

Merrimack Valley Metropolitan Planning Organization

Federal Fiscal Years 2020 to 2024

Transportation Improvement Program

As Amended through April 2020

Final Report

April 2020



Prepared by the Merrimack Valley Planning Commission

This document was prepared in cooperation with the Massachusetts Department of Transportation and the U.S. Department of Transportation. (under Contracts #95416, #MA-80-012, #MA-80-013 and # 108056 with MassDOT) The views and opinions of the Merrimack Valley Planning Commission expressed herein do not necessarily state or reflect those of the Massachusetts Department of Transportation or the U.S. Department of Transportation.

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Endorsement Page for Federal TIP - Signatures



Merrimack Valley Metropolitan Planning Organization Endorsement of Amendments # 6 to the FFYs 2020-2024 Transportation Improvement Program

Whereas, the Merrimack Valley MPO has completed its review in accordance with Section 176(c) (4) of the Clean Air Act as amended in 1990 [42 U.S.C. 7251 (a)], and hereby certifies that the FFYs 2020-2024 TIP is financially constrained and that the implementation of the Merrimack Valley Metropolitan Planning Organization 2020 Regional Transportation Plan satisfies the conformity criteria specified in both 40 CFR Part 51 and 93 (8/15/1997) and 310 CMR 60.03 (12/30/1994).

Therefore, in accordance with 23 CFR Part 450 Section 322 (Development and content of the Metropolitan Transportation Plan) of the March 16, 2007 Final Rules for Statewide and Metropolitan Planning, the MPO hereby endorses Amendments # 6 to the FFYs 2020-2024 Transportation Improvement Program.

Signatory Certification:

Date: April 22, 2020

Stephanie Pollack
Secretary/
CEO MassDOT

Joseph Costanzo
Administrator/CEO
MVRTA

James Fiorentini
Mayor of Haverhill

Jonathan L. Gulliver
MassDOT Highway
Division Administrator

Paul Materazzo
Town of Andover

Daniel Rivera
Mayor of Lawrence

John Cashell
Town of Georgetown

Neil Harrington
Town of Salisbury

Robert Snow
Town of Rowley

Theresa Park
MVPC Director

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**Self Certification Compliance
Statement - Signatures
Merrimack Valley Metropolitan
Planning Organization**

Concurrent with the submittal of the proposed TIP to the FHWA and the FTA, the MPO Policy Board shall certify that the metropolitan transportation planning process is being carried out in accordance with all applicable requirements including:

1. 23 U.S.C. 134, 49 U.S.C. 5303, and this subpart;
2. In nonattainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93;
3. Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;
4. 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
5. Section 1101 (b) of the FAST Act (Pub. L. 114-357) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;
6. 23 CFR 230, regarding the implementation of an Equal Employment Opportunity Program on Federal and Federal-aid Highway construction contracts;
7. The provisions of the American with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 CFR parts 27, 37, and 38;
8. The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
9. Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender;
10. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities;
11. Anti-lobbying restrictions found in 49 USC Part 20. No appropriated funds may be expended by a recipient to influence or attempt to influence an officer or employee of any agency, a Member of Congress, in connection with the awarding of any Federal contract.

Signatory Certification:

Date: May 22, 2019

Stephanie Pollack
Secretary/
CEO MassDOT

Joseph Costanzo
Administrator/CEO
MVRTA

James Fiorentini
Mayor of Haverhill

Jonathan L. Gulliver
MassDOT Highway
Division Administrator

Paul Materazzo
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Mayor of Lawrence

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Town of Georgetown

Neil Harrington
Town of Salisbury

Robert Snow
Town of Rowley

Karen Conard
MVPC Director

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310 CMR 60.05: Global Warming Solutions Act – Signatures

310 CMR 60.05: Global Warming Solutions Act Requirements for the Transportation Sector and the Massachusetts Department of Transportation

Self – Certification Compliance Statement for Metropolitan Planning Organizations

This will certify that the FFYs 2020-2024 Transportation Improvement Program for the Merrimack Valley Metropolitan Planning Organization is in compliance with all applicable requirements in the State Regulation 310 CMR 60.05: Global Warming Solutions Act Requirements for the Transportation Sector and the Massachusetts Department of Transportation. The regulation requires the Metropolitan Planning Organizations (MPOs) to:

1. 310 CMR 60.05, 3(b)(1)(a): Evaluate and track the GHG emissions and impacts of RTPs and TIPs;
2. 310 CMR 60.05, 3(b)(1)(b): In consultation with MassDOT, develop and utilize procedures to prioritize and select projects in RTPs, TIPs, and STIPs based on factors that include GHG emissions and impacts;
3. 310 CMR 60.05, 3(b)(1)(c): Quantify net GHG emissions and impacts resulting from projects in RTPs and TIPs and have made efforts to minimize GHG emissions and impacts;
4. 310 CMR 60.05, 3(b)(1)(d): Determine in consultation with MassDOT that the appropriate planning assumptions used for GHG emissions modeling are consistent with local land use policies, or that local authorities have made documented and credible commitments to establishing such consistency;
5. 310 CMR 60.05, 4(a)(2)(e): Develop public consultation procedures for GHG reporting and related GWSA requirements consistent with current and approved regional public participation plans;
6. 310 CMR 60.05, 4(c): Prior to making final endorsements on the RTPs, TIPs, STIPs, and projects included in these plans, MassDOT and the MPOs shall include the GHG Assessment and information on related GWSA activities in RTPs and TIPs and provide an opportunity for public review and comment on the RTPs, and TIPs.
7. 310 CMR 60.05, 6(a): After a final GHG assessment has been made by MassDOT and the MPOs, MassDOT and the MPOs shall submit MPO-endorsed RTPs and TIPs within 30 days of endorsement to the Department for review of the GHG assessment.

Signatory Certification:

Date: May 22, 2019

Stephanie Pollack
Secretary/CEO MassDOT

Joseph Costanzo
Administrator/CEO
MVRTA Advisory Board

James Fiorentini
Mayor of Haverhill

Jonathan L. Gulliver
MassDOT Highway
Division Administrator

Paul Materazzo
Town of Andover

Daniel Rivera
Mayor of Lawrence

John Cashell
Town of Georgetown

Neil Harrington
Town of Salisbury

Robert Snow
Town of Rowley

Karen Conard
MVPC Director

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Merrimack Valley Metropolitan Planning Organization FFYs 2020-2024 Transportation Improvement Program as Amended through April 2020

Final Report prepared April 2020

Part A. Introduction

Part A. 1. TIP Development Process

Federal transportation authorization legislation establishes funding categories for transportation projects that may be eligible for Federal funding and sets maximum funding levels per category for each year of the legislation. Projects in this TIP are planned to be primarily funded through the federal transportation act titled “Fixing America’s Surface Transportation Act (FAST Act)” that was signed into law December 4, 2015. The FAST Act funds \$305 billion dollars for transportation for Federal Fiscal Years (FFYs) 2016 through 2020.

The previous legislation “Moving Ahead for Progress in the 21st Century (MAP-21)” established planning factors known as the “MAP-21 eight planning factors”. The FAST Act adds two new planning factors (numbers 9 and 10 in the list that follows), the FAST Act stipulates that the metropolitan planning process...

“provide for consideration of projects and strategies that will-

- A) support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency;
- B) increase the safety of the transportation system for motorized and non-motorized users;
- C) increase the security of the transportation system for motorized and non-motorized users;
- D) increase the accessibility and mobility of people and for freight;
- E) protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;

- F) enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- G) promote efficient system management and operation;
- H) emphasize the preservation of the existing transportation system;
- I) improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
- J) enhance travel and tourism.”

It is the responsibility of the Federal mandated, State designated, regional Metropolitan Planning Organizations (MPOs) to carry out the Federal transportation planning process in their respective urbanized areas and prepare many Federal transportation documents, including the Transportation Improvement Program (TIP). This process, and the MPOs themselves, were established with the intention to include local and regional input into the Federal transportation planning process.

Based on Federal regulations any transportation project funded through the Federal Highway Administration (FHWA), or the Federal Transit Administration (FTA) must be listed in the appropriate region's Transportation Improvement Program (TIP). MassDOT combines the 13 regional MPO TIPs with statewide projects to produce the Statewide TIP (STIP) from which Federal-aid highway and transit projects are chosen. Without such a listing, Federal Highway funds cannot be expended by the Massachusetts Department of Transportation (MassDOT) on local or State projects. Similarly, the Merrimack Valley Regional Transit Authority (MVRTA) can only receive federal funds for projects listed in the TIP and STIP.

Merrimack Valley Metropolitan Planning Organization (MVMPO)

The MVMPO was first created by the Governor of Massachusetts in 1972. The MVMPO covers the same 15-community geographic area that defines the MVPC region and the MVRTA service area. The current MVMPO membership is as follows:

- Secretary of MassDOT –Stephanie Pollack
- MassDOT Highway Division Administrator –Jonathan L. Gulliver
- Merrimack Valley Planning Commission (MVPC) Director –Theresa Park
- Administrator/CEO Merrimack Valley Regional Transit Authority –Joseph Costanzo
- Mayor of Haverhill –James Fiorentini

- Mayor of Lawrence –Daniel Rivera
- Representing Region 1 (Amesbury, Newburyport, Salisbury) –Neil Harrington
- Representing Region 2 (Newbury, Rowley, West Newbury) –Robert Snow
- Representing Region 3 (Boxford, Georgetown, Groveland, Merrimac) –John Cashell
- Representing Region 4 (Andover, Methuen, North Andover) –Paul Materazzo

Ex officio, non-voting members of the MVMPO include:

- Federal Highway Administration –Massachusetts Division –Jeff McEwen
- Federal Transit Administration – Region I – Peter Butler
- Rockingham Planning Commission MPO (NH), Chairman RPC – Barbara Kravitz
- Boston MPO, President MAPC –Keith Bergman
- Northern Middlesex MPO, Chairman NMCOG –Pat Wojtas
- Nashua MPO (NH), Chairman NRCP –Susan Ruch

The TIP has been prepared in accordance with 23 CFR 450.326.

The development of the TIP starts with the Regional Transportation Plan (RTP). The MVMPO’s RTP is a twenty-five-year plan for transportation projects that can be programmed for implementation with Federal funds. The RTP is fiscally constrained and lists potential future projects in five-year blocks. Projects were chosen for the RTP based on MAP-21 transportation planning factors, existing roadway conditions, problems identified through ongoing pavement, congestion, and safety analyses conducted by the MVMPO, local and state project priorities and fiscal factors. Each year, the MVMPO programs projects from the RTP that are ‘ready-to-go’ into its five-year Transportation Improvement Program (TIP). Only those projects that are specifically identified in the RTP, or are consistent with its recommendations, can be programmed in the TIP. The planning tasks conducted in developing the RTP and the TIP are included in the region’s Unified Planning Work Program (UPWP) which is produced for public review annually. The UPWP includes additional transportation planning activities such as intersection and roadway analyses and studies.

Only projects from the RTP first two banks of years (i.e., 2016 to 2020 and 2021 to 2025) are programmed in the TIP. An inconsistency with spending shown in the RTP is that when the MVMPO’s FFY 2016 RTP was developed, it was assumed the construction of the Bradford Rail Trail in Haverhill would occur in FFYs 2021-2025. The project is moving through the project implementation and design processes more quickly with Phase II of the Bradford Rail Trail expected to be advertised in FFY 2020.

Projects that appear in the TIP were initiated and selected from a number of sources. Bridge projects have been selected and developed by MassDOT's Bridge section largely based upon the results of their ongoing bridge maintenance program. The Department has made it a priority to develop projects that would correct problems in "Structurally Deficient" (SD) bridges. The region's Congestion Management Process is used to identify intersections and roadways where significant congestion exists and measures the levels of congestion at these locations. This information has been used by local communities to develop roadway projects that are programmed in the TIP. Similarly, locations identified as having safety problems in the region's Safety Monitoring System or identified as a "crash cluster" by MassDOT, are used by the Department and local communities to develop TIP projects.

Part A. 2. Performance Measures

Federal legislation requires states to develop a Transportation Asset Management Plan (TAMP) that includes Performance Measures for NHS roadways and bridges as part of the asset management process. MassDOT Highway Division submitted an initial TAMP to FHWA on April 30, 2018, the final TAMP will be submitted in June of 2019.

The *Moving Ahead for Progress in the 21st Century Act (MAP-21)* and the *Fixing America's Surface Transportation Act (FAST)* require State DOTs and MPOs to establish performance measures, and targets for these measures, to be used in assessing the transportation system and programming projects for Federal funding categories provided in the Acts. The Final Rules establishing these measures have been released in three separate rule makings. PM1: "HSIP and Safety Performance Management Measures", PM2: "Pavement and Bridge Condition Performance Measures", and PM3: "System Performance/ Freight/ CMAQ Performance Measures". These Rules define the measures to be used in each of the categories.

The PM1 HSIP and Safety Performance Measures apply to all public roads. The PM2 Pavement and Bridge Performance Measures apply only to NHS (National Highway System) roads and bridges. PM3 Performance Measures apply to various facilities as defined below.

MassDOT has established targets based on these performance measures and the MPOs have worked with MassDOT in either a) choosing the same targets, b) adapting them to the specific region, or c) choosing new targets as goals for the MPO. The MVMPO has adopted all of the targets established by MassDOT. MassDOT and the MPOs will work cooperatively to exchange data and performance targets and measures as required by the legislation.

The following are the performance measures, divided into three categories, as defined by the Final Federal Rules:

HSIP and Safety Performance Management Measures to be applied to all public roads (PM1):

- Number of Fatalities
- Rate of Fatalities
- Number of Serious Injuries
- Rate of Serious Injuries
- Number of non-motorized fatalities and non-motorized serious injuries

Pavement and Bridge Condition Performance Measures (PM2):

- Percentage of Pavements of the Interstate System in Good condition
- Percentage of Pavements of the Interstate System in Poor condition
- Percentage of Pavements of the non-Interstate NHS in Good condition
- Percentage of Pavements of the non-Interstate NHS in Poor condition
- Percentage of NHS bridges by deck area classified as in Good condition
- Percentage of NHS bridges by deck area classified as in Poor condition

MassDOT has submitted a draft NHS Transportation Asset Management Plan (TAMP), as required by MAP-21, to address pavement and bridge conditions on the NHS system. The Final version will be submitted in June 2019.

System Performance/ Freight/ CMAQ Performance Measures (PM3):

- Percent of the Person-Miles Traveled on the Interstate that are Reliable
- Percent of the Person-Miles Traveled on the non-Interstate NHS that are Reliable
- Truck Travel Time Reliability (TTTR) Index on the Interstate System
- Annual Hours of Peak Hour Excessive Delay Per Capita
- Percent of Non-SOV Travel on the NHS System
- Total Emission Reduction of all projects funded with CMAQ in areas designated as nonattainment or maintenance for ozone (O₃), carbon monoxide (CO), or particulate matter (PM₁₀ and PM_{2.5})

The MVMPO will work cooperatively with MassDOT to determine which performance measures the MPO will collect data for and measure, and which MassDOT will collect data for and measure and will exchange data and program projects for funding with consideration of meeting the targets established for each measure. The performance measures will be incorporated into the Transportation Improvement Program (TIP)

Transportation Evaluation Criteria (TEC) in the scoring categories as indicated in the TEC Scoring Criteria Chart in Section A.3. of the TIP.

Targets are set by examining historic trends in the data and considering future plans for potential improvements.

Safety Performance Measures (PM1)

The Merrimack Valley MPO has chosen to adopt the statewide safety performance measure targets set by MassDOT for Calendar Year (CY) 2019. In setting these targets, MassDOT has followed FHWA guidelines by using statewide crash data and Highway Performance Monitoring System (HPMS) data for vehicle miles traveled (VMT) in order to calculate 5 year, rolling average trend lines for all FHWA-defined safety measures. For CY 2019 targets, four of the five safety measures—total number of fatalities, rate of fatalities per 100 million vehicle miles traveled, total number of incapacitating injuries, and rate of incapacitating injuries per 100 million VMT—were established by extending their trend lines into the 2015-2019 period. All four of these measures reflect a modest decrease in statewide trends. The fifth safety measure, the total number of combined incapacitating injuries and fatalities for non-motorized modes, is the only safety measure for which the statewide trend line depicts an increase. MassDOT’s effort to increase non-motorized mode share throughout the Commonwealth has posed a challenge to simultaneously reducing non-motorized injuries and fatalities. Rather than adopt a target that depicts an increase in the trend line, MassDOT has elected to establish a target of non-motorized fatalities and injuries and for CY 2019 that remains constant from the rolling average for 2012–2016. In recent years, MassDOT and the Merrimack Valley MPO have invested in “complete streets,” bicycle and pedestrian infrastructure, intersection and safety improvements in both the Capital Investment Plan (CIP) and Statewide Transportation Improvement Program (STIP) to address increasing mode share and to incorporate safety mitigation elements into projects. Moving forward, Merrimack Valley MPO, alongside MassDOT, is actively seeking to improve data collection and methodology for bicycle and pedestrian VMT counts and to continue analyzing crash clusters and crash counts that include both motorized and non-motorized modes in order to address safety issues at these locations.

In all safety categories, MassDOT has established a long-term target of “Toward Zero Deaths” through MassDOT’s Performance Measures Tracker¹ and will be establishing

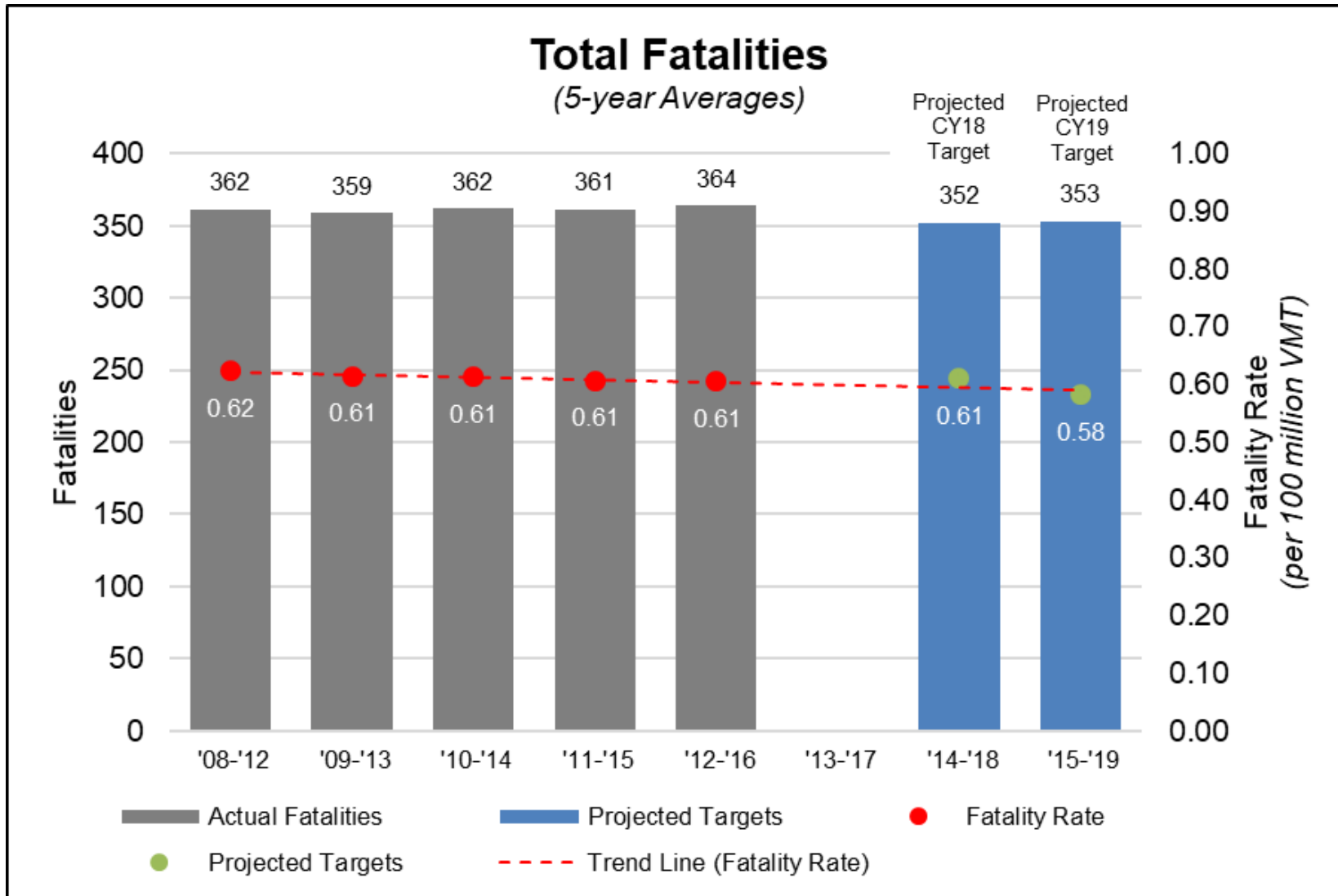
¹ <https://www.mass.gov/lists/tracker-annual-performance-management-reports>

safety targets for the MPO to consider for adoption each calendar year. While the MPO is not required by FHWA to report on annual safety performance targets, FHWA guidelines require MPOs to adopt MassDOT's annual targets or to establish their own each year.

The safety measures MassDOT has established for CY 2019, and that the Merrimack Valley MPO has adopted, are as follows:

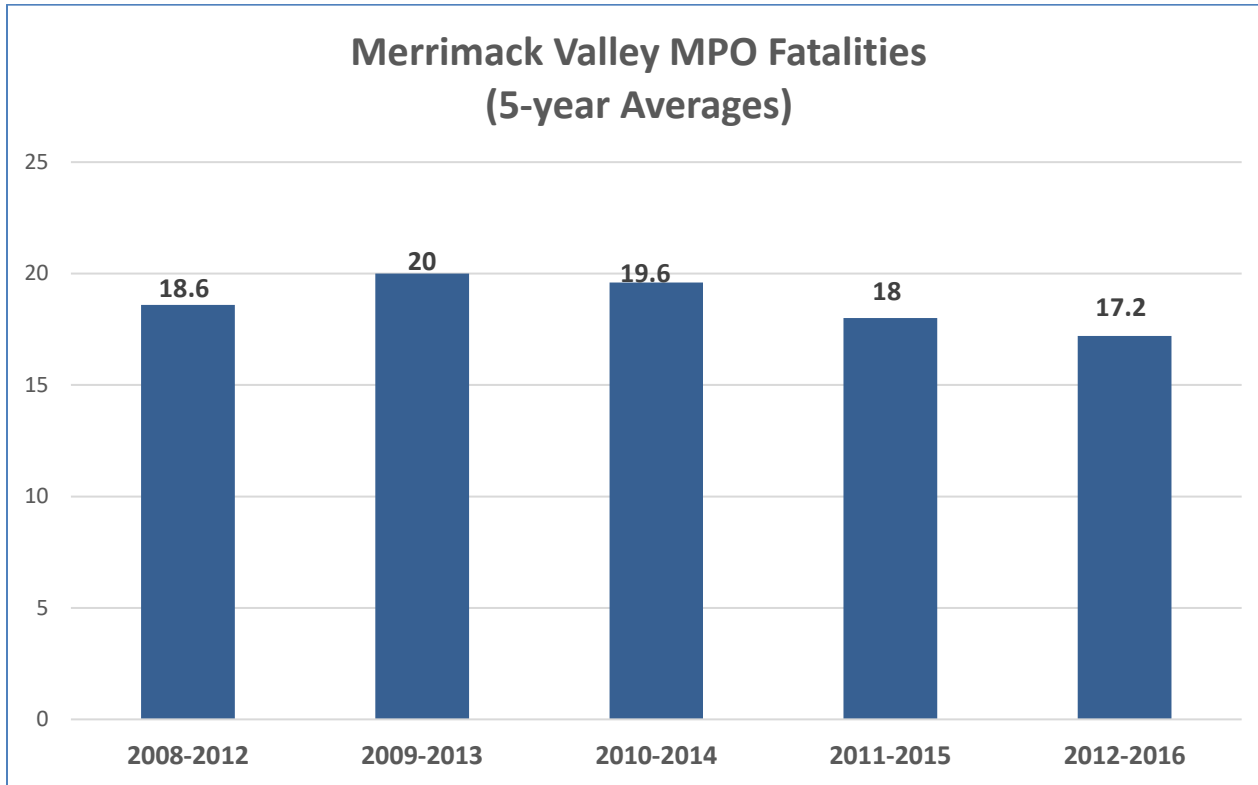
- 1) Fatalities: The target number of fatalities for years CY 2019 is 353, down from an average of 364 fatalities for the years 2012–2016. [See Figure 2 for Our MPO vs. Figure 1 statewide comparison of the trend for this performance measure]
- 2) Rate of Fatalities per 100 million VMT: The target fatality rate for years CY 2019 is 0.58, down from a 0.61 average for years 2012–2016. [See Figure 2 for Our MPO vs. Figure 1 statewide comparison of the trend for this performance measure]
- 3) Serious Injuries: The target number of incapacitating injuries for CY2019 is 2801, down from the average of 3146 for years 2012–2016. [See Figure 4 for Our MPO vs. Figure 3 statewide comparison of the trend for this performance measure]
- 4) Rate of Incapacitating Injuries per 100 million VMT: The incapacitating injury rate target for CY2019 is 4.37 per year, down from the 5.24 average rate for years 2012–2016. [See Figure 4 for Our MPO vs. Figure 3 statewide comparison of the trend for this performance measure]
- 5) Total Number of Combined Incapacitating Injuries and Fatalities for Non-Motorized Modes: The CY2019 target number of fatalities and incapacitating injuries for non-motorists is 541 per year, the same as the average for years 2012–2016. [See Figure 6 for Our MPO vs. Figure 5 statewide comparison of the trend for this performance measure]

