natural resiliency of marsh; Use Ferry Road and railroad ROW bed for temporary tidal protection; relocate at-risk Route 1 businesses.</p>	Salisbury	High/ Medium	Great Marsh Coastal Adaptation Plan, 2017 Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		

Table C1 Hazard Mitigation Projects Continued

PROJECT NAME/DESCRIPTION	COMMUNITY	PRIORITY	SOURCE/NOTES	Fed Aid Rd	Transportation Performance	Status
<p>March Road/First Street/Ferry Road: Area subject to tidal flooding at two separate undersized culverts on March Rd. and First St. Ferry Road culvert is in disrepair and also a tidal restriction. Conditions are degrading the marsh. Short-term strategies include conducting comprehensive assessment of Ferry Road culverts and upgrade of the March Road and First Street culverts.</p>	Salisbury	Medium/ High	Great Marsh Coastal Adaptation Plan, 2017 Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016	y		
<p>Increase drainage capacity at Donovan's Stream area (Causes flooding on Vendome Street, Lincoln Street, Summer Street, and Prospect Street)</p>	Merrimac	High	Merrimack Valley Multi-Hazard Mitigation Plan Update, 2016			

Appendix D: Public Comments

From: Judith Crocker, Massachusetts Safe Routes to School (SRTS), MassDOT

"...it would be terrific if part of the MVPC long-term plan could include active transportation elements specific for students. The vision is to positively impact student safety and student active transportation through a sustainable and city-wide/regional approach.

Focusing on school zones as an element of traffic calming would be a huge step forward in advancing pedestrian safety. Because so many communities use a neighborhood school model, the safety benefits would be enjoyed by all residents. It could be said that the efficacy of school zones as a tool to highlight the presence of students varies widely across the 15 MVPC communities. By bringing uniformity across the region in this manner, anyone traveling in the area would better understand when they are near a school.

Specifically:

- Increase school zone visibility and uniformity across school districts and the region with robust crosswalk pavement markings and signage
- Increase pedestrian visibility by not allowing parking around crosswalks, designing a procedure for regularly monitoring sidewalk vegetation in and around schools, and using in-road pedestrian signage
- Increase air quality through a 'No Idling' campaign
- Consider snow ordinances for sidewalk and crosswalk accessibility in and around schools

- Work with SRTS to encourage school policy directed toward codifying school traffic safety and mitigation. For example, encourage separation of transportation modes on school property and discourage parent queuing on public roadways."

From David Mohler, Massachusetts Department of Transportation

Chapter 1

- Page 9: Please indicate which community Merrimac Square is located in the photo caption.

Chapter 2

- Pages 18-22: Please label "Table 2.1 Summary of Goals, Objectives, Strategies, Performance Measures and Progress (continued)"

Chapter 3

- Page 32: Table 3.2 appears to be missing. Also, please review order/labeling of tables in this chapter.

Chapter 4

- Page 46: Please add most recent guidance for Air Quality to this section.

Chapter 5

- Page 60: Please edit Table 5.3 to read "2025-2029" under the Time Band column.

Chapter 7

- Page 94: Please edit Figure 7.7 Title to say "Crashes" instead of "Accidents".
- Page 95: Please edit Figure 7.8 title to say "Crashes" instead of "Accidents".

Chapter 8

- Page 97: Please capitalize the Objective 3.1 heading.
- Page 100: Multi-Modal Transportation systems can serve people that reside in the Merrimack Valley region and outside of it. It's resourceful to document how the multi-use trail systems within the region interact with those outside of it. In Figure 8.2, please reference the MAPIT tool and the Statewide Bike/Pedestrian Plans and consider identifying multi-use trail systems outside Merrimack Valley that connect to the region's growing network.
- Page 105: Under 'Measuring Success' section, please edit the Table reference to correspond with Table 8.16. Also (if available), please note the day of week, time(s) of day, and weather condition(s) from the time "Bikes Parked" was measured. Please also consider noting whether Commuter Rail and Park & Ride facilities have excellent, average, or poor connectivity to multi-modal bike infrastructure. One way to do this would be noting in comments which of the completed trail projects connect to the respective lots/stations.
- Page 109: Please update the Commuter Service to Boston data to the latest American Community Survey (current report cites 06-10 data).
- Page 111: Please update the MBTA fares in Table 8.5 with the updated fares from July 1, 2019. (link: <https://www.mbta.com/fares/commuter-rail>)

Chapter 9

- Page 126: Please capitalize "Increase" in the title for Objective 4.3.
- Page 127: Please add period after "network" under Strategies for Success. Also, please make bulleted lists following "include:" consistent (i.e. either add periods after each bullet, or add semicolons after each bullet).

Chapter 10

- Page 169: Please edit name of Table to read "Table 10.18". Also, please define advance construction (AC) earlier in the RTP if deciding to continue listing it under additional information.
- Page 177: Please give the table on this page a Table number.

Chapter 11

- Page 184: Please edit the Figure number.
- Page 185: Please reword the Table 11.3 heading and/or column headings to better capture what the data represents: number of households with no vehicles available (by community).

Comments Made at Lawrence Public Meeting:

- Project in Methuen between Green Street and Woodland should be Woodland Street, not Woodland Road in the Table.

Comment: from Harry LaCortiglia:

- Georgetown Route 133 is Exit #54, not Exit #55.

Comment from Mike Parquette at 1 PM Public Hearing on July 17, 2019

- Seven Star Road in Groveland is in terrible condition, it needs to be fixed.

Comments from Joe Costanzo, MVRTA:

Chapter 3

Include information about 65+ population projections.

Chapter 6

- Remove 'vehicles are considered in a State of Good Repair if they are rated 3 or higher. All MVRTA vehicles are rated 3 or higher'.
- Add 'model year 2007' after '3 buses'.

Chapter 8

- Add MVRTA Regional Transit Plan (2015) to list of plans. To the information on Boston Commuter Service, list the towns served.
- Add 'Job changes and more work from home policies have contributed to this reduction' to the end of the first paragraph of Measuring Success.
- Remove the sentence that discusses increase in ADA paratransit service.
- Under Objective 3.3, add the Route numbers to the descriptions of the regional fixed routes as well as the Route 54. In the paragraph discussing the Bus on Shoulder, add this sentence to the end of the paragraph, 'It may be time to revisit the

implementation of an extended bus/carpool/vanpool lane starting at the Anderson Transportation Center.

Chapter 9

- Provided several small changes.
- Add following to end of the sentence about potential improvements, ' implementing an intra-community shuttle bus route in Newburyport, implementing all day 30-minute weekday service on all Lawrence-based routes and improving service frequency to 60 minutes on Routes 51 and 54'.

Chapter 10

- Add 'presently priced at \$675,000 after 'diesel hybrid buses'.

Comment from Joseph Urena, Family Services

- Better pedestrian crossing and safe transit stop needed at the intersection of Broadway/Water Street/Canal Street in Lawrence.

Comment from Elecia Miller, Mayors Health Task Force

- Population projections look low.