Figure 1 Statewide Total Fatalities and Fatal Crash Rates – 5-Year Averages



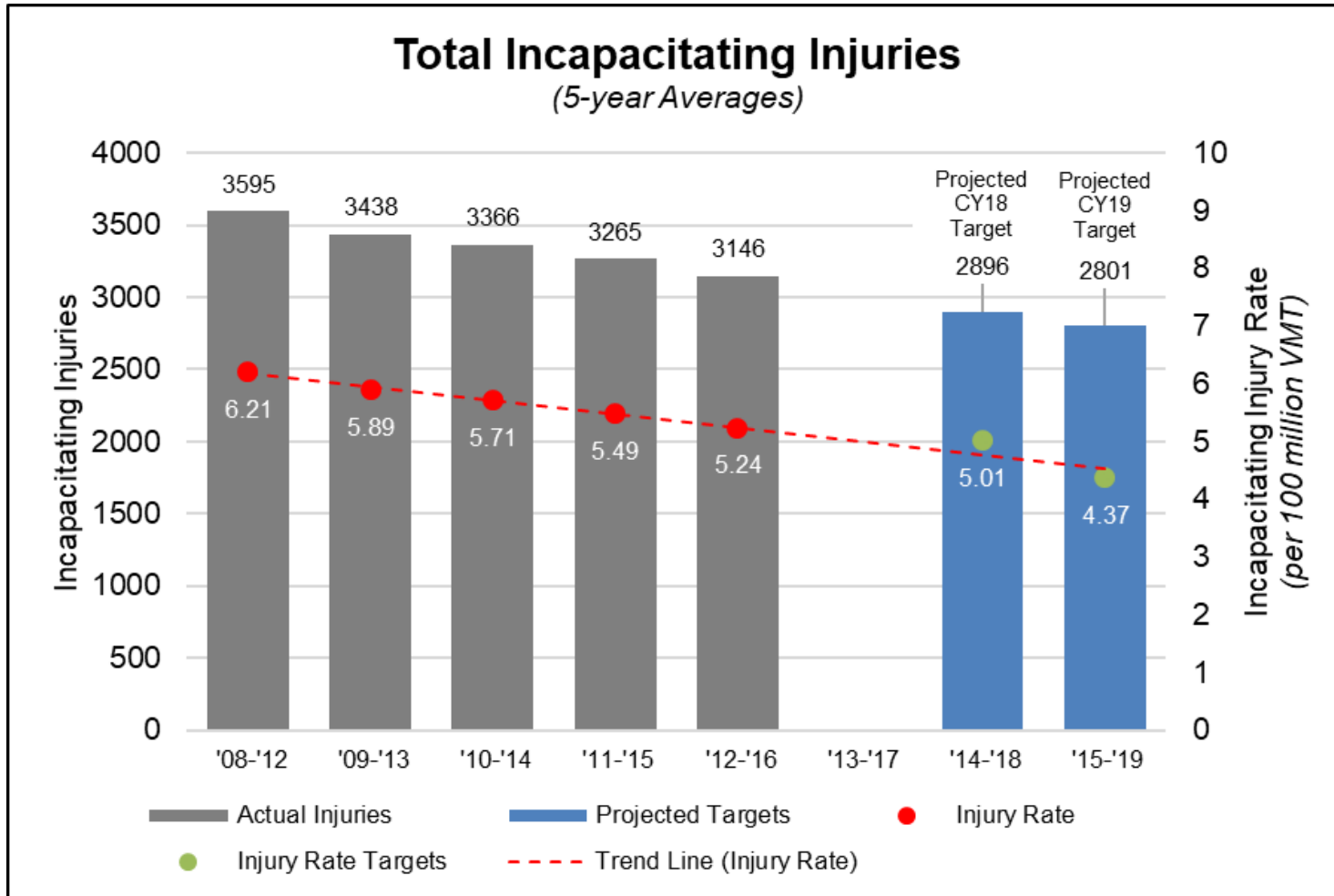
Graph Source: MassDOT

Figure 2 Merrimack Valley Total Fatalities and Fatal Crash Rates – 5-Yr. Averages



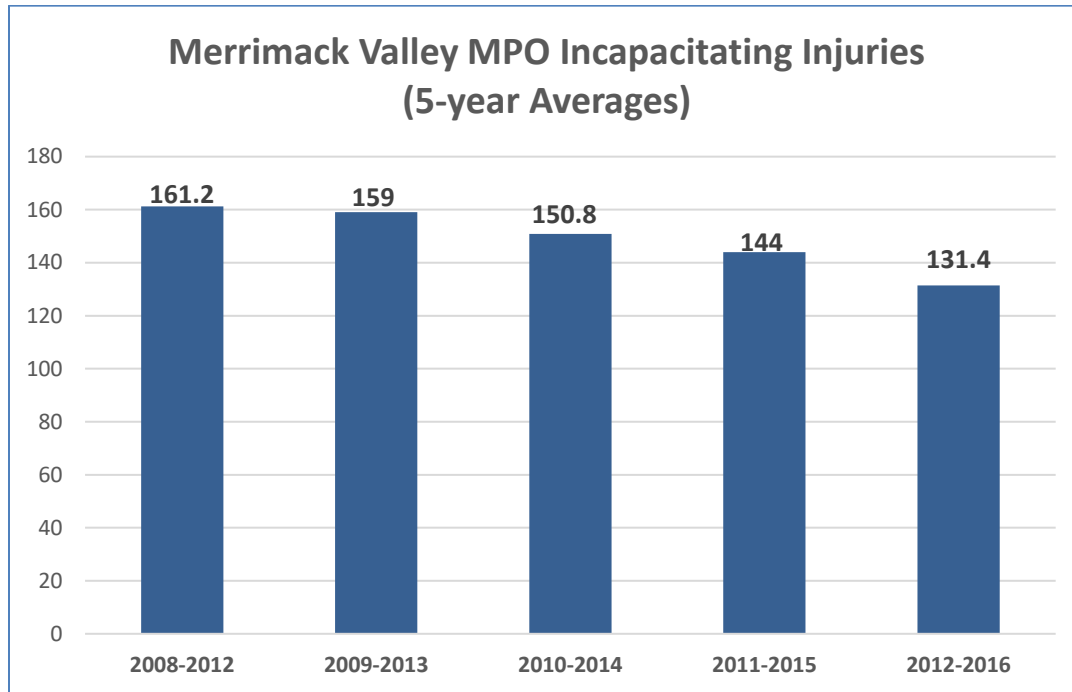
Graph Source: MassDOT

Figure 3 Statewide Total Incapacitating Injuries and Incapacitating Injury Crash Rates



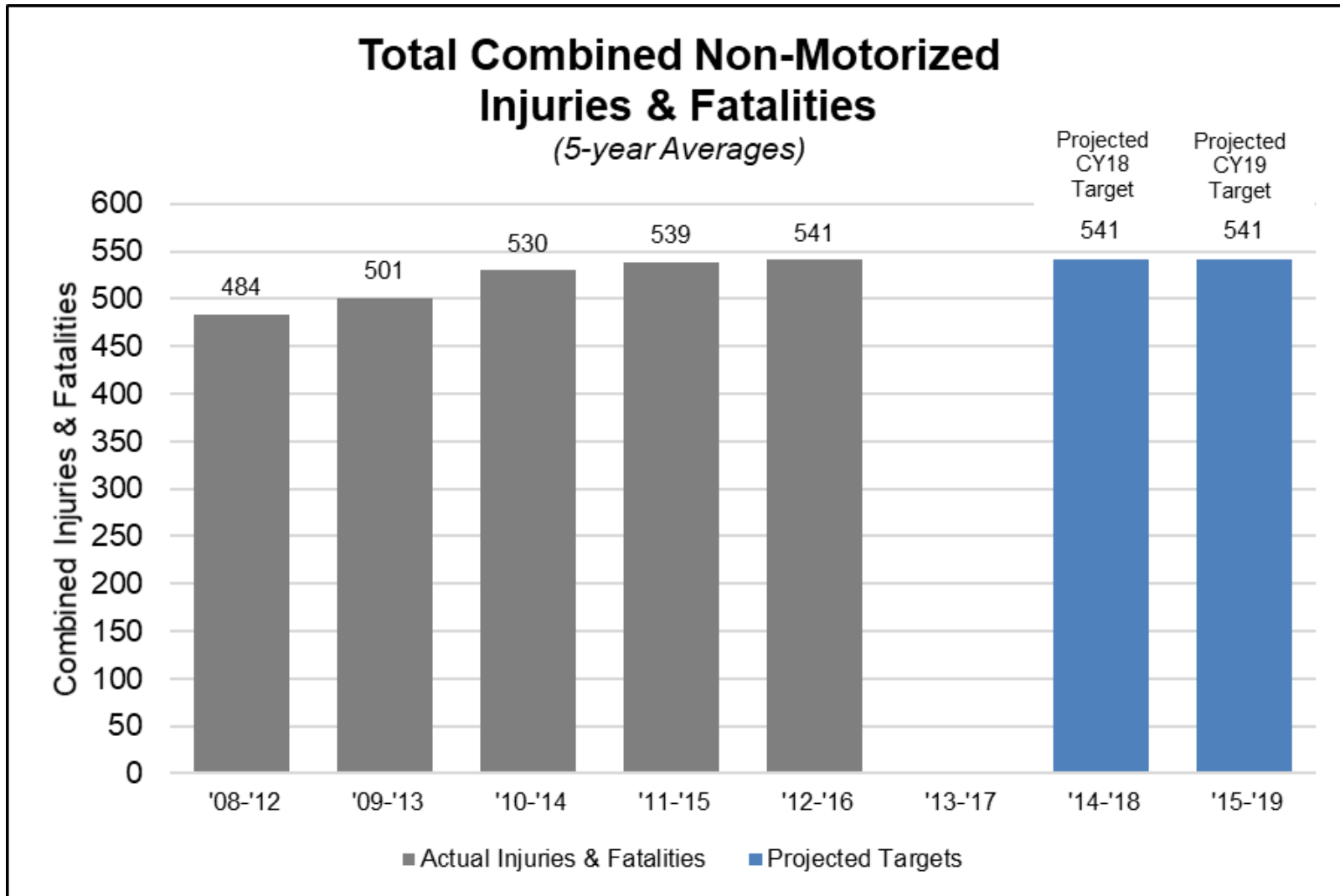
Graph Source: MassDOT

Figure 4 Merrimack Valley Total Incapacitating Injuries and Incapacitating Injury Crash Rates



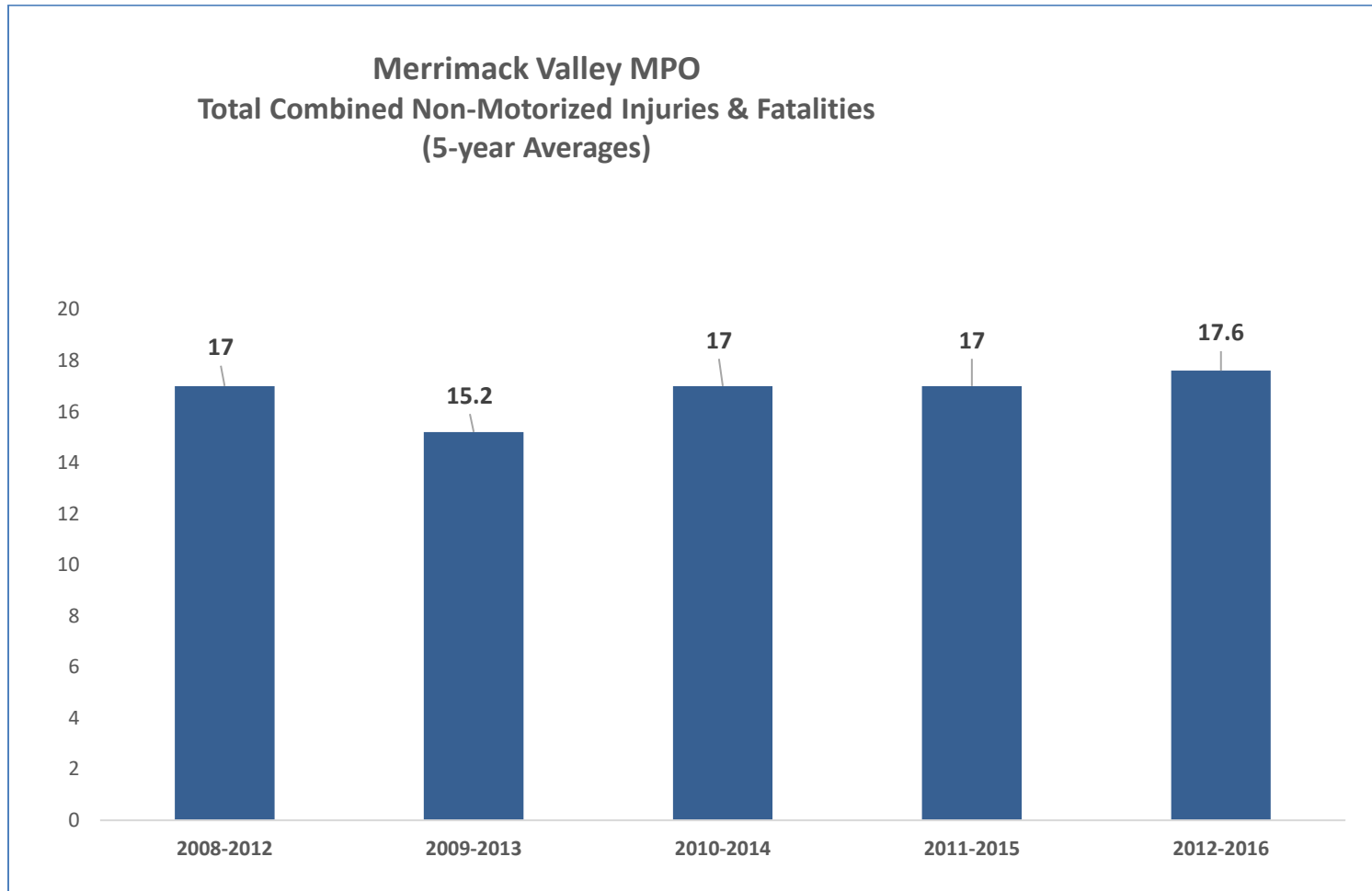
Graph Source: MassDOT

Figure 5 Statewide Combined Cyclist and Pedestrian Fatalities and Injuries



Graph Source: MassDOT

Figure 6 Merrimack Valley Region Combined Cyclist and Pedestrian Fatalities and Injuries



Bridge & Pavement Performance Measures (PM 2)

The Merrimack Valley MPO has chosen to adopt the 2-year (2020) and 4-year (2022) statewide bridge and pavement performance measure targets set by MassDOT. MassDOT was required to adopt a statewide target by May 20th, 2018, with MPOs either adopting the statewide target or establishing their own by November 2018. In setting these targets, MassDOT has followed FHWA guidelines by measuring bridges and pavement condition using the 9-point National Bridge Inventory Standards (NBIS); the International Roughness Index (IRI); the presence of pavement rutting; and the presence of pavement cracking. 2-year and 4-year targets were set for six individual performance measures: percent of bridges in good condition; percent of bridges in poor condition; percent of Interstate pavement in good condition; percent of Interstate pavement in poor condition; percent of non-Interstate pavement in good condition; and percent of non-Interstate pavement in poor condition. All of the above performance measures are tracked in greater detail in MassDOT's Transportation Asset Management Plan (TAMP), which is due to be finalized in July 2019.

Targets for bridge-related performance measures were determined by identifying which bridge projects are programmed and projecting at what rate bridge conditions deteriorate. The bridge-related performance measures measure the percentage of deck area, rather than the total number of bridges.

Performance targets for pavement-related performance measures were based on a single year of data collection, and thus were set to remain steady under the guidance of FHWA. These measures are to be revisited at the 2-year mark (2020), once three years of data are available, for more informed target setting.

MassDOT continues to measure pavement quality and to set statewide short-term and long-term targets in the MassDOT Performance Management Tracker using the Pavement Serviceability Index (PSI), which differs from IRI. These measures and targets are used in conjunction with federal measures to inform program sizing and project selection.

Performance Measure	Current (2017)	2-year target (2020)	4-year target (2022)
Bridges in good condition	15.22%	15%	16%
Bridges in poor condition	12.37%	13%	12%
Interstate Pavement in good condition	74.2%	70%	70%
Interstate Pavement in poor condition	0.1%	4%	4%
Non-Interstate Pavement in good condition	32.9%	30%	30%
Non-Interstate Pavement in poor condition	31.4%	30%	30%

Reliability, Congestion, & Emissions Performance Measures (PM3)

Merrimack Valley MPO has chosen to adopt the 2-year (2020) and 4-year (2022) statewide reliability, congestion, and emissions performance measure targets set by MassDOT. MassDOT was required to adopt a statewide target by May 20th, 2018, with MPOs either adopting the statewide target or establishing their own by November 2018.

MassDOT followed FHWA regulation in measuring Level of Travel Time Reliability (LOTTR) on both the Interstate and non-Interstate NHS as well as Truck Travel Time Reliability (TTTR) on the Interstate system using the National Performance Management Research Dataset (NPMRDS) provided by FHWA. These performance measures aim to identify the predictability of travel times on the roadway network by comparing the average travel time along a given segment against longer travel times. For LOTTR, the performance of all segments of the Interstate and of the non-Interstate NHS are defined as either reliable or unreliable based on a comparison between the 50th percentile travel time and the 80th percentile travel time, and the proportion of reliable segments is reported. For TTTR, the ratio between the 50th percentile travel time

and the 90th percentile travel time for trucks only along the Interstate system is reported as a statewide measure. As this data set has but one year of consistent data, FHWA guidance has been to set conservative targets and to adjust future targets once more data becomes available. To that end, MassDOT's reliability performance targets are set to remain the same.

The Merrimack Valley MPO an agency whose planning area includes communities in the Boston Urbanized Area (UZA), and as a signatory to the 2018 Boston UZA Memorandum of Understanding (Boston UZA MOU)—has also adopted 2-year (2020) and 4-year (2022) Boston UZA-wide congestion performance measure targets. These performance measures are the percentage of non-single occupancy vehicle (SOV) travel and the Peak Hour Excessive Delay (PHED). Targets were developed in coordination with state Departments of Transportation and neighboring MPOs with planning responsibility for portions of the Boston UZA.

The percentage of non-SOV travel is approximated using the U.S. Census Bureau's American Community Survey (ACS) Journey-to-Work data. In the Boston UZA, the proportion of non-SOV travel has been steadily increasing and is projected to continue increasing at a rate of 0.32% annually.

PHED is measured by totaling the number of hours spent in excessive delay (defined as travel time at 20 miles per hour or at 60% of the posted speed limit, whichever is greater) in peak hours (between 6:00am and 10:00, and between 3:00pm and 7:00pm) divided by the total UZA population. As of target-setting, there was only one year of data available. As such, the performance targets have been set flat until further data is available.

Emissions reduction targets are measured as the sum total of all emissions reductions anticipated through CMAQ-funded projects in non-attainment or air quality maintenance areas (currently the cities of Lowell, Springfield, Waltham, and Worcester, and the town of Oak Bluffs) identified in the Statewide Transportation Improvement Program (STIP). This anticipated emissions reduction is calculated using the existing CMAQ processes.

Measure	Current (2017)	2-year (2020)	4-year (2022)
Non-Interstate LOTTR	80%	80%	80%
Interstate LOTTR	68%	68%	68%
TTTR	1.85	1.85	1.85
PHED (Boston UZA)	18.31	18.31	18.31
% non-SOV (Boston UZA)	33.6% (2016)	34.82%	35.46%
Emissions Reductions	Baseline (FFY 14–17)	1,622 CO 497.9 Ozone	TBD CO (Springfield) 1.1 Ozone

MassDOT/ Adopted by MVMPO Performance Measures/ Targets Summary Table

Performance Measure Category	Performance Measure	Recent Data	Targets
PM1: HSIP and Safety	Number of Fatalities Statewide (All Public Roads)	364 average number of fatalities/year for 2012 to 2016	CY 2018 Target = 352 CY 2019 Target = 353 fatalities
PM1: HSIP and Safety	Rate of Fatalities Statewide (All Public Roads)	0.61 fatalities per 100 million vehicles miles traveled per year average for 2012 to 2016	CY 2018 Target = 0.61 CY 2019 Target = 0.58 fatalities per 100 million vehicle miles traveled
PM1: HSIP and Safety	Number of Serious Injuries Statewide (All Public Roads)	3,146 average number of serious injuries per year average from 2012 to 2016	CY 2018 Target = 2,896 CY 2019 Target = 2,801 serious injuries
PM1: HSIP and Safety	Rate of Serious Injuries Statewide (All Public Roads)	5.24 serious injuries per 100 million vehicle miles traveled per year average for 2012 to 2016	CY 2018 Target = 5.01 CY 2019 Target = 4.37 serious injuries per 100 million vehicle miles traveled
PM1: HSIP and Safety	Number of Non-motorized Fatalities and Non-motorized Serious Injury Statewide (All Public Roads)	541 average number of combined serious injuries and fatalities per year for non-motorized modes for 2012 to 2016	CY 2018 Target = 541 CY 2019 Target = 541 combined fatalities and serious injuries for non-motorized modes

MassDOT/ Adopted by MVMPO Performance Measures/ Targets Summary Table (Cont.)

Performance Measure Category	Performance Measure	Recent Data	Targets
PM2: Pavement and Bridge Condition	Percentage of Pavements of the Interstate System in Good Condition Statewide	74.2% in CY 2017	CY 2020 Target = 70% CY 2022 Target = 70%
PM2: Pavement and Bridge Condition	Percentage of Pavements of the Interstate System in Poor Condition Statewide	0.1% in CY 2017	CY 2020 Target = 4% CY 2022 Target = 4%
PM2: Pavement and Bridge Condition	Percentage of Pavements of the non-Interstate NHS in Good Condition Statewide	32.9 % in CY 2017	CY 2020 Target = 30% CY 2022 Target = 30%
PM2: Pavement and Bridge Condition	Percentage of Pavements of the non-Interstate NHS in Poor Condition Statewide	31.4% in CY 2017	CY 2020 Target = 30% CY 2022 Target = 30%

MassDOT/ Adopted by MVMPO Performance Measures/ Targets Summary Table (Cont.)

Performance Measure Category	Performance Measure	Recent Data	Targets
PM2: Pavement and Bridge Condition	Percentage of NHS bridges by deck area in Good Condition Statewide	15.22% Currently	CY 2020 Target = 15% CY 2022 Target = 16%
PM2: Pavement and Bridge Condition	Percentage of NHS bridges by deck area in Poor Condition Statewide	12.37% Currently	CY 2020 Target = 13% CY 2022 Target = 12%
PM3: System Performance/ Freight/ CMAQ	Percent of Person-Miles Traveled on the Interstate that are Reliable Statewide	68 % in CY 2017	CY 2020 Target = 68% CY 2022 Target = 68%
PM3: System Performance/ Freight/ CMAQ	Percent of Person-Miles Traveled on the Non-Interstate NHS that are Reliable Statewide	80% in CY 2017	CY 2020 Target = 80% CY 2022 Target = 80%

MassDOT/ Adopted by MVMPO Performance Measures/ Targets Summary Table (Cont.)

Performance Measure Category	Performance Measure	Recent Data	Targets
PM3: System Performance/ Freight/ CMAQ	Truck Travel Time Reliability (TTTR) Index on the Interstate System Statewide	TTTR index in CY 2017 = 1.85	CY 2020 Target = 1.85 CY 2022 Target = 1.85
PM3: System Performance/ Freight/ CMAQ	Annual Hours of Peak Hour Excessive Delay (PHED) per Capita in the UZA	PHED per capita in CY 2017 = 18.31 hours per person in the UZA	2018-2019 Two-year Target = 18.3 2018-2021 Four-year Target = 18.3
PM3: System Performance/ Freight/ CMAQ	Percent of Non-SOV Travel on the NHS System in the UZA	CY 2016 Non-SOV Travel on the NHS in the UZA = 33.6%	CY 2020 Target = 34.5% CY 2022 Target = 35.1%

**Performance Target(s) Project Will Help Meet
(2020 to 2024 Statewide and Regional Target Funds)**

Year (s) Program- med	City / Town	Project Description	Total Cost Programmed	Federal Performance Target(s) Project Will Help Meet
2020	Amesbury	Amesbury - Reconstruction of Elm Street (# 602418) (AC Yr 2 of 2)	\$7,223,053	Number of non-motorized fatalities and non-motorized serious injury.
2024	Andover	Andover- Bridge Rehabilitation, A-09-036, I-495 over St 28 (SB), A-09-037, I-495 over B&M and MBTA, A-09-041, I-495 over St 28 (NB) (# 606522)	17,204,394	1) Percentage of NHS bridges classified as in Good condition. 2) Percentage of Pavements of the Interstate System in Good Condition and in Poor Condition 3) Percent of the Person-Miles Traveled on the Interstate that are Reliable. 4) Truck Travel Time Reliability (TTTR) Index on the Interstate System.
2021	Georgetown / Boxford	Georgetown - Boxford Border to Boston Trail, from Georgetown Road to West Main Street (Route 97) (# 607541)	\$1,812,628	1) Number of non-motorized fatalities and non-motorized serious injury. 2) Percent change in Tailpipe CO ₂ Emissions on the NHS Compared to Calendar Year 2017 Level.
2023	Georgetown / Newbury	Georgetown - Newbury Border to Boston Trail, (Northern Georgetown to Byfield Section) (# 607542)	\$4,341,120	Number of non-motorized fatalities and non-motorized serious injury.

**Performance Target(s) Project Will Help Meet
(2020 to 2024 Statewide and Regional Target Funds)**

Year (s) Program- med	City / Town	Project Description	Total Cost Programmed	Federal Performance Target(s) Project Will Help Meet
2021	Groveland	Groveland – Groveland Community Trail, from Main Street to King Street (# 608298)	\$2,064,255	1) Number of non-motorized fatalities and non-motorized serious injury. 2) Percent change in Tailpipe CO ₂ Emissions on the NHS Compared to Calendar Year 2017 Level.
2020	Haverhill	Haverhill – Bradford Rail Trail Extension from Route 125 to Railroad Street (# 608027)	\$1,766,108	Number of non-motorized fatalities and non-motorized serious injury.
2020-2023	Haverhill	Haverhill – Bridge Replacement, H-12-039, I-495 (NB & SB) over Merrimack River (# 605306) (AC Yrs 3 to 6 of 6)	\$61,809,676	1) Percentage of NHS bridges classified as in Good condition. 2) Percentage of Pavements of the Interstate System in Good Condition and in Poor Condition 3) Percent of the Person-Miles Traveled on the Interstate that are Reliable. 4) Truck Travel Time Reliability (TTTR) Index on the Interstate System.

**Performance Target(s) Project Will Help Meet
(2020 to 2024 Statewide and Regional Target Funds) (Cont.)**

Year (s) Program- med	City / Town	Project Description	Total Cost Programmed	Federal Performance Target(s) Project Will Help Meet
2023- 2024	Haverhill	Haverhill – Bridge Replacement, H-12-040, I-495 (NB & SB) over Merrimack River (# TBD) (AC Yrs 1 to 2 of 3)	\$68,379,326	1) Percentage of NHS bridges classified as in Good condition. 2) Percentage of Pavements of the Interstate System in Good Condition and in Poor Condition 3) Percent of the Person-Miles Traveled on the Interstate that are Reliable. 4) Truck Travel Time Reliability (TTTR) Index on the Interstate System.
2022	Haverhill	Haverhill – Intersection Improvements at Rt 110 / Rt 108 (#608761)	\$2,099,520	1) Number and Rate of Fatalities 2) Number and Rate of Serious Injuries 3) Number of non-motorized fatalities and non-motorized serious injury. 4) Percent change in Tailpipe CO ₂ Emissions on the NHS Compared to Calendar Year 2017 Level. 5) Percent of the Person-Miles Traveled on the non-Interstate NHS that are Reliable.
2023- 2024	Haverhill	Haverhill – Roadway Reconstruction on North Avenue, from Main Street (Route 125) to Plaistow NH (#608788)	\$13,678,560	Number of non-motorized fatalities and non-motorized serious injury.

**Performance Target(s) Project Will Help Meet
(2020 to 2024 Statewide and Regional Target Funds) (Cont.)**

Year (s) Program- med	City / Town	Project Description	Total Cost Programmed	Federal Performance Target(s) Project Will Help Meet
2023	Lawrence	Lawrence – Lawrence Manchester Rail Corridor (LMRC) Rail Trail (# 608930)	\$15,950,704	Number of non-motorized fatalities and non-motorized serious injury
2021	Newbury - Newburyport - Salisbury	Newbury - Newburyport - Salisbury - Resurfacing and related work on Route 1 (# 608494)	\$9,807,200	Percentage of Pavements of the non-Interstate NHS in Good condition.
2021-2022	North Andover	North Andover - Corridor Improvements on Route 114, between Route 125 (Andover Street) & Stop & Shop Drive-way (# 608095)	\$17,399,023	1) Number of non-motorized fatalities and non-motorized serious injury. 2) Percentage of Pavements of the non-Interstate NHS in Good condition. 3) Percent of the Person-Miles Traveled on the non-Interstate NHS that are Reliable. 4) Number and Rate of Serious Injuries
2023	Salisbury	Salisbury – Reconstruction of Route 1 (Lafayette Road)	\$7,090,517	Number of non-motorized fatalities and non-motorized serious injury.

Transit Asset Management (TAM) Plan Performance Management Targets

The following information is from the MVRTA Transit Asset Management Plan prepared 8/20/2018.

Annual Performance Targets and Measures

As a recipient of Federal Transit Administration funds, the MVRTA is required to develop and maintain a Transit Asset Management Plan per Federal Transit Administration's (FTA's) Final Rule at 49 CFR Part 625. As defined by the Rule, Transit Asset Management (TAM) is the strategic and systematic practice of processing, operating, inspecting, maintaining, rehabilitating and replacing transit capital assets to manage their performance, risks and cost over their life cycles to provide safe, cost effective and reliable public transportation.

The preparation of the TAM is based on identifying the transit assets which the MVRTA owns and has direct Capital responsibility for and the performance measures included in the Final Rule that relate to these identified assets. A completed TAM plan is required by September 30, 2018.

	Performance Measure
Equipment Non-revenue support-service and maintenance vehicles	Percentage of vehicles met or exceeded Useful Life Benchmark
Rolling Stock Revenue vehicles by mode, bus/ van	Percent of vehicles met or exceeded Useful Life Benchmark
Facilities Maintenance and administrative facilities: and passenger stations (buildings) and parking facilities	Percentage of Assets with condition rating below 3.0 on FTA Transit Economic Requirements Model (TERM) Scale.

Using these Performance Measures leads to the setting of targets against the defined Useful Life Benchmark (ULB). FTA defines as:

The expected lifecycle of a capital asset for a particular Transit Provider’s operating environment, or the acceptable period of use in service for a particular Transit Provider’s operating environment.

The MVRTA has defined the ULB as presented in FTA circular C 5010.1E for buses and vans:

Minimum Service-life for Buses and Vans

Category	Length	Minimum Life	
		(Whichever comes first)	
		Years	Miles
Heavy-Duty Large Bus	35 to 45 ft.	12	500,000
Heavy-Duty Small Bus	30 ft.	10	350,000
Medium-Duty Transit Bus	30 ft.	7	200,000
Light-Duty Mid-Sized Bus	25 to 35 ft.	5	150,000
Light Duty Small Bus, Cutaways and Modified Van	16 to 28 ft.	4	100,000

For this first TAM Plan the MVRTA has prepared the following targets:

Transit TAM Targets

Percent of revenue vehicles that have met or exceeded their useful life benchmark:

Bus 5% (Replace 3 model year 2007 buses FFY 2019 = 3/58)

Van 0%

Non-revenue vehicles - percent of service vehicles that have met or exceeded their useful life benchmark:

Maintenance Trucks 0%

SUV (Supervisory vehicle) 14% (Replace 1 model year 2013 supervisory vehicle FFY 2019 = 1/7)

Facility - percent of facilities rated below 3 on the condition scale:

Passenger/ Parking facilities 0% (McGovern Center, Gateway Surface Parking,
Haverhill Intermodal Parking, Costello Center)

Administrative/ maintenance facilities 0% (85 Railroad Ave. HQ)

Updates to these targets will be done in conjunction with the preparation of the next TAM Plan and the FY 2020-2024 Capital Plan.

In January 2019 the Merrimack Valley MPO voted to adopt the transit TAM performance measure targets set by MVRTA for 2019.

MVRTA/ Adopted by MVMPO Performance Measures/ Targets Summary Table

Category	Performance Measure	2019 Targets
Equipment Non-revenue support-service and maintenance vehicles	Percentage of vehicles met or exceeded Useful Life Benchmark	Maintenance Trucks – 0% SUV (Supervisory Vehicle) – 14%
Rolling Stock Revenue vehicles by mode, bus/ van	Percent of vehicles met or exceeded Useful Life Benchmark	Bus – 5% Van – 0%
Facilities Maintenance and administrative facilities: and passenger stations (buildings) and parking facilities	Percentage of Assets with condition rating below 3.0 on FTA Transit Economic Requirements Model (TERM) Scale.	Passenger/ Parking facilities – 0% Administrative/ Maintenance facilities – 0%

Part A. 3. Prioritization

The FFYs 2020-2024 Merrimack Valley Metropolitan Planning Organization's Transportation Improvement Program (TIP) contains Federal-aid project programming information for five years. For each year, gross estimates of project costs are listed in the federal fiscal year of the proposed advertise date. Federal fiscal years begin on October 1 and run through September 30. For example, FFY 2020 begins on October 1, 2019 and ends on September 30, 2020. The advertising dates shown for roadway projects were determined based on information provided by the Capital Expenditure and Program Office within MassDOT, the MassDOT District 4 Office, and MVMPO member communities. The MVRTA and MassDOT's Rail and Transit Division determined programming dates for transit projects.

Projects are programmed in the region's TIP based on a number of factors. These include the project's score based upon the MPO's Transportation Evaluation Criteria (TEC), project cost and the availability of STP funding in the years covered in the document. Road and bridge project selection is also largely dependent upon the current and expected design status for each project, which can be affected by such factors as environmental permitting and Right-of-Way (ROW) status. For bridge projects, information from MassDOT's Bridge section is given primary consideration when scheduling projects.

Transportation Evaluation Criteria

In 2003, the MPOs worked with the then Massachusetts Executive Office of Transportation and Public Works (EOTPW) to develop objective evaluation criteria that could be applied to transportation projects in the Commonwealth. Early in 2004, EOTPW asked planning staff from the then MassHighway Planning, the MassHighway district offices and the regional planning agencies to apply these criteria to projects within their respective Metropolitan Planning Organizations (MPOs). Application of these criteria include not only an evaluation of the magnitude of improvement in the condition, mobility, and safety of transportation projects, but also an evaluation of their community effects and support, the land use and economic development impact, and the environmental effects. A score valued from -3 to 3 is assigned to each of the criteria. In fact, there is at least one score associated with each of the FAST Act ten planning factors. The scores within each category are averaged and then the category averages are added together to reach the total score. The following chart illustrates the data and scoring criteria for each TEC element as well as the planning factors considered in each element, and which TEC elements will be affected by performance measures.

TEC Element	Data	Scoring	Additional Notes	Planning Factors Considered
Condition				
A. Magnitude of pavement condition improvements	Use Pavement Condition Index (PCI) (if available) to rate current condition as excellent, good, fair, or poor. If not available, use pavement condition description from other sources.	Poor = 3 to 2 Fair = 2 to 1 Good = 1 to 2 Excellent = 0 to 1	Pavement conditions often vary across the project limits, and therefore scores have a range. Excellent current condition may score a 1 if project is not expected to be programmed for several years.	Preservation; Safety; Resiliency & reliability; Economic Vitality. Contributes to meeting Pavement Performance Measure Targets of 70% Interstate or 30% Non-Interstate NHS Pavements in Good Condition and/or 4% max. Interstate or 30% max. Non-Interstate Pavements in Poor Condition Statewide
B. Magnitude of improvement of other infrastructure	Types and number of upgrades	Major Upgrade such as widening a bridge = 3 Multiple upgrades from list of drainage improvements, new sidewalks, new signals, signal upgrades, adding turn lanes, etc. = 3 to 2 One or two of above upgrades = 2 to 1 No Upgrades = 0		Preservation; Safety; Resiliency & reliability; Accessibility & mobility; Environmental and economic sustainability; Enhance travel & tourism; Note that all roadway projects consider drainage improvements.

TEC Element	Data	Scoring	Additional Notes	Planning Factors Considered
Mobility				
A. Effect on magnitude and duration of congestion	Magnitude of current congestion, measured by Level of Service, traffic delays, or queue lengths, if available. If there is not currently congestion, then score is zero unless project causes congestion.	Significant reduction in congestion = 3 Moderate reduction in congestion = 2 Small reduction in congestion = 1 No change in congestion = 0 Small increase in congestion = -1 Moderate increase in congestion = -2 Significant increase in congestion = -3	If there is not currently congestion, then score is zero unless project causes new congestion.	Economic Vitality; Accessibility and Mobility; Resiliency and reliability; Enhance travel and tourism. Contributes to meeting System Performance Measure Targets of 68% Interstate or 80% Non-Interstate NHS person-miles travelled that are reliable Statewide and/or 1.85 Truck Travel Time Reliability Index Statewide
B. Effect on travel time and connectivity / access	Types and numbers of upgrades, such as, improves travel time by widening shoulders, or signal improvements; provides new access, connects existing trails, etc.	Major Upgrade such as providing new roadway access = 3 Multiple upgrades from signal improvements, new sidewalks, adding turn lanes, new trail = 3 to 2 One or two of above upgrades, or new = 2 to 1 No Upgrades = 0	Additional point (not above 3) if providing connectivity between schools, businesses, and other activity centers.	Economic Vitality; Accessibility and Mobility; Resiliency and reliability; Connectivity; Enhance travel and tourism.

TEC Element	Data	Scoring	Additional Notes	Planning Factors Considered
Mobility (Cont.)				
C. Effect on other modes using the facility	Types and numbers of upgrades to Other modes (means of travel)	Major Upgrade for Other mode of transportation = 3 Multiple upgrades from adding bike lanes, new sidewalks, wheelchair ramps, proximity to transit facilities = 3 to 2 One or two of above upgrades = 2 to 1 No Upgrades to Other modes = 0		Economic Vitality; Safety; Security; Accessibility and Mobility; Environmental and economic sustainability; Connectivity; Resiliency and reliability; Enhance travel and tourism. Contributes to meeting System Performance Measure Target of 34.5% Non-SOV travel on the NHS in the UZA
D. Effect on regional and local traffic	Whether affects traffic outside of the project limits locally, and beyond that, regionally	Is on the NHS, a State numbered route, connector, or highly traveled local road; and: Substantially improves traffic regionally = 3 Moderately improves traffic regionally = 2 to 1 Substantially or moderately improves traffic locally = 2 to 1 Neutral = 0 Negative scores if adversely affects traffic to the degrees and geography above.		Economic Vitality; Accessibility and Mobility; Efficient System Management; Enhance travel and tourism.

TEC Element	Data	Scoring	Additional Notes	Planning Factors Considered
Safety and Security				
A. Effect on crash rate compared to State average	Whether location is designated a State defined Crash Cluster location (HSIP eligible) and the EPDO score assigned by that performance measure, or crash rate compared to State average, other safety concerns	High EPDO score, crash cluster, Top 100 crash locations = 3 Higher than average crash rate/ EPDO score = 2 Lower than average crash rate, but safety concerns are being addressed = 1 No effect on crash rate = 0		Safety; Efficient System Management; Resiliency and Reliability. Contributes to meeting HSIP and Safety Performance Measure Targets for number of fatalities and serious injuries, rates of fatality and serious injury Statewide on all public roads.
B. Effect on bicycle and pedestrian safety	Includes improvements that effect bicycle and pedestrian safety or is detrimental to pedestrian bicycle safety.	Major Upgrade, separate bike lane, or shared use path = 3 Multiple upgrades from list of: widening shoulders for bikes; new or improved sidewalks; new pedestrian signals; wheelchair ramps; etc. = 3 to 2 One or two of above upgrades = 2 to 1 No Upgrades = 0 Could use negative scores if detrimental to bike / pedestrian safety	Additional point (not above 3) if improvements are near schools or other areas frequented by bicyclists and/ or pedestrians, or there is a history of crashes involving bikes and/or pedestrians.	Safety; Resiliency and Reliability; Enhance Travel and Tourism. Contributes to meeting HSIP and Safety Performance Measure Targets for Number of non-motorized fatalities and serious injuries Statewide on all public roads.

TEC Element	Data	Scoring	Additional Notes	Planning Factors Considered
Safety and Security (Cont.)				
C. Effect on transportation security and evacuation	Is on the NHS. Is a community designated evacuation route. Is within 10 miles of a nuclear power plant.	Will significantly improve travel along an evacuation route = 3 Is an evacuation route within 10 miles of a nuclear power plant, or is on the NHS and improves travel = 2 Is an evacuation route or Is within 10 miles of a nuclear power plant, or in on the NHS = 1 Is not any of the 3 listed in the data column = 0		Security; Safety.
Community Effects and Support				
A. Residential effects: ROW, noise, aesthetic, cut through traffic, and other.	Degree of effect on residential aspects.	Improves these aspects: Significantly = 3 Moderately = 2 Slightly = 1 No effect on these aspects = 0 Creates negative effects from these aspects: Slightly = -1 Moderately = -2 Significantly = -3		Environmental Sustainability;

TEC Element	Data	Scoring	Additional Notes	Planning Factors Considered
Community Effects and Support (Cont.)				
B. Public, local government, legislative, and regional support	Degree of support.	Improves these aspects: Greatly Supported = 3 Moderately Supported = 2 Somewhat Supported = 1 Not Supported, or unknown = 0 Some Opposition = -1		
C. Effect on service to minority or low-income neighborhoods. (Title VI and EJ)	Increased or decreased service to Title VI and EJ neighborhoods	Improves service to Title VI or EJ neighborhoods: Significantly = 3 Moderately = 2 Slightly = 1 No effect on Title VI or EJ neighborhood = 0 Slightly decreased service = - 1 Moderately decreased service = - 2 Significantly decreased service = - 3		Quality of Life; Accessibility and Mobility; Resiliency and Reliability; Enhance Travel and Tourism.

TEC Element	Data	Scoring	Additional Notes	Planning Factors Considered
Community Effects and Support (Cont.)				
D. Other impacts / benefits to minority or low-income neighborhoods. (Title VI and EJ)	Number / degree of positive or negative impacts to Title VI and EJ neighborhoods	Positive Impacts to Title VI or EJ neighborhoods: Significant = 3 Moderate = 2 Slight = 1 No effect on Title VI or EJ neighborhood = 0 Negative Impacts to Title VI or EJ neighborhoods: Slight = - 1 Moderate = - 2 Significant = - 3		Quality of Life.
E. Effect on development and redevelopment of housing stock	Number / degree of positive or negative effects on development and redevelopment of housing stock	Positive Impacts to development / redevelopment of housing stock: Significant = 3 Moderate = 2 Slight = 1 No effect on development or redevelopment of housing stock = 0 Negative Impacts to development / redevelopment of housing stock: Slight = - 1 Moderate = - 2 Significant = - 3		Economic Vitality; Quality of Life.

TEC Element	Data	Scoring	Additional Notes	Planning Factors Considered
Land Use and Economic Development				
A. Business effects: ROW, noise, traffic, parking, freight access and other.	Degree of effect on business aspects.	Improves these aspects: Sig- nificantly = 3 Moderately = 2 Slightly = 1 No effect on these aspects = 0 Creates negative effects from these aspects: Slightly = -1 Moderately = -2 Significantly = -3		Economic Vitality; Accessibility and Mobility.
B. Sustainable development effects. Consistent with Merrimack Valley Priority Growth Strategy (MVPGS).	Number / degree of positive or negative effects on sustainable development and proximity to State and/or Regional Priority Development Areas (PDA)	Positive Impacts to sustainable development: Significant = 3 Moderate = 2 Slight = 1 No effect on development or redevelopment of housing stock = 0 Negative Impacts to development / redevelopment of housing stock: Slight = - 1 Moderate = - 2 Significant = - 3	Additional points, (not above 3) if located in or near a State or Regional Priority Development Area	Economic Vitality; Consistency with State and local planned growth.

TEC Element	Data	Scoring	Additional Notes	Planning Factors Considered
Land Use and Economic Development (Cont.)				
C. Consistent with regional land-use and economic development plans and Merrimack Valley Priority Growth Strategy (MVPGS).	Degree of consistency with regional plans	Consistent with regional plans: Significantly = 3 Moderately = 2 Slightly = 1 Neutral = 0 Not Consistent with regional Plans: Slightly = - 1 Moderately = - 2 Significantly = - 3	Additional points (not above 3) if located in or near a Regional Priority Development Area	Economic Vitality; Consistency with State and local planned growth and economic development plans.
D. Effect on job creation.	Estimated job creation	Effect on job creation: Significant = 3 Moderate = 2 Slight = 1 Neutral = 0 Elimination of jobs: Slight = - 1 Moderate = - 2 Significant = - 3		Economic Vitality.

TEC Element	Data	Scoring	Additional Notes	Planning Factors Considered
Environmental Effects				
A. Air Quality / Climate effects	Green House Gas Analysis Results	Effect on Air Quality: Quantified decrease in emissions = 2 or 1 Qualitative decrease in emissions = 1 No effect on emissions = 0 Qualitative increase in emissions = -1 Quantified increase in emissions = - 2 or - 1		Protect and Enhance the Environment. Contributes to meeting CMAQ Performance Measure Target of 18.3 Annual Hours of Peak Hour Excessive Delay (PHED) per Capita in the UZA
B. Water Quality / supply effects; wetlands effects.	Number / degree of positive or negative effects on water quality / supply effects; wetlands effects.	Effect on Water Quality / supply and wetlands: Positive effect: Significant = 3 Moderate = 2 Slight = 1 Neutral = 0 Negative Effect: Slight = - 1 Moderate = - 2 Significant = - 3		Protect and Enhance the Environment; Reduce or mitigate stormwater impacts.

TEC Element	Data	Scoring	Additional Notes	Planning Factors Considered
Environmental Effects (Cont.)				
C. Historic and cultural resource effects	Proximity / degree of positive or negative effects on historic and cultural resources	Positive effect on historic and cultural resources: Significant = 3 Moderate = 2 Slight = 1 Neutral = 0 Negative Effect: Slight = - 1 Moderate = - 2 Significant = - 3	Often considers improved access to nearby resources.	Economic Vitality; Accessibility and Mobility; Quality of Life; Enhance Travel and Tourism.
D. Effect on wildlife habitat and endangered species.	Location of project in State Estimated Habitat of Rare Wildlife or State Priority Habitat of Rare Species	Positive effect on wildlife or endangered species in a State designated area: Significant = 3 Moderate = 2 Slight = 1 Not in a wildlife or endangered species area = 0 Negative effect on wildlife or endangered species in a State designated area.: Slight = - 1 Moderate = - 2 Significant = - 3		Protect and Enhance the Environment.

The resulting Transportation Evaluation Criteria (TEC) scores for selected projects in the Merrimack Valley region that were derived by applying these criteria are shown in Appendix C and also in the 'Additional Information' column in the project listings. It is the goal of the MVMPO that these criteria ratings, along with information related to the readiness of projects, will make the planning process, and more specifically, the selection and prioritization of projects, more transparent to the general public. A sample project evaluation sheet showing the various criteria is in Appendix D.

The use of these TEC scores also allows the Merrimack Valley MPO to meet FAST Act requirements for programming Transportation Alternatives (TA) funding (similar to TAP funding from the previous legislation). TA funding is a set-aside of Surface Transportation Block Grant Programming (STBG) through a competitive process and, in general, helps to manage performance by focusing available funding on the highest regional priorities. It also helps to draw attention to the reader that FAST Act is a very Performance Measure - oriented piece of legislation.

Part A. 4. Public Participation

The principal objective of this document is the provision of an additional point for public access to and review of the transportation planning process. This FFYs 2020-2024 Transportation Improvement Program was developed in accordance with the Public Participation Process established for the Merrimack Valley Metropolitan Planning Organization (MVMPO). The MVMPO amended its current Public Involvement Process in March of 2017, it is contained in the MVMPO Public Participation Plan as Amended through March 2017 on the MVPC website under Transportation Reports. The Process applies to the development of the Transportation Improvement Program (TIP), the Regional Transportation Plan (RTP) and the Unified Planning Work Program (UPWP). The Public Involvement Process endorsed by the MVMPO is also used by the MVRTA as its public involvement process. The notice of public involvement and time established for review and comment for the development of this TIP satisfies the Program of Project requirements established by the Federal Transit Administration (FTA).

The Merrimack Valley MPO's Public Participation Plan as amended through March 2017, reflects the consultation requirements identified in the FAST Act of 2015 and prior federal transportation authorizations, and the existing transportation planning regulations developed by the U.S. Department of Transportation for the development of Regional Transportation Plans and Transportation Improvement Programs. This document identifies a number of stakeholders to be consulted in developing these documents. In developing the Draft FFYs 2020-2024 Transportation Improvement Program, all

MVMPO stakeholders were given notice that the process of developing the FFYs 2020-2024 TIP was beginning. Stakeholders were also notified of the availability of the draft document for public review and comment.

Public Participation Plan Stakeholder List

Listed below are categories of interested individuals, organizations and other stakeholders (Interested Parties) identified by the MVMPO for inclusion in the PPP. They are defined based on the individual groups identified in the FAST Act of 2015 and prior federal transportation authorizations, and the existing transportation planning regulations developed by the U.S. Department of Transportation.

The MVMPO continues to add individuals, organizations or other stakeholders to this list and their addition is not considered an act requiring the formal amendment of the PPP. Similarly, any of the individuals or organizations identified below may request to be removed from the mailing list and such action does not necessitate a formal PPP amendment.

Individuals, including:

- Interested individuals, business persons
- Merrimack Valley Transportation Committee (MVTC) members
- Libraries
- City/Town Clerks
- MVMPO Region Congressional Delegation
- MVMPO Region Legislative Delegation

Affected public agencies, including:

- Boards of Selectmen / City Councils
- Chief Elected Officials
- City and Town Engineers
- Federal Emergency Management Agency
- Federal Highway Administration
- Federal Transit Administration
- Greater Derry-Salem Cooperative Alliance for Regional Transportation (CART)
- Local Departments of Public Works
- Local Police Departments

- Local Traffic and Safety Committees
- Massachusetts Department of Environmental Protection
- MBTA Commuter Rail Officials
- Massachusetts Executive Office of Housing and Economic Development
- Massachusetts Executive Office of Public Safety and Security
- MassDOT
- Merrimack Valley Regional Transit Authority
- Metropolitan Area Planning Council
- Nashua Regional Planning Commission
- Rockingham Planning Commission
- U.S. Environmental Protection Agency

Representatives of public transportation employees, including:

- Truck Driver's Union Local #170

Freight shippers, including:

- P.J. Murphy Transportation
- JB Hunt
- Estes Express
- Shaheen Brothers
- ABF Freight
- PanAm Railways
- Bonney's Express

Providers of freight transportation services, including:

- United Parcel Service
- Federal Express

Private profit- and non-profit providers of transportation in the region. including:

- Assist Incorporated
- C&J Transportation
- Cape Ann Transit Authority (CATA)
- Central Wheelchair and Van Transportation
- EMT Corporation
- Local Taxi Companies
- Northern Essex Elder Transportation (NEET)
- Other Transportation Providers Identified in the Regional Transportation Plan
- The Coach Company
- TransCare

Representatives of users of public transportation. including:

- American Training, Inc.
- Cambridge College
- Community Action Incorporated (CAI)
- Emmaus, Inc.
- Elder Services of the Merrimack Valley
- Local Senior Centers/Councils on Aging
- Northeast Independent Living Program
- Merrimack College
- Merrimack Valley Hospice
- Merrimack Valley Workforce Investment Board, Inc.
- Northern Essex Community College
- Office of Employment Services

Representatives of bicyclist and pedestrian advocacy organizations.

including:

- Andover Trails Committee
- Bay Circuit Alliance
- Coastal Trails Coalition
- Essex National Heritage Commission
- Essex County Trail Association
- Groveland Open Space and Recreation Committee

- MassBike
- Merrimack Valley Off-Road Trails Committee

Representatives for the community of individuals with disabilities.

including:

- Executive Office of Health and Human Services
- Northeast Independent Living Program
- Department of Mental Health
- Massachusetts Commission for the Blind
- Area Nursing Homes
- United Cerebral Palsy
- CLASS Inc.
- Fidelity House
- Association of Retarded Persons (ARC)

Organizations and facilities that serve low-income and minority households who traditionally have been underserved by existing transportation systems and may face challenges accessing employment and other services. includ-

ing:

- MVRTA Transit Centers in Amesbury, Haverhill and Lawrence (post notices)
- Social Security Offices
- Employment Offices (post notices)
- Ethnic, Civic/Social, Faith-Based and Veterans Organizations
- Merrimack Valley Goodwill
- Area Hospitals
- Salvation Army
- Groundwork Lawrence
- Lawrence Community Works
- United Way of the Merrimack Valley
- Methuen Arlington Neighborhood, Inc.
- YMCA/YWCA

Agencies and officials responsible for other planning activities within the MPA that are affected by transportation, including:

a. State and local planned growth:

1. Area Planning Boards
2. Mass Development
3. Merrimack Valley Transportation Management Association
4. The Junction Transportation Management Organization

b. Economic development:

1. Chambers of Commerce
2. Economic Development Administration
3. Local Community Development Directors
4. Merrimack Valley Economic Development Council

c. Environmental agencies and federal lands:

1. Andover Village Improvement Society (AVIS)
2. Essex County Greenbelt Association
3. Local Conservation Commissions
4. MassRiverways
5. Merrimack River Watershed Council
6. National Park Service
7. Powwow River Watershed Association
8. Parker River Clean Water Association
9. Shawsheen River Watershed Association
10. Trustees of Reservations
11. U.S. Environmental Protection Agency (EPA)
12. U.S. Fish and Wildlife Service

d. Airport operations:

1. Lawrence Airport Commission

e. Other Interested Parties

1. Conservation Law Foundation

The notices were sent directly to 873 addressees representing these groups, 600 via e-mail and 273 via traditional mail.

In addition to these direct mailings, and in accordance with this process, public notice of the Draft FFYs 2020-2024 Transportation Improvement Program was published in the *Lawrence Eagle Tribune*, *Newburyport Daily News*, *Haverhill Gazette* (Published Weekly) and *Rumbo News* informing the public of its right to comment on the document which would be available at the MVPC office, the MVPC website and local libraries from May 1, 2019 through May 21, 2019. It said that comments would be received through May 21, 2019 and that two separate public hearings on the document would take place on May 15, 2019 at 1:00 PM and at 6:00 PM at the MVPC office at 160 Main Street in Haverhill, MA. The MVMPO will summarize comments that are received during the 21-day review and comment period and will include this summary in the Final FFYs 2020-2024 TIP. Public input in developing the TIP was sought at the following meetings in 2019:

- January 23, 2019, February 27, 2019, March 27, 2019, April 24, 2019 and May 22, 2019 MVMPO Meetings;
- February 7, 2019, March 7, 2019, April 4, 2019 and May 2, 2019 MVRTA Advisory Board meetings held at the MVRTA Office;
- February 21, 2019 and March 21, 2019 Merrimack Valley Planning Commission (MVPC) meetings;
- March 12, 2019 Environmental Resiliency/ Sustainability Meeting
- April 3, 2019 DPW Directors/Stormwater Collaborative Meeting

The above meetings were held at the Merrimack Valley Planning Commission unless otherwise stated.

Part A. 5. Amendment/Adjustment Procedures

The following amendment/adjustment procedures are hereby adopted to consist of the following:

Minor adjustments to the TIP do not require formal MPO action and can be made via the administrative action of the Merrimack Valley MPO. These minor adjustments are limited to:

- .Moving a project from Fiscal Year 2 to Fiscal Year 1 (Annual Element);
- .Moving a project from Fiscal Year 2 or later to a later Fiscal Year;
- .Changing the scope and description of a project as long as they are minor changes;
- .Changing funding amounts that are less than a ten percent increase in project cost if project cost is more than \$5 million dollars;
- .Changing funding amounts that are an increase of less than \$500,000 if project cost is \$5 million dollars or less;
- .Changing funding sources.

Major changes continue to require MPO action through the formal amendment process. Major changes would require a twenty-one-day public review and comment period that includes a public hearing. These changes include, but are not limited to:

- .Advancement of other than a Fiscal Year 2 project;
- .Ten percent or more increases in the construction cost estimate for a Fiscal Year 1 project costing more than \$5 million dollars;
- .Project cost increase of \$500,000 or more, in the construction cost estimate for a Fiscal Year 1 project costing \$5 million dollars or less;
- Adding a new project.
- Deleting a project
- Major change in project/project phase initiation dates or design scope

Part A. 6. High Priority Projects

SAFETEA-LU contained a number of earmarked transportation projects that were to receive federal funding. Specific funding amounts were obligated to each of these projects, but no additional funding was included in SAFETEA-LU to complete them. Consequently, states with these projects must implement them within the annual federal authorization limits established in the legislation. The Merrimack Valley region contains eleven such projects which are shown below along with their status:

<u>Highway High Priority Projects</u>	<u>Status</u>
Amesbury/Newburyport – Rehabilitation of I-95 Whittier Bridge	Project Complete
Andover – Design, Engineering and Construction at I-93 The Junction Interchange, (Andover, Tewksbury, and Wilmington)	Draft EIR/EIS Being Developed
Haverhill – Construct Haverhill intermodal center access and vehicle capacity improvements.	Project Complete
Lawrence – Design and construct Canal and Union Street Corridor improvements.	Project Complete
Lawrence – Construct access improvements to the Lawrence Gateway Project.	Project Complete
Methuen – Design, engineering and construction of Methuen Rotary alternative at I-93 and Routes 110 and 113.	Project Complete
Newbury – Rehabilitation and paving of Parker River Road	Project Complete
North Andover – Improvements to Mass. Ave., Andover St., Osgood St., Salem St and Johnson St. in the Old Town Center of North Andover	Project Complete
Parker River National Wildlife Refuge – Preliminary engineering for Rehabilitation and paving of Sunset Drive in National Wildlife Refuge	Project Complete
Salisbury to Boxford – Design, Engineer, Permit and Construct “Border to Boston Bikeway” rail trail project	Project Under Design

<u>Transit Projects for Bus and Bus-Related Facilities and Clean Fuels Grant Program</u>	<u>Status</u>
Haverhill – Design and Construct Intermodal Transit Parking Improvements.	Project Complete (see above)
Lawrence – Gateway Intermodal and Quadrant Area Reuse Project.	Project Complete (see above)
Newburyport – Design and Construct Intermodal Facility	Project Under Construction

Part A. 7. Advance Construction

Advance Construction is a Federal-aid fund management tool, which as described by the Federal Highway Administration website:

“...allows states to begin a project even in the absence of sufficient Federal-aid obligation authority to cover the Federal share of project costs. It is codified in Title 23, Section 115. Advance construction eliminates the need to set aside full obligational authority before starting projects...At some future date when the state does have sufficient obligational authority, it may convert an advance-constructed project to a Federal-aid project by obligating the permissible share of its Federal-aid funds and receiving subsequent reimbursements.”

In other words, the state pays for the project with non-Federal-aid funds to begin with and can later seek reimbursement of the Federal share of the funding category’s project cost by obligating Federal-aid funding in future years.

Projects must meet the following criteria before they can be designated to use the Advanced Construction (AC) funding mechanism:

1. The project’s estimated Federal participating cost exceeds the **total** regional annual target (i.e. sum of HSIP, CMAQ, TA and Non HSIP/CMAQ/TA), and
2. Construction, based on an engineering review of the project, will take place during all the years for which federal funding is programmed.

The following projects are programmed in the FFY 2020-2024 TIP using this Advance Construction (AC) method:

- Amesbury – Reconstruction of Elm Street
- Haverhill – Bridge Replacement, H-12-039, I-495 (NB & SB) over Merrimack River
- North Andover- Corridor Improvements on Route 114, between Rt 125 (Andover St) & Stop & Shop Driveway
- Haverhill - Reconstruction on North Avenue from Main Street (Route 125) to Plaistow NH
- Haverhill - Bridge Replacement, H-12-007 & H-12-025, Bridge Street (SR 125) over Merrimack River and the Abandoned B&M RR (Proposed Bikeway)
- Andover - Bridge Rehabilitation, A-09-036, I-495 over St 28 (SB), A-09-037, I-495 over B&M and MBTA, A-09-041, I-495 over St 28 (NB)

Part A. 8. Transportation Funding Programs

Projects listed in the TIP must show the sources of funding that will be used to complete the project. The projects in the FFYs 2020 -2024 TIP are slated to use funding from the following Federal-aid funding programs identified in the FAST Act federal transportation funding authorization. Please note that in some cases Federal-aid funding is from older funding programs established in earlier legislation such as SAFETEA-LU and MAP-21. Projects may also receive non-Federal Aid funding which is shown in the project listings.

Highway Projects

Bridge Replacement and Rehabilitation ((BR) (continued in FAST Act)) - funds replacement and repair of Structurally Deficient or unsafe bridges in urban and rural areas on any public road. Bridges can be on the federal aid system (BR ON) or off system (BR OFF).

Funding: Federal - 80%, State - 20%

Congestion Mitigation and Air Quality Improvement Program ((CMAQ) (continued in FAST Act)) – funds projects that reduce congestion and improve air quality.

Funding: Federal - 80%, State - 20%

High Priority Projects (HPP) (Carryover from SAFETEA-LU) – funds up to 80% of the costs of specific transportation projects identified in SAFETEA-LU. These projects have a separate allocation, but do not receive additional funds, and are therefore subject to the state’s federal authorization limit.

Funding: Federal- 80%, State – 20%

Highway Safety Improvement Program ((HSIP) (continued in FAST Act)) - funds safety improvement projects at high crash locations and Railway-Highway Crossings.

Funding: Federal - 90%, State – 10%

National Highway Performance Program (NHPP) (continued in FAST Act) - funds projects on all National Highway System Roadways.

Funding: Varies, generally Federal - 80%, State – 20%, but for the Interstate System, Federal - 90%, State – 10%

Non-Federal Aid (NFA) - funds construction, reconstruction, and improvement projects on roads and bridges in urban and rural areas.

Funding: State - 100% (Transportation Bond Bill), or Private - 100%

Transportation Funding Programs - Highway Projects (Continued)

Surface Transportation Block Grant Program (STBG) (STP) – (also known as the Surface Transportation Program (STP) from previous legislation) - funding for any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.

STP Enhancements ((STP E) ((SAFETEA-LU; not continued in MAP-21)) - a portion of Surface Transportation Program funding for enhancement projects chosen by states and localities.

Funding: Federal -80%, State - 20%

Transportation Alternatives Program (TAP) – (MAP-21, replaced in FAST Act with Transportation Alternatives (TA) set aside of STBG funds) - funds for projects which can be defined as transportation alternatives including bicycle and pedestrian facilities, enhanced mobility, community improvements, environmental mitigations, and various other types of transportation alternatives as defined in FAST Act.

Funding: Federal - 80%, State - 20%

Transit Projects

Projects from the following Federal-aid (FAST Act) and non-Federal-aid funding categories are shown in the FFY 2020-2024 TIP.

Section 5307 (Capital and Planning) (continued in FAST Act) - funds routine capital projects and planning assistance in urban areas. This is an urban formula grant program for MVRTA Preventative Maintenance and ADA costs.

Funding: Federal - 80%, State - 20% (Bond Issue Funds) (capital and planning expenses)

State funding for the MVRTA's operating budget is provided through an agreement with the Transit Division of MassDOT. Local funds are derived from community assessments based on the number of route miles and special services operated within each community.

The Merrimack Valley Planning Commission will provide the 20% match for the planning activities it will conduct for the Merrimack Valley Regional Transit Authority under its Section 5307 transit planning contract with the Authority.

Section 5309 (continued in FAST Act) - funds capital projects in urban areas which can be characterized as major capital investments in public transportation equipment and facilities. This is a discretionary grant program.

Funding: Federal - 80%, State - 20% (Transportation Bond Issue)

Section 5310 (continued in FAST Act)- provides capital funds, through the State, to private non-profit corporations and organizations to assist them in providing transportation services to meet the special needs of elderly and disabled persons.

Funding: Federal - 80%, Funding Applicant - 20%

Section 5339 (continued in FAST Act) - provides capital funds, through the State, for bus and bus related equipment and facilities.

Funding: Federal - 80%, Funding Applicant - 20%

MAP (Mobility Assistance Program) – Massachusetts state program funding to purchase eligible vehicles to provide transportation services to elderly persons and persons with disabilities as defined in Chapter 637 Subsection 13 of the Acts of 1983.

Funding: State - 80%, Funding Applicant - 20%

Organization of Project Listings – Highway Projects

The TIP includes sections that identify the MPO’s priority road and bridge projects using a format prescribed by MassDOT’s Office of Transportation Planning. MassDOT is aligning the FFYs 2020 to 2024 Statewide Transportation Improvement Program (STIP) with the MassDOT Capital Investment Plan (CIP). The CIP identifies three capital planning priorities: reliability, modernization and expansion investments. The STIP will now align program names with CIP investment priorities as follows:

Reliability

- Bridge program (including investments in inspections, systematic maintenance, on-system NHS bridges, on-system non-NHS bridges, and off-system bridges)
- Interstate pavement program
- Non-Interstate DOT pavement program
- Roadway improvements program
- Safety improvements program

Modernization

- ADA retrofits program
- Intersection improvements program
- Intelligent Transportation Systems program
- Roadway reconstruction program

Expansion

- Bicycles and Pedestrians program
- Capacity program

For the FFYs 2020 to 2024 TIP, the Regional Target funding amounts, distributed via statewide formula to the regions across the state, are initially programmed by the regions as STBG (also known as STP) funding category projects and MassDOT will inform regions if projects are to be partitioned by the HSIP, CMAQ and TAP categories.

Section 1A / Regionally Prioritized Projects

- Federal-Aid STBG Projects Using MVMPO Target Authority (STBG)
- Federal-Aid HSIP Projects Using MVMPO Target (HSIP)
- Federal-Aid CMAQ Projects Using MVMPO Target (CMAQ)
- Federal-Aid TAP (now set aside of STBG funding) Projects Using MVMPO Target (TAP)

Section 1B / Earmark or Discretionary Grant Funded Projects (Provided by MassDOT)

- Federal-Aid Earmark or Discretionary Grant Funded Projects

Section 2A / State Prioritized Reliability Projects (Provided by MassDOT)

- Bridge Program / Inspections
- Bridge Program / Off-System
- Bridge Program / On-System (NHS)
- Bridge Program / On-System (Non-NHS)
- Bridge Program / Systematic Maintenance
- Interstate Pavement
- Non-Interstate Pavement
- Roadway Improvements
- Safety Improvements

Section 2B / State Prioritized Modernization Projects (Provided by MassDOT)

- ADA Retrofits
- Intersection Improvements
- Intelligent Transportation Systems
- Roadway Reconstruction

Section 2C / State Prioritized Expansion Projects (Provided by MassDOT)

- Bicycles and Pedestrians
- Capacity

Section 3 / Planning / Adjustments / Pass-throughs (Provided by MassDOT)

- Planning / Adjustments / Pass-throughs

Section 4 / Non-Federally Aided Projects (Provided by MassDOT)

- Non-Federal Aid

Each highway project in the TIP contains the following information:

Amendment/Adjustment Type – used to identify the type of amendment when changes are made to the document.

STIP Program – STIP program names as defined in the Organization of Highway Project Listings section above.

MassDOT Project ID - project identification numbers given by MassDOT for each highway and bridge project.

MPO – identifies the Metropolitan Planning Organization within which the project is located.

Municipality Name – identifies the community where the project is located.

MassDOT Project Description–includes the community, or communities, in which the project is located and a brief description of work to be funded under the project. This description is exactly the same as MassDOT has input to its project information pages.

MassDOT District -MassDOT highway district number (Merrimack Valley MPO is part of District 4);

Funding Source - abbreviation for the funding category from which funding is expected. (Funding categories and abbreviations are explained at the beginning of Part A.8.);

Total Programmed Funds- estimated cost of project in Fiscal Year in which advertising is expected; *

Federal Funds – portion of Total Programmed Funds provided by Federal Funding;

Non-Federal Funds– portion of Total Programmed Funds not provided by Federal Funding, but required as matching funds in order to receive Federal Funds;

Additional Information - a) Planning / Design / Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-State Non-Federal match; g) earmark details; h) TAP project proponent; i) other information.

* Inflation increases project costs and therefore **the project costs** have been increased by **4% each** future year of the TIP.

Organization of Project Listings – Transit Projects

Each transit project in the TIP contains the following information:

Project Number – Transit Project number from MassDOT

Agency – MVRTA (Merrimack Valley Regional Transit Authority) is the regional transit authority;

Line Item – The FTA Line Item number

Project Description – a brief description of work to be funded under the project;

Carry Over – indicates whether Carry over funding is being used;

Federal Funds – Portion of Total Programmed Funds provided by Federal Funding;

RTACAP – Regional Transit Authority State Capital Assistance - portion of Total Programmed Funds not provided by Federal Funding, but required as matching funds in order to receive Federal Funds, coming from State source;

SCA – State Contract Assistance - portion of Total Programmed Funds not provided by Federal Funding, but required as matching funds in order to receive Federal Funds, coming from State source;

TDC –Transportation Development Credits, and

Local Funds – portion of Total Programmed Funds not provided by Federal Funding but required as matching funds in order to receive Federal Funds, coming from local funding sources other than State funding sources.

Total - estimated total cost of project.

Part B. Project Listings
Highway Projects

2020 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable:</i> a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information
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► Section 1A / Regionally Prioritized Projects

► Regionally Prioritized Projects

Roadway Reconstruction	602418	Merrimack Valley	Amesbury	AMESBURY- RECONSTRUCTION OF ELM STREET	4	STBG	\$ 7,223,053	\$ 5,778,442	\$ 1,444,611	a) Construction; b) \$11,178,124 = \$3,955,071 STBG 2019 + \$7,223,053 STBG 2020; c) AC Year 2 of 2 = \$7,223,053; d) TEC = 5.98 out of 18	
Bicycles and Pedestrians	608027	Merrimack Valley	Haverhill	HAVERRILL- BRADFORD RAIL TRAIL EXTENSION, FROM ROUTE 125 TO RAILROAD STREET	4	STBG	\$ 1,697,257	\$ 1,357,806	\$ 339,451	a) Construction; b) \$1,766,108 = \$1,697,257 STBG + \$68,851 TAP; d) TEC = 7.15 out of 18 h) City of Haverhill	
Bicycles and Pedestrians	608027	Merrimack Valley	Haverhill	HAVERRILL- BRADFORD RAIL TRAIL EXTENSION, FROM ROUTE 125 TO RAILROAD STREET	4	TAP	\$ 68,851	\$ 55,081	\$ 13,770	a) Construction; b) \$1,766,108 = \$1,697,257 STBG + \$68,851 TAP; d) TEC = 7.15 out of 18 h) City of Haverhill	
		Merrimack Valley					\$ -	\$ -	\$ -		
Regionally Prioritized Projects subtotal ►							\$ 8,989,161	\$ 7,191,329	\$ 1,797,832	◀ Funding Split Varies by Funding Source	

Total Regional Federal Aid Funds Programmed ► \$ 8,989,161 \$ 10,564,815 ◀ **Total Budget \$ 1,575,654 Target Funds Available**

Section 1A Instructions: MPO Template Name) Choose Regional Name from dropdown list to populate header and MPO column; **Column C)** Enter ID from ProjectInfo; **Column E)** Choose Municipality Name from dropdown list; **Column H)** Choose the Funding Source being used for the project - if multiple funding sources are being used enter multiple lines; **Column I)** Enter the total amount of funds being programmed in this fiscal year and for each funding source; **Column J)** Federal funds autocalculate. Please verify the amount and only change if needed for flex. **Column K)** Non-federal funds autocalculate. Please verify the split/match - if matching an FTA flex, coordinate with Rail & Transit Division before programming; **Column L)** Enter Additional Information as described - please do not use any other format.

STBG programmed ►	\$ 8,920,310	\$ 7,136,248	◀ STBG
HSIP programmed ►	\$ -	\$ -	◀ HSIP
CMAQ programmed ►	\$ -	\$ -	◀ CMAQ
TAP programmed ►	\$ 68,851	\$ 55,081	◀ TAP

► Section 1B / Earmark or Discretionary Grant Funded Projects

► Other Federal Aid

		Merrimack Valley		Other Federal Aid			\$ -	\$ -	\$ -		
		Merrimack Valley		Other Federal Aid			\$ -	\$ -	\$ -		
Other Federal Aid subtotal ►							\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source	

► Section 2A / State Prioritized Reliability Projects

► Bridge Program / Inspections

Bridge Program		Merrimack Valley		Bridge Inspection			\$ -	\$ -	\$ -		
Bridge Program		Merrimack Valley		Bridge Inspection			\$ -	\$ -	\$ -		
Bridge Program / Inspections subtotal ►							\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source	

► Bridge Program / Off-System

Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	

2020 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
Bridge Program / Off-System subtotal ▶								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Bridge Program / On-System (NHS)											
	Bridge Program	605306	Merrimack Valley	Haverhill	HAVERHILL- BRIDGE REPLACEMENT, H-12-039, I-495 (NB & SB) OVER MERRIMACK RIVER	4	NHPP-On	\$ 15,305,880	\$ 12,244,704	\$ 3,061,176	AC Year 3 of 6, Total Cost \$118,786,388
	Bridge Program		Merrimack Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (NHS) subtotal ▶								\$ 15,305,880	\$ 12,244,704	\$ 3,061,176	◀ Funding Split Varies by Funding Source
► Bridge Program / On-System (Non-NHS)											
	Bridge Program		Merrimack Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (Non-NHS) subtotal ▶								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Bridge Program / Systematic Maintenance											
	Bridge Program		Merrimack Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
Bridge Program / Systematic Maintenance subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Interstate Pavement											
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement subtotal ▶								\$ -	\$ -	\$ -	◀ 90% Federal + 10% Non-Federal
► Non-Interstate Pavement											
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	

2020 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement subtotal ►								\$ -	\$ -	\$ -	◄ 80% Federal + 20% Non-Federal
► Roadway Improvements											
	Roadway Improvements		Merrimack Valley		Roadway Improvements			\$ -	\$ -	\$ -	
	Roadway Improvements		Merrimack Valley		Roadway Improvements			\$ -	\$ -	\$ -	
Roadway Improvements subtotal ►								\$ -	\$ -	\$ -	◄ 80% Federal + 20% Non-Federal
► Safety Improvements											
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
Safety Improvements subtotal ►								\$ -	\$ -	\$ -	◄ Funding Split Varies by Funding Source
► Section 2B / State Prioritized Modernization Projects											
► ADA Retrofits											
	ADA Retrofits		Merrimack Valley		ADA Retrofits			\$ -	\$ -	\$ -	
	ADA Retrofits		Merrimack Valley		ADA Retrofits			\$ -	\$ -	\$ -	
ADA Retrofits subtotal ►								\$ -	\$ -	\$ -	◄ 80% Federal + 20% Non-Federal
► Intersection Improvements											
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
Intersection Improvements subtotal ►								\$ -	\$ -	\$ -	◄ Funding Split Varies by Funding Source
► Intelligent Transportation Systems											
	Intelligent Transportation Systems		Merrimack Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
	Intelligent Transportation Systems		Merrimack Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	

2020 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
	Intelligent Transportation Systems		Merrimack Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
Intelligent Transportation System subtotal ▶								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Roadway Reconstruction											
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
Roadway Reconstruction subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 2C / State Prioritized Expansion Projects											
► Bicycles and Pedestrians											
	Bicycles and Pedestrians		Merrimack Valley		Bicycles and Pedestrians			\$ -	\$ -	\$ -	
	Bicycles and Pedestrians		Merrimack Valley		Bicycles and Pedestrians			\$ -	\$ -	\$ -	
	Bicycles and Pedestrians		Merrimack Valley		Bicycles and Pedestrians			\$ -	\$ -	\$ -	
Bicycles and Pedestrians subtotal ▶								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Capacity											
	Capacity		Merrimack Valley		Capacity			\$ -	\$ -	\$ -	
	Capacity		Merrimack Valley		Capacity			\$ -	\$ -	\$ -	
Capacity subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 3 / Planning / Adjustments / Pass-throughs											
► Planning / Adjustments / Pass-throughs											
			Merrimack Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		State Planning and Research Work Program I, (SPR I), Planning	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		State Planning and Research Work Program II, (SPR II), Research	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Recreational Trails	Multiple		\$ -	\$ -	\$ -	
Other Statewide Items subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 4 / Non-Federally Aided Projects											
► Non-Federally Aided Projects											

2020 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
	Non Federal Aid		Merrimack Valley		Non-Federal Aid			\$ -		\$ -	
	Non-Federally Aided Projects		Merrimack Valley		Non-Federal Aid			\$ -		\$ -	
Non-Federal Aid subtotal ▶								\$ -		\$ -	◀100% Non-Federal

2020 Summary

	TIP Section 1 - 3: ▼	TIP Section 4: ▼	Total of All Projects ▼	
Total ▶	\$ 24,295,041	\$ -	\$ 24,295,041	◀ Total Spending in Region
Federal Funds ▶	\$ 19,436,033		\$ 19,436,033	◀ Total Federal Spending in Region
Non-Federal Funds ▶	\$ 4,859,008	\$ -	\$ 4,859,008	◀ Total Non-Federal Spending in Region

701 CMR 7.00 Use of Road Flaggers and Police Details on Public Works Projects / 701 CMR 7.00 (the Regulation) was promulgated and became law on October 3, 2008. Under this Regulation, the CMR is applicable to any Public works Project that is performed within the limits of, or that impact traffic on, any Public Road. The Municipal Limitation referenced in this Regulation is applicable only to projects where the Municipality is the Awarding Authority. For all projects contained in the TIP, the Commonwealth is the Awarding Authority. Therefore, all projects must be considered and implemented in accordance with 701 CMR 7.00, and the Road Flagger and Police Detail Guidelines. By placing a project on the TIP, the Municipality acknowledges that 701 CMR 7.00 is applicable to its project and design and construction will be fully compliant with this Regulation. This information, and additional information relative to guidance and implementation of the Regulation can be found at the following link on the MassDOT Highway Division website: <http://www.massdot.state.ma.us/Highway/flaggers/main.aspx>

2021 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable:</i> a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information
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► Section 1A / Regionally Prioritized Projects

► Regionally Prioritized Projects

	Bicycles and Pedestrians	608298	Merrimack Valley	Groveland	GROVELAND- COMMUNITY TRAIL FROM MAIN STREET TO KING STREET	4	STBG	\$ 1,331,411	\$ 1,065,129	\$ 266,282	a) Construction; b) \$2,064,255 (Inflated 4% from 2020 cost) = \$1,331,411 STBG + \$408,848 CMAQ + \$323,996 TAP d) TEC = 4.87 out of 18
	Bicycles and Pedestrians	608298	Merrimack Valley	Groveland	GROVELAND- COMMUNITY TRAIL FROM MAIN STREET TO KING STREET	4	CMAQ	\$ 408,848	\$ 327,078	\$ 81,770	a) Construction; b) \$2,064,255 (Inflated 4% from 2020 cost) = \$1,331,411 STBG + \$408,848 CMAQ + \$323,996 TAP d) TEC = 4.87 out of 18
	Bicycles and Pedestrians	608298	Merrimack Valley	Groveland	GROVELAND- COMMUNITY TRAIL FROM MAIN STREET TO KING STREET	4	TAP	\$ 323,996	\$ 259,197	\$ 64,799	a) Construction; b) \$2,064,255 (Inflated 4% from 2020 cost) = \$1,331,411 STBG + \$408,848 CMAQ + \$323,996 TAP d) TEC = 4.87 out of 18
	Roadway Reconstruction	608095	Merrimack Valley	North Andover	NORTH ANDOVER- CORRIDOR IMPROVEMENTS ON ROUTE 114, BETWEEN ROUTE 125 (ANDOVER STREET) & STOP & SHOP DRIVEWAY	4	STBG	\$ 6,813,052	\$ 5,450,442	\$ 1,362,610	a) Construction; b) \$17,399,023 (Inflated 4% from 2020 cost) = FFY 2021 (\$6,813,052 STBG + \$1,107,389 CMAQ + \$442,956 HSIP + \$351,000 TAP) + FFY 2022 (\$6,783,281 STBG + \$1,107,389 CMAQ + \$442,956 HSIP + \$351,000 TAP); c) AC Year 1 of 2 = \$8,714,397; d) TEC = 11.32 out of 18
	Roadway Reconstruction	608095	Merrimack Valley	North Andover	NORTH ANDOVER- CORRIDOR IMPROVEMENTS ON ROUTE 114, BETWEEN ROUTE 125 (ANDOVER STREET) & STOP & SHOP DRIVEWAY	4	CMAQ	\$ 1,107,389	\$ 885,911	\$ 221,478	a) Construction; b) \$17,399,023 (Inflated 4% from 2020 cost) = FFY 2021 (\$6,813,052 STBG + \$1,107,389 CMAQ + \$442,956 HSIP + \$351,000 TAP) + FFY 2022 (\$6,783,281 STBG + \$1,107,389 CMAQ + \$442,956 HSIP + \$351,000 TAP); c) AC Year 1 of 2 = \$8,714,397; d) TEC = 11.32 out of 18
	Roadway Reconstruction	608095	Merrimack Valley	North Andover	NORTH ANDOVER- CORRIDOR IMPROVEMENTS ON ROUTE 114, BETWEEN ROUTE 125 (ANDOVER STREET) & STOP & SHOP DRIVEWAY	4	HSIP	\$ 442,956	\$ 398,660	\$ 44,296	a) Construction; b) \$17,399,023 (Inflated 4% from 2020 cost) = FFY 2021 (\$6,813,052 STBG + \$1,107,389 CMAQ + \$442,956 HSIP + \$351,000 TAP) + FFY 2022 (\$6,783,281 STBG + \$1,107,389 CMAQ + \$442,956 HSIP + \$351,000 TAP); c) AC Year 1 of 2 = \$8,714,397; d) TEC = 11.32 out of 18
	Roadway Reconstruction	608095	Merrimack Valley	North Andover	NORTH ANDOVER- CORRIDOR IMPROVEMENTS ON ROUTE 114, BETWEEN ROUTE 125 (ANDOVER STREET) & STOP & SHOP DRIVEWAY	4	TAP	\$ 351,000	\$ 280,800	\$ 70,200	a) Construction; b) \$17,399,023 (Inflated 4% from 2020 cost) = FFY 2021 (\$6,813,052 STBG + \$1,107,389 CMAQ + \$442,956 HSIP + \$351,000 TAP) + FFY 2022 (\$6,783,281 STBG + \$1,107,389 CMAQ + \$442,956 HSIP + \$351,000 TAP); c) AC Year 1 of 2 = \$8,714,397; d) TEC = 11.32 out of 18
Regionally Prioritized Projects subtotal ►								\$ 10,778,652	\$ 8,667,217	\$ 2,111,435	◀ Funding Split Varies by Funding Source

► Section 1A / Fiscal Constraint Analysis

Total Regional Federal Aid Funds Programmed ► \$ 10,778,652 **\$ 10,778,652** **◀ Total Budget \$ -** **Target Funds Available**

STBG programmed ► \$ 8,144,463 \$ 6,515,570 **◀ STBG**

HSIP programmed ► \$ 442,956 \$ 398,660 **◀ HSIP**

Section 1A Instructions: MPO Template Name) Choose Regional Name from dropdown list to populate header and MPO column; Column C) Enter ID from Projectinfo; Column E) Choose Municipality Name from dropdown list; Column H) Choose the Funding Source being used for the project - if multiple funding sources are being used enter multiple lines; Column I) Enter the total amount of

2021 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>	
funds being programmed in this fiscal year and for each funding source; Column J Federal funds autocalculates. Please verify the amount and only change if needed for flex. Column K Non-federal funds autocalculates. Please verify the split/match - if matching an FTA flex, coordinate with Rail & Transit Division before programming; Column L Enter Additional Information as described - please do not use any other format.								CMAQ programmed ▶	\$ 1,516,237	\$ 1,212,990	◀ CMAQ	
								TAP programmed ▶	\$ 674,996	\$ 539,997	◀ TAP	

► Section 1B / Earmark or Discretionary Grant Funded Projects

► Other Federal Aid

			Merrimack Valley		Other Federal Aid			\$ -	\$ -	\$ -	
			Merrimack Valley		Other Federal Aid			\$ -	\$ -	\$ -	
Other Federal Aid subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Section 2A / State Prioritized Reliability Projects

► Bridge Program / Inspections

	Bridge Program		Merrimack Valley		Bridge Inspection			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Inspection			\$ -	\$ -	\$ -	
Bridge Program / Inspections subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Bridge Program / Off-System

	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
Bridge Program / Off-System subtotal ▶								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal

► Bridge Program / On-System (NHS)

	Bridge Program	605306	Merrimack Valley	Haverhill	HAVERRHILL- BRIDGE REPLACEMENT, H-12-039, I-495 (NB & SB) OVER MERRIMACK RIVER	4	NHPP-On	\$ 15,305,880	\$ 12,244,704	\$ 3,061,176	AC Year 4 of 6, Total Cost \$118,786,388
	Bridge Program		Merrimack Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (NHS) subtotal ▶								\$ 15,305,880	\$ 12,244,704	\$ 3,061,176	◀ Funding Split Varies by Funding Source

► Bridge Program / On-System (Non-NHS)

	Bridge Program		Merrimack Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (Non-NHS) subtotal ▶								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal

► Bridge Program / Systematic Maintenance

	Bridge Program		Merrimack Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
Bridge Program / Systematic Maintenance subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Interstate Pavement

2021 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement subtotal ▶								\$ -	\$ -	\$ -	◀ 90% Federal + 10% Non-Federal
► Non-Interstate Pavement											
	Non-Interstate Pavement	608494	Merrimack Valley	Multiple	NEWBURY-NEWBURYPORT-SALISBURY RESURFACING AND RELATED WORK ON US ROUTE 1	4	NHPP	\$ 9,807,200	\$ 7,845,760	\$ 1,961,440	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement subtotal ▶								\$ 9,807,200	\$ 7,845,760	\$ 1,961,440	◀ 80% Federal + 20% Non-Federal
► Roadway Improvements											
	Roadway Improvements		Merrimack Valley		Roadway Improvements			\$ -	\$ -	\$ -	
	Roadway Improvements		Merrimack Valley		Roadway Improvements			\$ -	\$ -	\$ -	
	Roadway Improvements		Merrimack Valley		Roadway Improvements			\$ -	\$ -	\$ -	
Roadway Improvements subtotal ▶								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Safety Improvements											
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
Safety Improvements subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

2021 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
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► Section 2B / State Prioritized Modernization Projects

► ADA Retrofits

	ADA Retrofits		Merrimack Valley		ADA Retrofits			\$ -	\$ -	\$ -	
	ADA Retrofits		Merrimack Valley		ADA Retrofits			\$ -	\$ -	\$ -	
ADA Retrofits subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal

► Intersection Improvements

	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
Intersection Improvements subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Intelligent Transportation Systems

	Intelligent Transportation Systems		Merrimack Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
	Intelligent Transportation Systems		Merrimack Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
	Intelligent Transportation Systems		Merrimack Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
Intelligent Transportation System subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal

► Roadway Reconstruction

	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
Roadway Reconstruction subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Section 2C / State Prioritized Expansion Projects

► Bicycles and Pedestrians

	Bicycles and Pedestrians	607541	Merrimack Valley	Multiple	GEORGETOWN- BOXFORD- BORDER TO BOSTON TRAIL, FROM GEORGETOWN ROAD TO WEST MAIN STREET (ROUTE 97)	4	CMAQ	\$ 1,812,628	\$ 1,450,102	\$ 362,526	
	Bicycles and Pedestrians		Merrimack Valley		Bicycles and Pedestrians			\$ -	\$ -	\$ -	
	Bicycles and Pedestrians		Merrimack Valley		Bicycles and Pedestrians			\$ -	\$ -	\$ -	
Bicycles and Pedestrians subtotal ►								\$ 1,812,628	\$ 1,450,102	\$ 362,526	◀ 80% Federal + 20% Non-Federal

2021 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
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► Capacity												
	Capacity		Merrimack Valley		Capacity			\$ -	\$ -	\$ -		
	Capacity		Merrimack Valley		Capacity			\$ -	\$ -	\$ -		
								Capacity subtotal ►	\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Section 3 / Planning / Adjustments / Pass-throughs

► Planning / Adjustments / Pass-throughs												
			Merrimack Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -		
			Merrimack Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -		
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -		
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -		
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -		
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -		
			Merrimack Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -		
			Merrimack Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -		
			Merrimack Valley		State Planning and Research Work Program I, (SPR I), Planning	Multiple		\$ -	\$ -	\$ -		
			Merrimack Valley		State Planning and Research Work Program II, (SPR II), Research	Multiple		\$ -	\$ -	\$ -		
			Merrimack Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -		
			Merrimack Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -		
			Merrimack Valley		Recreational Trails	Multiple		\$ -	\$ -	\$ -		
								Other Statewide Items subtotal ►	\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Section 4 / Non-Federally Aided Projects

► Non-Federally Aided Projects											
	Non Federal Aid		Merrimack Valley		Non-Federal Aid			\$ -		\$ -	
	Non-Federally Aided Projects		Merrimack Valley		Non-Federal Aid			\$ -		\$ -	
								Non-Federal Aid subtotal ►	\$ -	\$ -	◀ 100% Non-Federal

2021 Summary			TIP Section 1 - 3: ▼	TIP Section 4: ▼	Total of All Projects ▼	
Total ►	\$ 37,704,359	\$ -	\$ 37,704,359	◀ Total Spending in Region		
Federal Funds ►	\$ 30,207,783	\$ -	\$ 30,207,783	◀ Total Federal Spending in Region		
Non-Federal Funds ►	\$ 7,496,576	\$ -	\$ 7,496,576	◀ Total Non-Federal Spending in Region		

701 CMR 7.00 Use of Road Flaggers and Police Details on Public Works Projects / 701 CMR 7.00 (the Regulation) was promulgated and became law on October 3, 2008. Under this Regulation, the CMR is applicable to any Public works Project that is performed within the limits of, or that impact traffic on, any Public Road. The Municipal Limitation referenced in this Regulation is applicable only to projects where the Municipality is the Awarding Authority. For all projects contained in the TIP, the Commonwealth is the Awarding Authority. Therefore, all projects must be considered and implemented in accordance with 701 CMR 7.00, and the Road Flagger and Police Detail Guidelines. By placing a project on the TIP, the Municipality acknowledges that 701 CMR 7.00 is applicable to its project and design and construction will be fully compliant with this Regulation. This information, and additional information relative to guidance and implementation of the Regulation can be found at the following link on the MassDOT Highway Division website: <http://www.massdot.state.ma.us/Highway/flaggers/main.aspx>

2022 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
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► Section 1A / Regionally Prioritized Projects

► Regionally Prioritized Projects

	Intersection Improvements	608761	Merrimack Valley	Haverhill	HAVERTHILL- INTERSECTION RECONSTRUCTION ON ROUTE 108 (NEWTON ROAD) AT ROUTE 110 (KENOZA AVENUE AND AMESBURY ROAD)	4	STBG	\$ 2,099,520	\$ 1,679,616	\$ 419,904	a) Construction; b) \$2,099,520 (Inflated 8% from 2020 cost) d) TEC = 8.87 out of 18
	Roadway Reconstruction	608095	Merrimack Valley	North Andover	NORTH ANDOVER- CORRIDOR IMPROVEMENTS ON ROUTE 114, BETWEEN ROUTE 125 (ANDOVER STREET) & STOP & SHOP DRIVEWAY	4	STBG	\$ 6,783,281	\$ 5,426,625	\$ 1,356,656	a) Construction; b) \$17,399,023 (Inflated 4% from 2020 cost) = FFY 2021 (\$6,813,052 STBG + \$1,107,389 CMAQ + \$442,956 HSIP + \$351,000 TAP) + FFY 2022 (\$6,783,281 STBG + \$1,107,389 CMAQ + \$442,956 HSIP + \$351,000 TAP); c) AC Year 2 of 2 = \$8,684,626; d) TEC = 11.32 out of 18
	Roadway Reconstruction	608095	Merrimack Valley	North Andover	NORTH ANDOVER- CORRIDOR IMPROVEMENTS ON ROUTE 114, BETWEEN ROUTE 125 (ANDOVER STREET) & STOP & SHOP DRIVEWAY	4	CMAQ	\$ 1,107,389	\$ 885,911	\$ 221,478	a) Construction; b) \$17,399,023 (Inflated 4% from 2020 cost) = FFY 2021 (\$6,813,052 STBG + \$1,107,389 CMAQ + \$442,956 HSIP + \$351,000 TAP) + FFY 2022 (\$6,783,281 STBG + \$1,107,389 CMAQ + \$442,956 HSIP + \$351,000 TAP); c) AC Year 2 of 2 = \$8,684,626; d) TEC = 11.32 out of 18
	Roadway Reconstruction	608095	Merrimack Valley	North Andover	NORTH ANDOVER- CORRIDOR IMPROVEMENTS ON ROUTE 114, BETWEEN ROUTE 125 (ANDOVER STREET) & STOP & SHOP DRIVEWAY	4	HSIP	\$ 442,956	\$ 398,660	\$ 44,296	a) Construction; b) \$17,399,023 (Inflated 4% from 2020 cost) = FFY 2021 (\$6,813,052 STBG + \$1,107,389 CMAQ + \$442,956 HSIP + \$351,000 TAP) + FFY 2022 (\$6,783,281 STBG + \$1,107,389 CMAQ + \$442,956 HSIP + \$351,000 TAP); c) AC Year 2 of 2 = \$8,684,626; d) TEC = 11.32 out of 18
	Roadway Reconstruction	608095	Merrimack Valley	North Andover	NORTH ANDOVER- CORRIDOR IMPROVEMENTS ON ROUTE 114, BETWEEN ROUTE 125 (ANDOVER STREET) & STOP & SHOP DRIVEWAY	4	TAP	\$ 351,000	\$ 280,800	\$ 70,200	a) Construction; b) \$17,399,023 (Inflated 4% from 2020 cost) = FFY 2021 (\$6,813,052 STBG + \$1,107,389 CMAQ + \$442,956 HSIP + \$351,000 TAP) + FFY 2022 (\$6,783,281 STBG + \$1,107,389 CMAQ + \$442,956 HSIP + \$351,000 TAP); c) AC Year 2 of 2 = \$8,684,626; d) TEC = 11.32 out of 18
			Merrimack Valley					\$ -	\$ -	\$ -	

Regionally Prioritized Projects subtotal ► **\$ 10,784,146** \$ 8,671,612 \$ 2,112,534 ◀ Funding Split Varies by Funding Source

► Section 1A / Fiscal Constraint Analysis

Total Regional Federal Aid Funds Programmed ► \$ 10,784,146 \$ 10,998,132 ◀ **Total Budget** \$ 213,986 **Target Funds Available**

STBG programmed ► \$ 8,882,801 \$ 7,106,241 ◀ **STBG**

HSIP programmed ► \$ 442,956 \$ 398,660 ◀ **HSIP**

CMAQ programmed ► \$ 1,107,389 \$ 885,911 ◀ **CMAQ**

TAP programmed ► \$ 351,000 \$ 280,800 ◀ **TAP**

Section 1A Instructions: MPO Template Name) Choose Regional Name from dropdown list to populate header and MPO column; **Column C)** Enter ID from ProjectInfo; **Column E)** Choose Municipality Name from dropdown list; **Column H)** Choose the Funding Source being used for the project - if multiple funding sources are being used enter multiple lines; **Column I)** Enter the total amount of funds being programmed in this fiscal year and for each funding source; **Column J)** Federal funds autocalculates. Please verify the amount and only change if needed for flex. **Column K)** Non-federal funds autocalculates. Please verify the split/match - if matching an FTA flex, coordinate with Rail & Transit Division before programming; **Column L)** Enter Additional Information as described - please do not use any other format.

► Section 1B / Earmark or Discretionary Grant Funded Projects

2022 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>	
► Other Federal Aid												
			Merrimack Valley		Other Federal Aid			\$ -	\$ -	\$ -		
			Merrimack Valley		Other Federal Aid			\$ -	\$ -	\$ -		
								Other Federal Aid subtotal ►	\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 2A / State Prioritized Reliability Projects												
► Bridge Program / Inspections												
	Bridge Program		Merrimack Valley		Bridge Inspection			\$ -	\$ -	\$ -		
	Bridge Program		Merrimack Valley		Bridge Inspection			\$ -	\$ -	\$ -		
								Bridge Program / Inspections subtotal ►	\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Bridge Program / Off-System												
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -		
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -		
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -		
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -		
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -		
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -		
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -		
								Bridge Program / Off-System subtotal ►	\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Bridge Program / On-System (NHS)												
	Bridge Program	605306	Merrimack Valley	Haverhill	HAVERRHILL- BRIDGE REPLACEMENT, H-12-039, I-495 (NB & SB) OVER MERRIMACK RIVER	4	NHPP-On	\$ 18,203,683	\$ 14,562,946	\$ 3,640,737	AC Year 5 of 6, Total Cost \$118,786,388	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -		
	Bridge Program		Merrimack Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -		
	Bridge Program		Merrimack Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -		
	Bridge Program		Merrimack Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -		
								Bridge Program / On-System (NHS) subtotal ►	\$ 18,203,683	\$ 14,562,946	\$ 3,640,737	◀ Funding Split Varies by Funding Source
► Bridge Program / On-System (Non-NHS)												
	Bridge Program		Merrimack Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -		
	Bridge Program		Merrimack Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -		
	Bridge Program		Merrimack Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -		
								Bridge Program / On-System (Non-NHS) subtotal ►	\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Bridge Program / Systematic Maintenance												
	Bridge Program		Merrimack Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -		
	Bridge Program		Merrimack Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -		
	Bridge Program		Merrimack Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -		
								Bridge Program / Systematic Maintenance subtotal ►	\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Interstate Pavement												
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -		
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -		
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -		

2022 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement subtotal ►								\$ -	\$ -	\$ -	◀ 90% Federal + 10% Non-Federal
► Non-Interstate Pavement											
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Roadway Improvements											
	Roadway Improvements		Merrimack Valley		Roadway Improvements			\$ -	\$ -	\$ -	
	Roadway Improvements		Merrimack Valley		Roadway Improvements			\$ -	\$ -	\$ -	
	Roadway Improvements		Merrimack Valley		Roadway Improvements			\$ -	\$ -	\$ -	
Roadway Improvements subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Safety Improvements											
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
Safety Improvements subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 2B / State Prioritized Modernization Projects											
► ADA Retrofits											
	ADA Retrofits		Merrimack Valley		ADA Retrofits			\$ -	\$ -	\$ -	
	ADA Retrofits		Merrimack Valley		ADA Retrofits			\$ -	\$ -	\$ -	

2022 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
ADA Retrofits subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Intersection Improvements											
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
Intersection Improvements subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Intelligent Transportation Systems											
	Intelligent Transportation Systems		Merrimack Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
	Intelligent Transportation Systems		Merrimack Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
	Intelligent Transportation Systems		Merrimack Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
Intelligent Transportation System subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Roadway Reconstruction											
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
Roadway Reconstruction subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 2C / State Prioritized Expansion Projects											
► Bicycles and Pedestrians											
	Bicycles and Pedestrians		Merrimack Valley		Bicycles and Pedestrians			\$ -	\$ -	\$ -	
Bicycles and Pedestrians subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Capacity											
	Capacity		Merrimack Valley		Capacity			\$ -	\$ -	\$ -	
	Capacity		Merrimack Valley		Capacity			\$ -	\$ -	\$ -	
Capacity subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 3 / Planning / Adjustments / Pass-throughs											
► Planning / Adjustments / Pass-throughs											
			Merrimack Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	

2022 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		State Planning and Research Work Program I, (SPR I), Planning	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		State Planning and Research Work Program II, (SPR II), Research	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Recreational Trails	Multiple		\$ -	\$ -	\$ -	
Other Statewide Items subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

▶ Section 4 / Non-Federally Aided Projects

▶ Non-Federally Aided Projects

	Non Federal Aid		Merrimack Valley		Non-Federal Aid			\$ -		\$ -	
	Non-Federally Aided Projects		Merrimack Valley		Non-Federal Aid			\$ -		\$ -	
Non-Federal Aid subtotal ▶								\$ -		\$ -	◀ 100% Non-Federal

2022 Summary

	TIP Section 1 - 3: ▼	TIP Section 4: ▼	Total of All Projects ▼	
Total ▶	\$ 28,987,829	\$ -	\$ 28,987,829	◀ Total Spending in Region
Federal Funds ▶	\$ 23,234,559		\$ 23,234,559	◀ Total Federal Spending in Region
Non-Federal Funds ▶	\$ 5,753,270	\$ -	\$ 5,753,270	◀ Total Non-Federal Spending in Region

701 CMR 7.00 Use of Road Flaggers and Police Details on Public Works Projects / 701 CMR 7.00 (the Regulation) was promulgated and became law on October 3, 2008. Under this Regulation, the CMR is applicable to any Public works Project that is performed within the limits of, or that impact traffic on, any Public Road. The Municipal Limitation referenced in this Regulation is applicable only to projects where the Municipality is the Awarding Authority. For all projects contained in the TIP, the Commonwealth is the Awarding Authority. Therefore, all projects must be considered and implemented in accordance with 701 CMR 7.00, and the Road Flagger and Police Detail Guidelines. By placing a project on the TIP, the Municipality acknowledges that 701 CMR 7.00 is applicable to its project and design and construction will be fully compliant with this Regulation. This information, and additional information relative to guidance and implementation of the Regulation can be found at the following link on the MassDOT Highway Division website: <http://www.massdot.state.ma.us/Highway/flaggers/main.aspx>

2023 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
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► Section 1A / Regionally Prioritized Projects

► Regionally Prioritized Projects

	Roadway Reconstruction	608788	Merrimack Valley	Haverhill	HAVERRILL- ROADWAY RECONSTRUCTION ON NORTH AVENUE, FROM MAIN STREET (ROUTE 125) TO PLAISTOW NH	4	STBG	\$ 4,147,823	\$ 3,318,258	\$ 829,565	a) Construction; b) \$13,678,560 (Inflated 12% from 2020 cost) = \$4,147,823 STBG 2023 + \$9,530,737 STBG 2024; c) AC Year 1 of 2 = \$4,147,823; d) TEC = 8.00 out of 18
	Roadway Reconstruction	602202	Merrimack Valley	Salisbury	SALISBURY- RECONSTRUCTION OF ROUTE 1 (LAFAYETTE ROAD)	4	STBG	\$ 7,090,517	\$ 5,672,414	\$ 1,418,103	a) Construction; b) \$7,090,517 (Inflated 12% from 2020 cost) d) TEC = 8.60 out of 18
			Merrimack Valley					\$ -	\$ -	\$ -	
			Merrimack Valley					\$ -	\$ -	\$ -	
			Merrimack Valley					\$ -	\$ -	\$ -	
Regionally Prioritized Projects subtotal ►								\$ 11,238,340	\$ 8,990,672	\$ 2,247,668	◀ Funding Split Varies by Funding Source

► Section 1A / Fiscal Constraint Analysis

Total Regional Federal Aid Funds Programmed ►								\$ 11,238,340	\$ 11,238,340	◀ Total Budget	\$ -	Target Funds Available
STBG programmed ►								\$ 11,238,340	\$ 8,990,672	◀ STBG		
HSIP programmed ►								\$ -	\$ -	◀ HSIP		
CMAQ programmed ►								\$ -	\$ -	◀ CMAQ		
TAP programmed ►								\$ -	\$ -	◀ TAP		

Section 1A Instructions: MPO Template Name) Choose Regional Name from dropdown list to populate header and MPO column; Column C) Enter ID from ProjectInfo; Column E) Choose Municipality Name from dropdown list; Column H) Choose the Funding Source being used for the project - if multiple funding sources are being used enter multiple lines; Column I) Enter the total amount of funds being programmed in this fiscal year and for each funding source; Column J) Federal funds autocalculates. Please verify the amount and only change if needed for flex. Column K) Non-federal funds autocalculates. Please verify the split/match - if matching an FTA flex, coordinate with Rail & Transit Division before programming; Column L) Enter Additional Information as described - please do not use any other format.

► Section 1B / Earmark or Discretionary Grant Funded Projects

► Other Federal Aid

			Merrimack Valley		Other Federal Aid		HPP	\$ -	\$ -	\$ -	
			Merrimack Valley		Other Federal Aid		HPP	\$ -	\$ -	\$ -	
Other Federal Aid subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Section 2A / State Prioritized Reliability Projects

► Bridge Program / Inspections

	Bridge Program		Merrimack Valley		Bridge Inspection			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Inspection			\$ -	\$ -	\$ -	
Bridge Program / Inspections subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Bridge Program / Off-System

	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	

2023 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
Bridge Program / Off-System subtotal ▶								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Bridge Program / On-System (NHS)											
	Bridge Program	605306	Merrimack Valley	Haverhill	HAVERHILL- BRIDGE REPLACEMENT, H-12-039, I-495 (NB & SB) OVER MERRIMACK RIVER	4	NHPP-On	\$ 12,994,233	\$ 10,395,386	\$ 2,598,847	AC Year 6 of 6, Total Cost \$118,786,388
	Bridge Program	TBD	Merrimack Valley	Haverhill	HAVERHILL- BRIDGE REPLACEMENT, H-12-040, I-495 (NB & SB) OVER MERRIMACK RIVER	4	NHPP-On	\$ 25,198,768	\$ 20,159,014	\$ 5,039,754	AC Year 1 of 3, Total Cost \$96,000,000.
	Bridge Program		Merrimack Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (NHS) subtotal ▶								\$ 38,193,001	\$ 30,554,401	\$ 7,638,600	◀ Funding Split Varies by Funding Source
► Bridge Program / On-System (Non-NHS)											
	Bridge Program		Merrimack Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (Non-NHS) subtotal ▶								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Bridge Program / Systematic Maintenance											
	Bridge Program		Merrimack Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
Bridge Program / Systematic Maintenance subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Interstate Pavement											
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement subtotal ▶								\$ -	\$ -	\$ -	◀ 90% Federal + 10% Non-Federal
► Non-Interstate Pavement											
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	

2023 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
Non-Interstate Pavement subtotal ▶								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Roadway Improvements											
	Roadway Improvements		Merrimack Valley		Roadway Improvements			\$ -	\$ -	\$ -	
	Roadway Improvements		Merrimack Valley		Roadway Improvements			\$ -	\$ -	\$ -	
	Roadway Improvements		Merrimack Valley		Roadway Improvements			\$ -	\$ -	\$ -	
Roadway Improvements subtotal ▶								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Safety Improvements											
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
Safety Improvements subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 2B / State Prioritized Modernization Projects											
► ADA Retrofits											
	ADA Retrofits		Merrimack Valley		ADA Retrofits			\$ -	\$ -	\$ -	
	ADA Retrofits		Merrimack Valley		ADA Retrofits			\$ -	\$ -	\$ -	
ADA Retrofits subtotal ▶								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Intersection Improvements											
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
Intersection Improvements subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Intelligent Transportation Systems											
	Intelligent Transportation Systems		Merrimack Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
	Intelligent Transportation Systems		Merrimack Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	

2023 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
	Intelligent Transportation Systems		Merrimack Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
Intelligent Transportation System subtotal ▶								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Roadway Reconstruction											
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
Roadway Reconstruction subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 2C / State Prioritized Expansion Projects											
► Bicycles and Pedestrians											
	Bicycles and Pedestrians	608930	Merrimack Valley	Lawrence	LAWRENCE- LAWRENCE MANCHESTER RAIL CORRIDOR (LMRC) RAIL TRAIL	4	CMAQ	\$ 15,950,704	\$ 12,760,563	\$ 3,190,141	
	Bicycles and Pedestrians	607542	Merrimack Valley	Multiple	GEORGETOWN- NEWBURY- BORDER TO BOSTON TRAIL (NORTHERN GEORGETOWN TO BYFIELD SECTION)	4	CMAQ	\$ 4,341,120	\$ 3,472,896	\$ 868,224	
	Bicycles and Pedestrians		Merrimack Valley		Bicycles and Pedestrians			\$ -	\$ -	\$ -	
Bicycles and Pedestrians subtotal ▶								\$ 20,291,824	\$ 16,233,459	\$ 4,058,365	◀ 80% Federal + 20% Non-Federal
► Capacity											
	Capacity		Merrimack Valley		Capacity			\$ -	\$ -	\$ -	
	Capacity		Merrimack Valley		Capacity			\$ -	\$ -	\$ -	
Capacity subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 3 / Planning / Adjustments / Pass-throughs											
► Planning / Adjustments / Pass-throughs											
			Merrimack Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		State Planning and Research Work Program I, (SPR I), Planning	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		State Planning and Research Work Program II, (SPR II), Research	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Recreational Trails	Multiple		\$ -	\$ -	\$ -	
Other Statewide Items subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 4 / Non-Federally Aided Projects											

2023 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable:</i> a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information
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► Non-Federally Aided Projects

	Non Federal Aid		Merrimack Valley		Non-Federal Aid			\$ -		\$ -	
	Non-Federally Aided Projects		Merrimack Valley		Non-Federal Aid			\$ -		\$ -	
Non-Federal Aid subtotal ►								\$ -		\$ -	◀ 100% Non-Federal

2023 Summary

	TIP Section 1 - 3: ▼	TIP Section 4: ▼	Total of All Projects ▼	
Total ►	\$ 69,723,165	\$ -	\$ 69,723,165	◀ Total Spending in Region
Federal Funds ►	\$ 55,778,532		\$ 55,778,532	◀ Total Federal Spending in Region
Non-Federal Funds ►	\$ 13,944,633	\$ -	\$ 13,944,633	◀ Total Non-Federal Spending in Region

701 CMR 7.00 Use of Road Flaggers and Police Details on Public Works Projects / 701 CMR 7.00 (the Regulation) was promulgated and became law on October 3, 2008. Under this Regulation, the CMR is applicable to any Public works Project that is performed within the limits of, or that impact traffic on, any Public Road. The Municipal Limitation referenced in this Regulation is applicable only to projects where the Municipality is the Awarding Authority. For all projects contained in the TIP, the Commonwealth is the Awarding Authority. Therefore, all projects must be considered and implemented in accordance with 701 CMR 7.00, and the Road Flagger and Police Detail Guidelines. By placing a project on the TIP, the Municipality acknowledges that 701 CMR 7.00 is applicable to its project and design and construction will be fully compliant with this Regulation. This information, and additional information relative to guidance and implementation of the Regulation can be found at the following link on the MassDOT Highway Division website: <http://www.massdot.state.ma.us/Highway/flaggers/main.aspx>

2024 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
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► Section 1A / Regionally Prioritized Projects

► Regionally Prioritized Projects

	Roadway Reconstruction	608788	Merrimack Valley	Haverhill	HAVERRHILL- ROADWAY RECONSTRUCTION ON NORTH AVENUE, FROM MAIN STREET (ROUTE 125) TO PLAISTOW NH	4	STBG	\$ 9,530,737	\$ 7,624,590	\$ 1,906,147	a) Construction; b) \$13,678,560 (Inflated 12% from 2020 cost) = \$4,147,823 STBG 2023 + \$9,530,737 STBG 2024; c) AC Year 2 of 2 = \$9,530,737; d) TEC = 8.00 out of 18
			Merrimack Valley					\$ -	\$ -	\$ -	
			Merrimack Valley					\$ -	\$ -	\$ -	
			Merrimack Valley					\$ -	\$ -	\$ -	
			Merrimack Valley					\$ -	\$ -	\$ -	
Regionally Prioritized Projects subtotal ►								\$ 9,530,737	\$ 7,624,590	\$ 1,906,147	◀ Funding Split Varies by Funding Source

► Section 1A / Fiscal Constraint Analysis

Section 1A Instructions: MPO Template Name) Choose Regional Name from dropdown list to populate header and MPO column; **Column C)** Enter ID from ProjectInfo; **Column E)** Choose Municipality Name from dropdown list; **Column H)** Choose the Funding Source being used for the project - if multiple funding sources are being used enter multiple lines; **Column I)** Enter the total amount of funds being programmed in this fiscal year and for each funding source; **Column J)** Federal funds autocalculates. Please verify the amount and only change if needed for flex. **Column K)** Non-federal funds autocalculates. Please verify the split/match - if matching an FTA flex, coordinate with Rail & Transit Division before programming; **Column L)** Enter Additional Information as described - please do not use any other format.

Total Regional Federal Aid Funds Programmed ►		\$ 9,530,737	\$ 11,385,638	◀ Total Budget	\$ 1,854,901	Target Funds Available
STBG programmed ►	\$ 9,530,737	\$ 7,624,590	◀ STBG			
HSIP programmed ►	\$ -	\$ -	◀ HSIP			
CMAQ programmed ►	\$ -	\$ -	◀ CMAQ			
TAP programmed ►	\$ -	\$ -	◀ TAP			

► Section 1B / Earmark or Discretionary Grant Funded Projects

► Other Federal Aid

			Merrimack Valley		Other Federal Aid			\$ -	\$ -	\$ -	
			Merrimack Valley		Other Federal Aid			\$ -	\$ -	\$ -	
Other Federal Aid subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Section 2A / State Prioritized Reliability Projects

► Bridge Program / Inspections

	Bridge Program		Merrimack Valley		Bridge Inspection			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Inspection			\$ -	\$ -	\$ -	
Bridge Program / Inspections subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Bridge Program / Off-System

	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	

2024 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
Bridge Program / Off-System subtotal ▶								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Bridge Program / On-System (NHS)											
	Bridge Program	606522	Merrimack Valley	Andover	ANDOVER- BRIDGE REHABILITATION, A-09-036, I-495 OVER ST 28 (SB), A-09-037, I-495 OVER B&M AND MBTA, A-09-041, I-495 OVER ST 28 (NB)	4	NHPP-On	\$ 17,204,394	\$ 13,763,515	\$ 3,440,879	AC Year 1 of 5, Total Cost \$113,386,056
	Bridge Program	605304	Merrimack Valley	Haverhill	HAVERRILL- BRIDGE REPLACEMENT, H-12-007 & H-12-025, BRIDGE STREET (SR 125) OVER THE MERRIMACK RIVER AND THE ABANDONED B&M RR (PROPOSED BIKEWAY)	4	NHPP-On	\$ 13,142,589	\$ 10,514,071	\$ 2,628,518	AC Year 1 of 5, Total Cost \$124,938,960
	Bridge Program	TBD	Merrimack Valley	Haverhill	HAVERRILL- BRIDGE REPLACEMENT, H-12-040, I-495 (NB & SB) OVER MERRIMACK RIVER	4	NHPP-On	\$ 43,180,558	\$ 34,544,446	\$ 8,636,112	AC Year 2 of 3, Total Cost = \$96,000,000
	Bridge Program		Merrimack Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (NHS) subtotal ▶								\$ 73,527,541	\$ 58,822,033	\$ 14,705,508	◀ Funding Split Varies by Funding Source
► Bridge Program / On-System (Non-NHS)											
	Bridge Program		Merrimack Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (Non-NHS) subtotal ▶								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Bridge Program / Systematic Maintenance											
	Bridge Program		Merrimack Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Merrimack Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
Bridge Program / Systematic Maintenance subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Interstate Pavement											
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Merrimack Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement subtotal ▶								\$ -	\$ -	\$ -	◀ 90% Federal + 10% Non-Federal
► Non-Interstate Pavement											
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	

2024 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Merrimack Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Roadway Improvements											
	Roadway Improvements		Merrimack Valley		Roadway Improvements			\$ -	\$ -	\$ -	
	Roadway Improvements		Merrimack Valley		Roadway Improvements			\$ -	\$ -	\$ -	
Roadway Improvements subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Safety Improvements											
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Merrimack Valley		Safety Improvements			\$ -	\$ -	\$ -	
Safety Improvements subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 2B / State Prioritized Modernization Projects											
► ADA Retrofits											
	ADA Retrofits		Merrimack Valley		ADA Retrofits			\$ -	\$ -	\$ -	
	ADA Retrofits		Merrimack Valley		ADA Retrofits			\$ -	\$ -	\$ -	
ADA Retrofits subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Intersection Improvements											
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Merrimack Valley		Intersection Improvements			\$ -	\$ -	\$ -	
Intersection Improvements subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Intelligent Transportation Systems											

2024 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information</i>
	Intelligent Transportation Systems		Merrimack Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
	Intelligent Transportation Systems		Merrimack Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
	Intelligent Transportation Systems		Merrimack Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
Intelligent Transportation System subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Roadway Reconstruction											
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Merrimack Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
Roadway Reconstruction subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 2C / State Prioritized Expansion Projects											
► Bicycles and Pedestrians											
	Bicycles and Pedestrians		Merrimack Valley		Bicycles and Pedestrians			\$ -	\$ -	\$ -	
	Bicycles and Pedestrians		Merrimack Valley		Bicycles and Pedestrians			\$ -	\$ -	\$ -	
Bicycles and Pedestrians subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Capacity											
	Capacity		Merrimack Valley		Capacity			\$ -	\$ -	\$ -	
	Capacity		Merrimack Valley		Capacity			\$ -	\$ -	\$ -	
Capacity subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 3 / Planning / Adjustments / Pass-throughs											
► Planning / Adjustments / Pass-throughs											
			Merrimack Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		State Planning and Research Work Program I, (SPR I), Planning	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		State Planning and Research Work Program II, (SPR II), Research	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
			Merrimack Valley		Recreational Trails	Multiple		\$ -	\$ -	\$ -	
Other Statewide Items subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

2024 Merrimack Valley Region Transportation Improvement Program

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable:</i> a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction status; d) MPO project score; e) name of entity receiving a transfer; f) name of entity paying the non-state non-federal match; g) earmark details; h) TAP project proponent; i) other information
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▶ Section 4 / Non-Federally Aided Projects

▶ Non-Federally Aided Projects

	Non Federal Aid		Merrimack Valley		Non-Federal Aid			\$ -		\$ -	
	Non-Federally Aided Projects		Merrimack Valley		Non-Federal Aid			\$ -		\$ -	
Non-Federal Aid subtotal ▶								\$ -		\$ -	◀ 100% Non-Federal

2024 Summary

		TIP Section 1 - 3: ▼	TIP Section 4: ▼	Total of All Projects ▼	
Total ▶	\$ 83,058,278	\$ -	\$ 83,058,278	\$ 83,058,278	◀ Total Spending in Region
Federal Funds ▶	\$ 66,446,622	\$ -	\$ 66,446,622	\$ 66,446,622	◀ Total Federal Spending in Region
Non-Federal Funds ▶	\$ 16,611,656	\$ -	\$ 16,611,656	\$ 16,611,656	◀ Total Non-Federal Spending in Region

701 CMR 7.00 Use of Road Flaggers and Police Details on Public Works Projects / 701 CMR 7.00 (the Regulation) was promulgated and became law on October 3, 2008. Under this Regulation, the CMR is applicable to any Public works Project that is performed within the limits of, or that impact traffic on, any Public Road. The Municipal Limitation referenced in this Regulation is applicable only to projects where the Municipality is the Awarding Authority. For all projects contained in the TIP, the Commonwealth is the Awarding Authority. Therefore, all projects must be considered and implemented in accordance with 701 CMR 7.00, and the Road Flagger and Police Detail Guidelines. By placing a project on the TIP, the Municipality acknowledges that 701 CMR 7.00 is applicable to its project and design and construction will be fully compliant with this Regulation. This information, and additional information relative to guidance and implementation of the Regulation can be found at the following link on the MassDOT Highway Division website: <http://www.massdot.state.ma.us/Highway/flaggers/main.aspx>

Part B. Project Listings (Cont.)

Transit Projects

**TIP FFYs 2020 – 2024 Transit Projects
2020**

5307										
Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	RTACAP	SCA	TDC	Local Funds	Total
Sect 5307										
RTD0007680	MVRTA	117A00	Preventive Maintenance		\$2,658,530	\$0	\$664,630	\$0	\$0	\$3,323,160
RTD0007681	MVRTA	117C00	Non-Fixed Route ADA para serv		\$1,322,605	\$0	\$330,650	\$0	\$0	\$1,653,255
RTD0007682	MVRTA	442400	SHORT RANGE TRANSIT PLANNING	2019 - \$80,000	\$80,000	\$0	\$0	\$0	\$20,000	\$100,000
RTD0007683	MVRTA	300900	OPERATING ASSISTANCE		\$430,775	\$0	\$430,775	\$0	\$0	\$861,550
RTD0007687	MVRTA	111202	Replace 3 Model Yr 2007 buses delivery 2020	2019 - \$1,101,720	\$1,101,720	\$275,430	\$0	\$0	\$0	\$1,377,150
RTD0007695	MVRTA	114305	SGR Riverbank stabilization Construction		\$1,400,265	\$350,065	\$0	\$0	\$0	\$1,750,330
RTD0007696	MVRTA	114211	SGR Replace 1 model year 2013 supervisory vehicle		\$37,225	\$9,305	\$0	\$0	\$0	\$46,530
				Sect 5307 Total	\$7,031,120	\$634,800	\$1,426,055	\$0	\$20,000	\$9,111,975

**TIP FFYs 2020 – 2024 Transit Projects
2020 (Cont.)**

Project Number	Agency	Project Description	Carry Over	Federal Funds	RTACAP	SCA	MAP	TDC	Local Funds	Total
5310										
RTD0008295	Northern Essex Elder Transport	Driving Forward 2020		\$12,500	\$0	\$0		\$0	\$12,500	\$25,000
			Sect 5310 Total	\$12,500	\$0	\$0		\$0	\$12,500	\$25,000
5339										
	MVRTA	Purchase On-board Automatic Passenger Counter (APC)		\$371,280	\$0	\$0		\$92,820*	\$0	\$371,280 *
			Sect 5339 Total	\$371,280	\$0	\$0		\$92,820*	\$0	\$371,280 *
MAP										
RTD0008311	Town of Andover	Buy Replacement Van (1)		\$0	\$0	\$0	\$55,280	\$0	\$13,820	\$69,100
RTD0008320	Town of Salisbury	Buy Van for Svc Expansion (1)		\$0	\$0	\$0	\$54,400	\$0	\$13,600	\$68,000
			MAP Total	\$0	\$0	\$0	\$109,680	\$0	\$27,420	\$137,100
			Grand Total Federal Aid	\$7,414,900	\$634,800	\$1,426,055	\$109,680	\$92,820*	\$59,920	\$9,645,355 *

*TDC Toll Credits are not included in Totals

**TIP FFYs 2020 – 2024 Transit Projects
2020 (Cont.)**

Project Number	Agency	Project Description	Carry Over	Federal Funds	RTACAP	SCA	MAP	TDC	Local Funds	Total
Non- Federal Aid										
RTD0008938	MVRTA		State of Good Re- pair Transpor- tation Centers		\$188,357					\$188,357
			NFA Total		\$188,357					\$188,357

*TDC Toll Credits are not included in Totals

**TIP FFYs 2020 – 2024 Transit Projects
2021**

5307										
Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	RTACAP	SCA	TDC	Local Funds	Total
RTD0007684	MVRTA	117A00	Preventive Maintenance		\$2,796,775	\$0	\$699,195	\$0	\$0	\$3,495,970
RTD0007685	MVRTA	117C00	Non-Fixed Route ADA para serv		\$1,392,850	\$0	\$348,215	\$0	\$0	\$1,741,065
RTD0007686	MVRTA	442400	SHORT RANGE TRANSIT PLANNING		\$80,000	\$0	\$0	\$0	\$20,000	\$100,000
RTD0007688	MVRTA	300901	OPERATING ASSISTANCE		\$453,175	\$0	\$453,175	\$0	\$0	\$906,350
RTD0007689	MVRTA	111215	Replace 16 Model Yr 2015 vans with new		\$944,385	\$236,095	\$0	\$0	\$0	\$1,180,480
RTD0007697	MVRTA	114211	SGR Replace 1 model yr 2014 supervisory vehicle		\$38,320	\$9,580	\$0	\$0	\$0	\$47,900
				Total	\$5,705,505	\$245,675	\$1,500,585	\$0	\$20,000	\$7,471,765

**TIP FFYs 2020 – 2024 Transit Projects
2022**

5307										
Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	RTACAP	SCA	TDC	Local Funds	Total
RTD0007690	MVRTA	117A00	Preventive Maintenance		\$2,889,070	\$0	\$722,265	\$0	\$0	\$3,611,335
RTD0007691	MVRTA	117C00	Non-Fixed Route ADA para serv		\$1,441,305	\$0	\$360,325	\$0	\$0	\$1,801,630
RTD0007692	MVRTA	442400	SHORT RANGE TRANSIT PLANNING		\$80,000	\$0	\$0	\$0	\$20,000	\$100,000
RTD0007693	MVRTA	300901	OPERATING ASSISTANCE		\$468,130	\$0	\$468,130	\$0	\$0	\$936,260
RTD0007694	MVRTA	111202	Replace Model Yr 2009 buses delivery 2022 7 of 9		\$2,734,145	\$683,535	\$0	\$0	\$0	\$3,417,680
RTD0008061	MVRTA	114211	SGR Replace 2 model year 2016 supervisory vehicles		\$78,190	\$19,550	\$0	\$0	\$0	\$97,740
				Total	\$7,690,840	\$703,085	\$1,550,720	\$0	\$20,000	\$9,964,645

**TIP FFYs 2020 – 2024 Transit Projects
2023**

5307										
Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	RTACAP	SCA	TDC	Local Funds	Total
RTD0007698	MVRTA	117A00	Preventive Maintenance		\$2,984,410	\$0	\$746,100	\$0	\$0	\$3,730,510
RTD0007699	MVRTA	300901	OPERATING ASSISTANCE		\$483,575	\$0	\$483,575	\$0	\$0	\$967,150
RTD0007700	MVRTA	117C00	Non-Fixed Route ADA para serv		\$1,488,870	\$0	\$372,220	\$0	\$0	\$1,861,090
RTD0007701	MVRTA	111202	Replace 2 Model Yr 2009 buses delivery 2023		\$804,625	\$201,155		\$0	\$0	\$1,005,780
RTD0007702	MVRTA	111215	Replace 6 model yr 2017 vans delivery 2023		\$375,695	\$93,925		\$0	\$0	\$469,620
RTD0007703	MVRTA	442400	SHORT RANGE TRANSIT PLANNING		\$80,000	\$0		\$0	\$20,000	\$100,000
				Total	\$6,217,175	\$295,080	\$1,601,895	\$0	\$20,000	\$8,134,150

**TIP FFYs 2020 – 2024 Transit Projects
2024**

5307										
Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	RTACAP	SCA	TDC	Local Funds	Total
	MVRTA		Preventative Maintenance Expense		\$3,082,895	\$0	\$770,725	\$0	\$0	\$3,853,620
	MVRTA		Non-fixed Route ADA paratransit service		\$1,538,105	\$0	\$384,525	\$0	\$0	\$1,922,630
	MVRTA		SHORT RANGE TRANSIT PLANNING		\$80,000	\$0	\$0	\$0	\$20,000	\$100,000
	MVRTA		OPERATING ASSISTANCE		\$432,660	\$0	\$432,660	\$0	\$0	\$865,320
	MVRTA		SGR Replace 2 Model Yr 2011 Buses Delivery 2024 (2 of 8)		\$828,750	\$207,190				\$1,035,940
				Total	\$5,962,410	\$207,190	\$1,587,910	\$0	\$20,000	\$7,777,510

Summary of Highway Project Listings by Town

**Summary of Highway Projects by Town
(2020 to 2024 Regional Target Funds)**

Year (s) Programmed	City / Town	Project Description	Total Cost Programmed
2020	Amesbury	Amesbury - Reconstruction of Elm Street (# 602418) (AC Year 2 of 2)	\$7,223,053
2021	Groveland	Groveland - Groveland Community Trail, from Main Street to King Street (# 608298)	\$2,064,255
2020	Haverhill	Haverhill – Bradford Rail Trail Extension from Route 125 to Railroad Street (# 608027)	\$1,766,108
2022	Haverhill	Haverhill – Intersection Improvements at Rt 110 / Rt 108 (# 608761)	\$2,099,520
2023-2024	Haverhill	Haverhill – Roadway Reconstruction on North Avenue, from Main Street (Route 125) to Plaistow NH	\$13,678,560
2021-2022	North Andover	North Andover - Corridor Improvements on Route 114, between Route 125 (Andover Street) & Stop & Shop Driveway (# 608095)	\$17,399,023
2023	Salisbury	Salisbury – Reconstruction of Route 1 (Lafayette Road)	\$7,090,517

**Summary of Programmed Highway Funds by Town
(2020 to 2024 Regional Target Funds)**

Project Description	Total Cost Programmed
Amesbury Total	\$7,223,053
Groveland Total	\$2,064,255
Haverhill Total	\$17,544,188
North Andover Total	\$17,399,023
Salisbury Total	\$7,090,517
Regional Total	\$51,321,036

**Summary of Highway Projects by Town
(2020 to 2024 Statewide and Regional Target Funds)**

Year (s) Programmed	City / Town	Project Description	Total Cost Programmed
2020	Amesbury	Amesbury - Reconstruction of Elm Street (# 602418)	\$7,223,053
2024	Andover	Andover- Bridge Rehabilitation, A-09-036, I-495 over St 28 (SB), A-09-037, I-495 over B&M and MBTA, A-09-041, I-495 over St 28 (NB) (#606522)	\$17,204,394
2021	Georgetown / Boxford	Georgetown - Boxford Border to Boston Trail, from Georgetown Road to West Main Street (Route 97) (# 607541)	\$1,812,628
2023	Georgetown / Newbury	Georgetown - Newbury Border to Boston Trail, (Northern Georgetown to Byfield Section) (# 607542)	\$4,341,120
2021	Groveland	Groveland - Groveland Community Trail, from Main Street to King Street (# 608298)	\$2,064,255
2020	Haverhill	Haverhill – Bradford Rail Trail Extension from Route 125 to Railroad Street (# 608027)	\$1,766,108
2020-2023	Haverhill	Haverhill - Bridge Replacement, H-12-039, I-495 (NB & SB) over Merrimack River (# 605306)	\$61,809,676
2023-2024	Haverhill	Haverhill - Bridge Replacement, H-12-040, I-495 (NB & SB) over Merrimack River (#TBD)	\$68,379,326

**Summary of Highway Projects by Town
(2020 to 2024 Statewide and Target Funds) (Cont.)**

Year (s) Programmed	City / Town	Project Description	Total Cost Programmed
2022	Haverhill	Haverhill – Intersection Improvements at Rt 110 / Rt 108 (# 608761)	\$2,099,520
2023-2024	Haverhill	Haverhill – Roadway Reconstruction on North Avenue, from Main Street (Route 125) to Plaistow NH (#608788)	\$13,678,560
2024	Haverhill	Haverhill- Bridge Replacement, H-12-007 & H-12-025, Bridge Street (SR 125) over the Merrimack River and the Abandoned B&M RR (Proposed Bikeway) (#605304)	\$13,142,589
2023	Lawrence	Lawrence – Lawrence Manchester Rail Corridor (LMRC) Rail Trail (# 608930)	\$15,950,704
2021	Newbury - Newburyport - Salisbury	Newbury - Newburyport - Salisbury - Resurfacing and related work on Route 1 (# 608494)	\$9,807,200
2021-2022	North Andover	North Andover - Corridor Improvements on Route 114, between Route 125 (Andover Street) & Stop & Shop Driveway (# 608095)	\$17,399,023
2023	Salisbury	Salisbury – Reconstruction of Route 1 (Lafayette Road) (#602202)	\$7,090,517

**Summary of Programmed Highway Funds by Town
(2020 to 2024 Statewide and Regional Target Funds)**

Project Description	Total Cost Programmed
Amesbury Total	\$7,223,053
Andover Total	\$17,204,394
Boxford Total	\$906,314
Georgetown Total	\$3,076,874
Groveland Total	\$2,064,255
Haverhill Total	\$160,875,779
Lawrence Total	\$15,950,704
Newbury Total	\$5,439,627
Newburyport Total	\$3,269,067
North Andover Total	\$17,399,023
Salisbury Total	\$10,359,584
Regional Total	\$243,768,674

Part C. Federal Requirements

Part C.1. Highway Program Financial Plan

The TIP must be financially constrained, meaning projects included in the TIP must have an identified funding source. Funding levels for Federal Fiscal Years 2020-2024 have been developed cooperatively between the State and the MPOs as part of the TIP development process. The following five tables depict the resulting financial plan for each of the five fiscal years. FHWA provides the state with the expected Federal Funding available for each year of the TIP this estimated Title 23 Base Obligation Authority is listed first to which is added a “Planned redistribution request” estimated to be \$50,000,000 each year of the TIP. (Toward the end of the FFY any state that has not spent their Federal Obligation Authority returns that authority, and the Federal government redistributes those funds to the other states.) The Total estimated Federal Funds available to Massachusetts is estimated to be between approximately 676 million dollars and 739 million dollars for each of FFYs 2020 to 2024. The State then subtracts annual debt service payments for the Accelerated Bridge Program (ABP) Grant Application Notes (GANs) which range from 81 million dollars to almost 99 million dollars for each year over the five years of the TIP. The State generally provides the 20% match required for the Federal funds resulting in estimated funds ranging from approximately 734 million dollars to approximately 793 million dollars available Statewide for highway program funding for each of the five years of the TIP.

MassDOT Highway Division, Office of Transportation Planning (OTP), and the Federal Aid Programming and Reimbursement Office (FAPRO) then decide the amount of funding needed for Statewide items such as Interstate Maintenance, district-wide contracts, planning and transportation demand management. Those funds are subtracted from the total and the remaining is available for regional priorities, which ranges from \$238,504,702 in FFY 2020 to \$257,035,098 in FFY 2024.

This funding is then allocated to MPOs based upon the existing Massachusetts Association of Regional Planning Agencies (MARPA) TIP target distribution formula. This “MARPA” formula is based mainly on each MPO’s road mileage and population. The MVMPO’s share is 4.4296%, resulting in the funding available for regional priorities to be \$10,564,815 in FFY 2020; \$10,778,652 in FFY 2021; \$10,998,132 in FFY 2022; \$11,238,340 in FFY 2023 and \$11,385,638 in FFY 2024.

In FFY 2017 MassDOT ended funding for the regional major infrastructure program after the I-91 Viaduct in Springfield project had been completed. These funds will be reallocated to the Regional Target program for prioritization by MPOs across the state.

Inflation increases project costs and therefore project costs have been increased 4% per year.

**FFY 2020-2024 STIP
2020 BUDGET**

	Obligation authority <i>(federal aid only)</i>	Matching funds	FFY 2020 (Proposed) <i>(federal aid + match)</i>
Base obligation authority	\$ 626,330,019		
Planned redistribution request	\$ 50,000,000		
Total Estimated Funding Available	\$ 676,330,019		
ABP GANS Repayment	\$ (81,570,000)		
Total non-earmarked funding available	\$ 594,760,019	\$ 139,025,281	\$ 733,785,300
Planning / Adjustments / Pass-throughs			
Award adjustments, change orders, etc.	\$ 27,084,260	\$ 6,771,065	\$ 33,855,325
Metropolitan planning	\$ 10,008,878	\$ 2,502,219	\$ 12,511,095
State planning and research	\$ 20,431,055	\$ 5,107,764	\$ 25,538,819
Freight Plan flex to Rail and Transit	\$ 2,245,872	\$ 561,488	\$ 2,807,340
Recreational trails	\$ 1,186,729	\$ 296,682	\$ 1,483,411
Railroad grade crossings	\$ 2,000,000	\$ 222,222	\$ 2,222,222
SRTS education	\$ 1,080,000	\$ 270,000	\$ 1,350,000
Transit grant program	\$ 1,580,000	\$ 395,000	\$ 1,975,000
<i>subtotal of planning / adjustments / pass-throughs</i>	\$ 65,616,792	\$ 16,126,420	\$ 81,743,212
Funding for regional priorities	regional share %	MPO	Total federal aid Matching funds Total funding (proposed)
	3.5596%	Berkshire	\$ 6,791,857 \$ 1,687,964 \$ 8,489,822
	42.9671%	Boston	\$ 81,982,925 \$ 20,495,731 \$ 102,478,656
	4.5851%	Cape Cod	\$ 8,748,552 \$ 2,187,138 \$ 10,935,690
	8.6901%	Central Mass	\$ 16,581,054 \$ 4,145,264 \$ 20,726,318
	2.5397%	Franklin	\$ 4,845,848 \$ 1,211,462 \$ 6,057,310
	0.3100%	Martha's Vineyard	\$ 591,492 \$ 147,873 \$ 739,365
	4.4296%	Merrimack Valley	\$ 8,451,852 \$ 2,112,963 \$ 10,564,815
	4.4596%	Montachusett	\$ 8,509,093 \$ 2,127,273 \$ 10,636,366
	0.2200%	Nantucket	\$ 419,769 \$ 104,942 \$ 524,711
	3.9096%	Northern Middlesex	\$ 7,459,871 \$ 1,864,918 \$ 9,324,589
	4.5595%	Old Colony	\$ 8,699,706 \$ 2,174,927 \$ 10,874,633
	10.8099%	Pioneer Valley	\$ 20,625,716 \$ 5,156,429 \$ 25,782,146
	8.9601%	Southeastern Mass	\$ 17,098,225 \$ 4,274,056 \$ 21,370,281
	<i>Total funding of regional priorities</i>		\$ 190,803,952 \$ 47,700,940 \$ 238,504,702
Highway Division programs			\$ 338,339,275 \$ 75,197,921 \$ 413,537,196
Reliability programs			\$ 283,939,275 \$ 63,681,254 \$ 347,620,529
Bridge program			\$ 151,472,055 \$ 37,868,014 \$ 197,709,931
	<i>Inspections</i>		\$ 14,320,000 \$ 3,580,000 \$ 17,900,000
	<i>Systematic maintenance</i>		\$ 8,000,000 \$ 2,000,000 \$ 10,000,000
	<i>On-system NHS (minimum)</i>		\$ 94,900,000 \$ 23,725,000 \$ 118,625,000
	<i>On-System Non-NHS</i>		\$ 9,100,000 \$ 2,275,000 \$ 11,375,000
	<i>Off-system</i>		\$ 28,500,000 \$ 7,125,000 \$ 35,625,000
Interstate pavement program			\$ 37,585,665 \$ 4,176,185 \$ 41,761,850

**FFY 2020-2024 STIP
2020 BUDGET**

Non-interstate DOT pavement program	\$ 65,185,865	\$ 16,298,418	\$ 81,482,081
Roadway improvements program	\$ 3,000,000	\$ 750,000	\$ 3,750,000
Safety improvements program	\$ 20,000,000	\$ 2,918,887	\$ 22,916,667
Modernization programs	\$ 34,400,000	\$ 6,516,667	\$ 40,916,667
ADA retrofits program	\$ -	\$ -	\$ -
Intersection improvements program	\$ 17,000,000	\$ 2,168,887	\$ 19,166,667
Intelligent Transportation Systems program	\$ 10,000,000	\$ 2,500,000	\$ 12,500,000
Roadway reconstruction program	\$ 7,400,000	\$ 1,850,000	\$ 9,250,000
Expansion programs	\$ 20,000,000	\$ 5,000,000	\$ 25,000,000
Bicycles and pedestrians program	\$ 20,000,000	\$ 5,000,000	\$ 25,000,000
Capacity program	\$ -	\$ -	\$ -

**FFY 2020-2024 STIP
2021 BUDGET**

	Obligation authority <i>(federal aid only)</i>	Matching funds	FFY 2021 (Proposed) <i>(federal aid + match)</i>
Base obligation authority	\$ 641,988,270		
Planned redistribution request	\$ 50,000,000		
Total Estimated Funding Available	\$ 691,988,270		
ABP GANS Repayment	\$ (85,190,000)		
Total non-earmarked funding available	\$ 606,798,270	\$ 143,814,674	\$ 750,612,944
Planning / Adjustments / Pass-throughs			
Award adjustments, change orders, etc.	\$ 18,903,344	\$ 4,725,838	\$ 23,629,180
Metropolitan planning	\$ 10,008,878	\$ 2,502,219	\$ 12,511,095
State planning and research	\$ 20,431,055	\$ 5,107,784	\$ 25,538,819
Freight Plan flex to Rail and Transit	\$ 2,245,872	\$ 561,488	\$ 2,807,340
Recreational trails	\$ 1,188,729	\$ 298,682	\$ 1,483,411
Railroad grade crossings	\$ 2,000,000	\$ 222,222	\$ 2,222,222
SRTS education	\$ 1,080,000	\$ 270,000	\$ 1,350,000
Transit grant program	\$ 1,580,000	\$ 395,000	\$ 1,975,000
<i>subtotal of planning / adjustments / pass-throughs</i>	\$ 57,435,876	\$ 14,081,191	\$ 71,517,067
Funding for regional priorities	regional share %	MPO	Total federal aid
			Matching funds
			Total funding (proposed)
	3.5596%	Berkshire	\$ 6,929,328
	42.9671%	Boston	\$ 83,642,302
	4.5851%	Cape Cod	\$ 8,925,827
	8.6901%	Central Mass	\$ 16,916,863
	2.5397%	Franklin	\$ 4,943,930
	0.3100%	Martha's Vineyard	\$ 603,464
	4.4296%	Merrimack Valley	\$ 8,622,922
	4.4596%	Montachusett	\$ 8,681,322
	0.2200%	Nantucket	\$ 428,285
	3.9096%	Northern Middlesex	\$ 7,610,859
	4.5595%	Old Colony	\$ 8,875,793
	10.8099%	Pioneer Valley	\$ 21,043,192
	8.9601%	Southeastern Mass	\$ 17,442,261
		<i>Total funding of regional priorities</i>	\$ 194,665,923
Highway Division programs			\$ 48,666,432
Reliability programs			\$ 81,067,051
Bridge program			\$ 242,628,526
			\$ 55,414,829
			\$ 179,809,931
		<i>Inspections</i>	\$ -
		<i>Systematic maintenance</i>	\$ 8,000,000
		<i>On-system NHS (minimum)</i>	\$ 94,900,000
		<i>On-System Non-NHS</i>	\$ 9,100,000
		<i>Off-system</i>	\$ 28,500,000
			\$ 7,125,000
			\$ 35,625,000

**FFY 2020-2024 STIP
2021 BUDGET**

Interstate pavement program	\$ 24,744,581	\$ 2,749,308	\$ 27,493,979
Non-interstate DOT pavement program	\$ 54,036,000	\$ 13,509,000	\$ 67,545,000
Roadway improvements program	\$ 3,000,000	\$ 750,000	\$ 3,750,000
Safety improvements program	\$ 17,000,000	\$ 2,444,444	\$ 19,444,444
Modernization programs	\$ 80,720,000	\$ 18,652,222	\$ 99,372,222
ADA retrofits program	\$ 1,400,000	\$ 350,000	\$ 1,750,000
Intersection improvements program	\$ 16,000,000	\$ 2,472,222	\$ 18,472,222
Intelligent Transportation Systems program	\$ 8,000,000	\$ 2,000,000	\$ 10,000,000
Roadway reconstruction program	\$ 55,320,000	\$ 13,830,000	\$ 69,150,000
Expansion programs	\$ 28,000,000	\$ 7,000,000	\$ 35,000,000
Bicycles and pedestrians program	\$ 28,000,000	\$ 7,000,000	\$ 35,000,000
Capacity program	\$ -	\$ -	\$ -

**FFY 2020-2024 STIP
2022 BUDGET**

	Obligation authority <i>(federal aid only)</i>	Matching funds	FFY 2022 (Proposed) <i>(federal aid + match)</i>
Base obligation authority	\$ 858,744,163		
Planned redistribution request	\$ 50,000,000		
Total Estimated Funding Available	\$ 708,744,163		
ABP GANS Repayment	\$ (89,580,000)		
Total non-earmarked funding available	\$ 619,154,163	\$ 147,301,057	\$ 766,455,220
Planning / Adjustments / Pass-throughs			
Award adjustments, change orders, etc.	\$ 25,270,365	\$ 6,317,591	\$ 31,587,956
Metropolitan planning	\$ 10,008,876	\$ 2,502,219	\$ 12,511,095
State planning and research	\$ 20,431,055	\$ 5,107,764	\$ 25,538,819
Freight Plan flex to Rail and Transit	\$ 2,245,872	\$ 561,468	\$ 2,807,340
Recreational trails	\$ 1,186,729	\$ 296,682	\$ 1,483,411
Railroad grade crossings	\$ 2,000,000	\$ 222,222	\$ 2,222,222
SRTS education	\$ 1,080,000	\$ 270,000	\$ 1,350,000
Transit grant program	\$ 1,580,000	\$ 395,000	\$ 1,975,000
<i>subtotal of planning / adjustments / pass-throughs</i>	\$ 63,802,897	\$ 15,672,946	\$ 79,475,843
Funding for regional priorities	<i>regional share % MPO</i>	<i>Total federal aid</i>	<i>Matching funds Total funding (proposed)</i>
	3.5596% Berkshire	\$ 7,070,426	\$ 1,767,607 \$ 8,838,033
	42.9671% Boston	\$ 85,345,463	\$ 21,336,368 \$ 106,681,829
	4.5851% Cape Cod	\$ 9,107,375	\$ 2,276,844 \$ 11,384,218
	8.6901% Central Mass	\$ 17,261,128	\$ 4,315,282 \$ 21,576,410
	2.5397% Franklin	\$ 5,044,601	\$ 1,261,150 \$ 6,305,751
	0.3100% Martha's Vineyard	\$ 615,752	\$ 153,938 \$ 769,690
	4.4296% Merrimack Valley	\$ 8,798,505	\$ 2,199,628 \$ 10,998,132
	4.4596% Montachusett	\$ 8,858,094	\$ 2,214,524 \$ 11,072,618
	0.2200% Nantucket	\$ 436,988	\$ 109,248 \$ 546,232
	3.9096% Northern Middlesex	\$ 7,765,631	\$ 1,941,408 \$ 9,707,038
	4.5595% Old Colony	\$ 9,056,526	\$ 2,264,131 \$ 11,320,657
	10.8099% Pioneer Valley	\$ 21,471,682	\$ 5,367,921 \$ 26,839,603
	8.9601% Southeastern Mass	\$ 17,797,428	\$ 4,449,357 \$ 22,246,785
	<i>Total funding of regional priorities</i>	\$ 198,629,796	\$ 49,657,399 \$ 248,286,997
Highway Division programs	\$ 356,721,470	\$ 81,970,711	\$ 438,692,181
Reliability programs	\$ 250,221,470	\$ 57,429,045	\$ 307,650,514
Bridge program	\$ 158,167,945	\$ 39,541,988	\$ 197,709,931
	<i>Inspections</i>	\$ 14,320,000	\$ 3,580,000 \$ 17,900,000
	<i>Systematic maintenance</i>	\$ 8,000,000	\$ 2,000,000 \$ 10,000,000
	<i>On-system NHS (minimum)</i>	\$ 94,900,000	\$ 23,725,000 \$ 118,625,000
	<i>On-System Non-NHS</i>	\$ 9,100,000	\$ 2,275,000 \$ 11,375,000
	<i>Off-system</i>	\$ 28,500,000	\$ 7,125,000 \$ 35,625,000

**FFY 2020-2024 STIP
2022 BUDGET**

Interstate pavement program	\$ 22,909,525	\$ 2,545,503	\$ 25,455,028
Non-interstate DOT pavement program	\$ 51,144,000	\$ 12,786,000	\$ 63,930,000
Roadway improvements program	\$ 1,000,000	\$ 250,000	\$ 1,250,000
Safety improvements program	\$ 17,000,000	\$ 2,305,556	\$ 19,305,556
Modernization programs	\$ 78,500,000	\$ 17,541,667	\$ 96,041,667
ADA retrofits program	\$ -	\$ -	\$ -
Intersection improvements program	\$ 15,000,000	\$ 1,666,667	\$ 16,666,667
Intelligent Transportation Systems program	\$ 8,000,000	\$ 2,000,000	\$ 10,000,000
Roadway reconstruction program	\$ 55,500,000	\$ 13,875,000	\$ 69,375,000
Expansion programs	\$ 28,000,000	\$ 7,000,000	\$ 35,000,000
Bicycles and pedestrians program	\$ 28,000,000	\$ 7,000,000	\$ 35,000,000
Capacity program	\$ -	\$ -	\$ -

**FFY 2020-2024 STIP
2023 BUDGET**

	Obligation authority <i>(federal aid only)</i>	Matching funds	FFY 2023 (Proposed) <i>(federal aid + match)</i>		
Base obligation authority	\$ 676,662,005				
Planned redistribution request	\$ 50,000,000				
Total Estimated Funding Available	\$ 726,662,005				
ABP GANS Repayment	\$ (93,985,000)				
Total non-earmarked funding available	\$ 632,677,005	\$ 150,023,500	\$ 782,700,504		
Planning / Adjustments / Pass-throughs					
Award adjustments, change orders, etc.	\$ 12,257,029	\$ 3,084,257	\$ 15,321,286		
Metropolitan planning	\$ 10,008,878	\$ 2,502,219	\$ 12,511,095		
State planning and research	\$ 20,431,055	\$ 5,107,764	\$ 25,538,819		
Recreational trails	\$ 1,188,729	\$ 296,882	\$ 1,483,411		
Railroad grade crossings	\$ 2,000,000	\$ 222,222	\$ 2,222,222		
SRTS education	\$ 1,080,000	\$ 270,000	\$ 1,350,000		
Transit grant program	\$ 1,580,000	\$ 395,000	\$ 1,975,000		
<i>subtotal of planning / adjustments / pass-throughs</i>	\$ 48,543,689	\$ 11,858,144	\$ 60,401,833		
Funding for regional priorities	regional share %	MPO	Total federal aid	Matching funds	Total funding (proposed)
	3.5596%	Berkshire	\$ 7,224,850	\$ 1,808,213	\$ 9,031,063
	42.9671%	Boston	\$ 87,209,479	\$ 21,802,370	\$ 109,011,849
	4.5851%	Cape Cod	\$ 9,308,287	\$ 2,326,572	\$ 11,632,859
	8.6901%	Central Mass	\$ 17,638,125	\$ 4,409,531	\$ 22,047,657
	2.5397%	Franklin	\$ 5,154,779	\$ 1,288,895	\$ 6,443,474
	0.3100%	Martha's Vineyard	\$ 629,201	\$ 157,300	\$ 786,501
	4.4296%	Merrimack Valley	\$ 8,990,872	\$ 2,247,888	\$ 11,238,340
	4.4596%	Montachusett	\$ 9,051,563	\$ 2,262,891	\$ 11,314,453
	0.2200%	Nantucket	\$ 448,530	\$ 111,832	\$ 558,162
	3.9096%	Northern Middlesex	\$ 7,935,238	\$ 1,983,810	\$ 9,919,048
	4.5595%	Old Colony	\$ 9,254,328	\$ 2,313,582	\$ 11,567,910
	10.8099%	Pioneer Valley	\$ 21,940,642	\$ 5,485,180	\$ 27,425,802
	8.9601%	Southeastern Mass	\$ 18,188,139	\$ 4,548,535	\$ 22,732,674
		<i>Total funding of regional priorities</i>	\$ 202,968,036	\$ 50,741,958	\$ 253,709,792
Highway Division programs			\$ 381,165,279	\$ 87,423,397	\$ 468,588,676
Reliability programs			\$ 267,601,252	\$ 61,384,440	\$ 326,834,487
Bridge program			\$ 166,998,123	\$ 41,749,031	\$ 207,515,202
		<i>Inspections</i>		\$ -	\$ -
		<i>Systematic maintenance</i>	\$ 8,629,176	\$ 2,157,294	\$ 10,722,914
		<i>On-system NHS</i>	\$ 94,900,000	\$ 23,725,000	\$ 118,625,000
		<i>On-System Non-NHS</i>	\$ 9,815,687	\$ 2,453,922	\$ 12,197,315
		<i>Off-system</i>	\$ 28,500,000	\$ 7,125,000	\$ 35,625,000
Interstate pavement program			\$ 24,711,290	\$ 2,745,899	\$ 27,456,989
Non-interstate DOT pavement program			\$ 56,414,722	\$ 14,103,681	\$ 70,518,403

**FFY 2020-2024 STIP
2023 BUDGET**

Roadway improvements program	\$ 1,142,119	\$ 285,530	\$ 1,427,648
Safety improvements program	\$ 18,338,998	\$ 2,500,500	\$ 20,837,498
Modernization programs	\$ 84,673,787	\$ 18,816,397	\$ 102,880,407
ADA retrofits program	\$ 1,400,000	\$ 350,000	\$ 1,750,000
Intersection improvements program	\$ 16,934,757	\$ 1,881,640	\$ 18,705,529
Intelligent Transportation Systems program	\$ 8,000,000	\$ 2,000,000	\$ 10,000,000
Roadway reconstruction program	\$ 58,339,029	\$ 14,584,757	\$ 72,424,878
Expansion programs	\$ 28,890,241	\$ 7,222,560	\$ 36,112,801
Bicycles and pedestrians program	\$ 28,890,241	\$ 7,222,560	\$ 36,112,801
Capacity program	\$ -	\$ -	\$ -

**FFY 2020-2024 STIP
2024 BUDGET**

	Obligation authority <i>(federal aid only)</i>	Matching funds	FFY 2024 (Proposed) <i>(federal aid + match)</i>		
Base obligation authority	\$ 689,684,333				
Planned redistribution request	\$ 50,000,000				
Total Estimated Funding Available	\$ 739,684,333				
ABP GANS Repayment	\$ (98,715,000)				
Total non-earmarked funding available	\$ 640,969,333	\$ 151,980,325	\$ 792,949,658		
Planning / Adjustments / Pass-throughs					
Award adjustments, change orders, etc.	\$ 12,257,029	\$ 3,064,257	\$ 15,321,286		
Metropolitan planning	\$ 10,008,876	\$ 2,502,219	\$ 12,511,095		
State planning and research	\$ 20,431,055	\$ 5,107,764	\$ 25,538,819		
Recreational trails	\$ 1,188,729	\$ 296,882	\$ 1,483,411		
Railroad grade crossings	\$ 2,000,000	\$ 222,222	\$ 2,222,222		
SRTS education	\$ 1,080,000	\$ 270,000	\$ 1,350,000		
Transit grant program	\$ 1,580,000	\$ 395,000	\$ 1,975,000		
<i>subtotal of planning / adjustments / pass-throughs</i>	\$ 48,543,689	\$ 11,858,144	\$ 60,401,833		
Funding for regional priorities	regional share %	MPO	Total federal aid	Matching funds	Total funding (proposed)
	3.5596%	Berkshire	\$ 7,319,544	\$ 1,829,886	\$ 9,149,430
	42.9671%	Boston	\$ 88,352,510	\$ 22,088,128	\$ 110,440,638
	4.5851%	Cape Cod	\$ 9,428,262	\$ 2,357,066	\$ 11,785,328
	8.6901%	Central Mass	\$ 17,869,304	\$ 4,467,326	\$ 22,336,629
	2.5397%	Franklin	\$ 5,222,342	\$ 1,305,585	\$ 6,527,927
	0.3100%	Martha's Vineyard	\$ 637,448	\$ 159,362	\$ 796,810
	4.4296%	Merrimack Valley	\$ 9,108,510	\$ 2,277,128	\$ 11,385,638
	4.4596%	Montachusett	\$ 9,170,199	\$ 2,292,550	\$ 11,462,749
	0.2200%	Nantucket	\$ 452,382	\$ 113,096	\$ 565,478
	3.9096%	Northern Middlesex	\$ 8,039,243	\$ 2,009,811	\$ 10,049,054
	4.5595%	Old Colony	\$ 9,375,622	\$ 2,343,905	\$ 11,719,527
	10.8099%	Pioneer Valley	\$ 22,228,212	\$ 5,557,053	\$ 27,785,265
	8.9601%	Southeastern Mass	\$ 18,424,500	\$ 4,606,125	\$ 23,030,625
	<i>Total funding of regional priorities</i>		\$ 205,628,284	\$ 51,407,020	\$ 257,035,098
Highway Division programs			\$ 386,797,360	\$ 88,715,161	\$ 475,512,521
Reliability programs			\$ 271,555,215	\$ 62,291,428	\$ 333,846,643
Bridge program			\$ 169,463,850	\$ 42,365,912	\$ 211,829,562
		<i>Inspections</i>	\$ 14,320,000	\$ 3,580,000	\$ 17,900,000
		<i>Systematic maintenance</i>	\$ 8,756,680	\$ 2,189,170	\$ 10,945,850
		<i>On-system NHS</i>	\$ 94,900,000	\$ 23,725,000	\$ 118,625,000
		<i>On-System Non-NHS</i>	\$ 9,960,724	\$ 2,490,181	\$ 12,450,904
		<i>Off-system</i>	\$ 28,500,000	\$ 7,125,000	\$ 35,625,000
Interstate pavement program			\$ 25,076,422	\$ 2,788,269	\$ 27,864,692
Non-interstate DOT pavement program			\$ 57,248,203	\$ 14,312,051	\$ 71,560,253

**FFY 2020-2024 STIP
2024 BUDGET**

Roadway improvements program	\$ 1,158,995	\$ 289,749	\$ 1,448,743
Safety improvements program	\$ 18,607,945	\$ 2,537,447	\$ 21,145,392
Modernization programs	\$ 85,924,923	\$ 19,094,427	\$ 105,019,350
ADA retrofits program	\$ -	\$ -	\$ -
Intersection improvements program	\$ 17,184,985	\$ 1,909,443	\$ 19,094,427
Intelligent Transportation Systems program	\$ 8,000,000	\$ 2,000,000	\$ 10,000,000
Roadway reconstruction program	\$ 60,739,938	\$ 15,184,985	\$ 75,924,923
Expansion programs	\$ 29,317,223	\$ 7,329,306	\$ 36,646,529
Bicycles and pedestrians program	\$ 29,317,223	\$ 7,329,306	\$ 36,646,529
Capacity program	\$ -	\$ -	\$ -

The following table shows the total federal programmed amounts in this TIP for each of the five years covered in this document. The funding summaries below show the total Operating and Maintenance costs versus Capital and Other costs, for each year of the TIP. A fiscal constraint finding for the State Transportation Improvement Program will include the cost of operating and maintaining the existing MVMPO transportation system.

Highway Program Financial Plan Table

Merrimack Valley Metropolitan Planning Organization

FFY 2020-2024 Transportation Improvement Program

(FHWA - related funding categories only)

Total Costs including Federal and State Match*

Figures include Federal Aid “target” program & statewide funding

Fiscal Year	Federal Programmed Operating/ Maintenance Costs*(inc. Match)	Federal Programmed Capital and Other Costs*(inc. Match)	Total Federal + Match Programmed*	Total Federal + Match Estimated Available Funds*
2020	\$15.31	\$8.99	\$24.30	\$25.87
2021	\$25.11	\$12.59	\$37.70	\$37.70
2022	\$18.20	\$10.78	\$28.98	\$29.19
2023	\$38.19	\$31.53	\$69.72	\$69.72
2024	\$73.53	\$9.53	\$83.06	\$84.91

* Millions of dollars

The financial plan contained herein is financially constrained and indicates that the Merrimack Valley Metropolitan Planning Organization's FFYs 2020-2024 TIP reflects an emphasis on the maintenance and operation of the current roadway and bridge system with the ability to provide additional capital improvements. Only projects for which funds can be expected have been included.

Appendix B of this document includes a list of Non-federal-aid transportation projects in the region. The projects listed in Appendix B are an integral part of the planning, programming, and priority setting process of the MVMPO but have no available funding source.

Summary of Highway Funding Categories

The following tables contain a breakdown of the project cost totals and federal aid cost portions by federal aid funding categories for each fiscal year and the expected available resources to cover the cost.

Cost Estimates and Available Resources

Summary By Funding Category

Highway Projects Federal Fiscal Year 2020

Highway FFY 2020	Estimated Needs MVMPO (in 1000s) Federal Portion of Cost	Estimated Needs MVMPO (in 1000s) Total Project Cost	Available Resources MVMPO Projects (in 1000s) (From Region Target if not Statewide Category)
Regional Target Surface Transportation Block Grant Program (STBG)	\$7,136.25	\$8,920.31	\$10,495.97
Regional Target Transportation Alternatives Program (TAP)	\$55.08	\$68.85	\$68.85
Regional Target Subtotals	\$7,191.33	\$8,989.16	\$10,564.82
Statewide On-System Bridges (NHPP-On)	\$12,244.70	\$15,305.88	\$15,305.88
Total FFY 2020	\$19,436.03	\$24,295.04	\$25,870.70

Cost Estimates and Available Resources
Summary by Funding Category
Highway Projects Federal Fiscal Year 2021

Highway FFY 2021	Estimated Needs MVMPO (in 1000s) Federal Portion of Cost	Estimated Needs MVMPO (in 1000s) Total Project Cost	Available Resources MVMPO Projects (in 1000s) (From Region Target if not Statewide Category)
Regional Target Congestion Mitigation/AQ Program (CMAQ)	\$1,212.99	\$1,516.24	\$1,516.24
Regional Target Highway Safety Program (HSIP)	\$398.66	\$442.96	\$442.96
Regional Target Surface Transportation Block Grant Program (STBG)	\$6,515.57	\$8,144.46	\$8,144.46
Regional Target Transportation Alternatives Program (TAP)	\$540.00	\$674.99	\$674.99
Regional Target Subtotals	\$8,667.22	\$10,778.65	\$10,778.65
Statewide On-System Bridges (NHPP-On)	\$12,244.70	\$15,305.88	\$15,305.88
Statewide Bicycles and Pedestrians (CMAQ)	\$1,450.10	\$1,812.63	\$1,812.63
Statewide Non-Interstate Pavement (NHPP)	\$7,845.76	\$9,807.20	\$9,807.20
Total FFY 2021	\$30,207.78	\$37,704.36	\$37,704.36

Cost Estimates and Available Resources
Summary by Funding Category
Highway Projects Federal Fiscal Year 2022

Highway FFY 2022	Estimated Needs MVMPO (in 1000s) Federal Portion of Cost	Estimated Needs MVMPO (in 1000s) Total Project Cost	Available Resources MVMPO Projects (in 1000s) (From Region Target if not Statewide Category)
Regional Target Congestion Mitigation/AQ Program (CMAQ)	\$885.91	\$1,107.39	\$1,107.39
Regional Target Highway Safety Program (HSIP)	\$398.66	\$442.96	\$442.96
Regional Target Surface Transportation Block Grant Program (STBG)	\$7,106.24	\$8,882.80	\$9,096.79
Regional Target Transportation Alternatives Program (TAP)	\$280.80	\$351.00	\$351.00
Regional Target Subtotals	\$8,671.61	\$10,784.15	\$10,998.14
Statewide On-System Bridges (NHPP-On)	\$14,562.95	\$18,203.68	\$18,203.68
Total FFY 2022	\$23,234.56	\$28,987.83	\$29,201.82

**Cost Estimates and Available Resources
Summary by Funding Category
Highway Projects Federal Fiscal Year 2023**

Highway FFY 2023	Estimated Needs MVMPO (in 1000s) Federal Portion of Cost	Estimated Needs MVMPO (in 1000s) Total Project Cost	Available Resources MVMPO Projects (in 1000s) (From Region Target if not Statewide Category)
Regional Target Congestion Mitigation/AQ Program (CMAQ)			
Regional Target Highway Safety Program (HSIP)			
Regional Target Surface Transportation Block Grant Program (STBG)	\$8,990.67	\$11,238.34	\$11,238.34
Regional Target Transportation Alternatives Program (TAP)			
Regional Target Subtotals	\$8,990.67	\$11,238.34	\$11,238.34
Statewide On-System Bridges (NHPP-On)	\$30,554.40	\$38,193.00	\$38,193.00
Statewide Bicycle and Pedestrians (CMAQ)	\$16,233.46	\$20,291.82	\$20,291.82
Total FFY 2023	\$55,778.53	\$69,723.16	\$69,723.16

Cost Estimates and Available Resources
Summary by Funding Category
Highway Projects Federal Fiscal Year 2024

Highway FFY 2024	Estimated Needs MVMPO (in 1000s) Federal Portion of Cost	Estimated Needs MVMPO (in 1000s) Total Project Cost	Available Resources MVMPO Projects (in 1000s) (From Region Target if not Statewide Category)
Regional Target Surface Transportation Block Grant Program (STBG)	\$7,624.59	\$9,530.74	\$11,385.64
Regional Target Subtotals	\$7,624.59	\$9,530.74	\$11,385.64
Statewide (SW) Bridges On-System (NHPP-On)	\$58,822.04	\$73,527.54	\$73,527.54
Total FFY 2024	\$66,446.63	\$83,058.28	\$84,913.18

Part C. 2. Transit Program Financial Plan

Planning Justification for Transit Projects

The Merrimack Valley region's FFYs 2020-2024 TIP federal aid transit projects are to be carried out using Sections 5307 received by the MVRTA from the FTA with the exception of the provision of operating assistance, the planning justification for the Section 5307 projects are contained in the Merrimack Valley Regional Transit Authority's Five-Year Capital Program for 2020-2024.

MVRTA Financial Status

The FAST Act requires that projects appearing in the TIP must have an identified source of funding that will allow them to be completed within the time period contemplated. Transit projects appearing in the FY 2020-2024 TIP meet this criterion.

Transit Program Financial Plan Table

Merrimack Valley Metropolitan Planning Organization
 FFYs 2020-2024 Transportation Improvement Program
 (FTA related funding categories only)
 Total Costs including Federal, State and Local*

Fiscal Year	Federal Programmed Operating/ Maintenance Costs* (inc. Match)	Federal Programmed Capital and Other Costs* (inc. Match)	Total Federal + Match Programmed*	Total Federal + Match Estimated Available Funds*
2020	\$9.11	\$0.54	\$9.65	\$9.65
2021	\$7.37	\$0.10	\$7.47	\$7.47
2022	\$9.86	\$0.10	\$9.96	\$9.96
2023	\$8.03	\$0.10	\$8.13	\$8.13
2024	\$7.68	\$0.10	\$7.78	\$7.78

* Millions of dollars

**Cost Estimates and Available Resources
Summary by Funding Category
2020 Transit Projects**

FTA Funding Program Summaries (Federal dollars only)

Merrimack Valley Regional Transit Authority FTA Funding Programs	Estimated Authorization FFY 2020	Regional TIP FFY 2020	Balance FFY 2020
Section 5307 Capital and Planning Formula	\$6,045,140	\$4,100,175	\$1,944,965
Section 5307 Transit Enhancements			
Subtotal	\$6,045,140	\$4,100,175	\$1,944,965
Section 5307 Capital and Planning Formula Carryover	\$2,930,945	\$2,930,945	\$0
Section 5307 Operating Carryover			
Section 5307 Transit Enhancements Carryover			
Subtotal	\$2,930,945	\$2,930,945	\$0
Section 5307 Total	\$8,976,085	\$7,031,120	\$1,944,965
Section 5310 Elderly and Disabled	\$12,500	\$12,500	\$0
Section 5310 Elderly and Disabled Carryover			
Section 5310 Total	\$12,500	\$12,500	\$0
Section 5339 Bus and Bus related Equipment and Facilities	\$371,280	\$371,280	\$0
Section 5339 Total	\$371,280	\$371,280	\$0
MAP Mobility Assistance Program	\$109,680	\$109,680	\$0
MAP Total	\$109,680	\$109,680	\$0
Federal Aid Total	\$9,469,545	\$7,524,580	\$1,944,965
Other Transit Funding (Non-Federal Aid)	\$188,357	\$188,357	\$0
Non-Federal Aid Total	\$188,357	\$188,357	\$0

**Cost Estimates and Available Resources
Summary by Funding Category
2021 Transit Projects**

FTA Funding Program Summaries (Federal dollars only)

Merrimack Valley Regional Transit Authority FTA Funding Programs	Estimated Authorization FFY 2021	Regional TIP FFY 2021	Balance FFY 2021
Section 5307 Capital and Planning Formula	\$6,170,880	\$3,760,540	\$2,410,340
Section 5307 Transit Enhancements			
Subtotal	\$6,170,880	\$3,760,540	\$2,410,340
Section 5307 Capital and Planning Formula Carryover	\$1,944,965	\$1,944,965	\$0
Section 5307 Operating Carryover			
Section 5307 Transit Enhancements Carryover			
Subtotal	\$1,944,965	\$1,944,965	\$0
Section 5307 Total	\$8,115,845	\$5,705,505	\$2,410,340
Section 5309 Bus			
Section 5309 Fixed Guideway			
Section 5309 Total			
Section 5310 Elderly and Disabled			
Section 5310 Elderly and Disabled Carryover			
Federal Aid Total	\$8,115,845	\$5,705,505	\$2,410,340
Other Transit Funding			

Summary of Transit Funding Categories

Cost Estimates and Available Resources

Summary by Funding Category

2022 Transit Projects

FTA Funding Program Summaries (Federal dollars only)

Merrimack Valley Regional Transit Authority FTA Funding Programs	Estimated Authorization FFY 2022	Regional TIP FFY 2022	Balance FFY 2022
Section 5307 Capital and Planning Formula	\$6,299,235	\$5,280,500	\$1,018,735
Section 5307 Transit Enhancements			
Subtotal	\$6,299,235	\$5,280,500	\$1,018,735
Section 5307 Capital and Planning Formula Carryover	\$2,410,340	\$2,410,340	\$0
Section 5307 Operating Carryover			
Section 5307 Transit Enhancements Carryover			
Subtotal	\$2,410,340	\$2,410,340	\$0
Section 5307 Total	\$8,709,575	\$7,690,840	\$1,018,735
Section 5309 Bus			
Section 5309 Fixed Guideway			
Section 5309 Total			
Section 5310 Elderly and Disabled			
Section 5310 Elderly and Disabled Carryover			
Federal Aid Total	\$8,709,575	\$7,690,840	\$1,018,735
Other Transit Funding (Non-Federal Aid)			

**Cost Estimates and Available Resources
Summary by Funding Category
2023 Transit Projects**

FTA Funding Program Summaries (Federal dollars only)

Merrimack Valley Regional Transit Authority FTA Funding Programs	Estimated Authorization FFY 2023	Regional TIP FFY 2023	Balance FFY 2023
Section 5307 Capital and Planning Formula	\$6,430,260	\$5,198,440	\$1,231,820
Section 5307 Transit Enhancements			
Subtotal	\$6,430,260	\$5,198,440	\$1,231,820
Section 5307 Capital and Planning Formula Carryover	\$1,018,735	\$1,018,735	\$0
Section 5307 Operating Carryover			
Section 5307 Transit Enhancements Carryover			
Subtotal	\$1,018,735	\$1,018,735	\$0
Section 5307 Total	\$7,448,995	\$6,217,175	\$1,231,820
Section 5309 Bus			
Section 5309 Fixed Guideway			
Section 5309 Total			
Section 5310 Elderly and Disabled			
Section 5310 Elderly and Disabled Carryover			
Section 5339 Bus and Bus Related Equipment and Facilities			
Federal Aid Total	\$7,448,995	\$6,217,175	\$1,231,820
Other Transit Funding (Non-Federal Aid)	\$0	\$0	\$0

**Cost Estimates and Available Resources
Summary by Funding Category
2024 Transit Projects**

FTA Funding Program Summaries (Federal dollars only)

Merrimack Valley Regional Transit Authority FTA Funding Programs	Estimated Authorization FFY 2024	Regional TIP FFY 2024	Balance FFY 2024
Section 5307 Capital and Planning Formula	\$6,564,010	\$4,730,590	\$1,833,420
Section 5307 Transit Enhancements			
Subtotal	\$6,564,010	\$4,730,590	\$1,833,420
Section 5307 Capital and Planning Formula Carryover	\$1,231,820	\$1,231,820	\$0
Section 5307 Operating Carryover			
Section 5307 Transit Enhancements Carryover			
Subtotal	\$1,231,820	\$1,231,820	\$0
Section 5307 Total	\$7,795,830	\$5,962,410	\$1,833,420
Section 5309 Bus			
Section 5309 Fixed Guideway			
Section 5309 Total			
Section 5310 Elderly and Disabled			
Section 5310 Elderly and Disabled Carryover			
Section 5339 Bus and Bus Related Equipment and Facilities			
Federal Aid Total	\$7,795,830	\$5,962,410	\$1,833,420
Other Transit Funding (Non-Federal Aid)	\$0	\$0	\$0

MVRTA Transit Operations and Maintenance Summary Table

State Fiscal Year 2018 (Actual), 2019 (Adopted Budget), and 2020 to 2024 (Projected)

The numbers below represent actual numbers for the previous year, the current year budget/forecast approved by the MVRTA Advisory Board, and Projections for the out-years. These numbers indicate that there are sufficient revenues projected to meet the operating needs of the MVRTA.

	Audit	Adopted Budget	DRAFT Budget	Projected	Projected	Projected	Projected
Operating Revenue	Actual	Current	Yr One	Yr Two	Yr Three	Yr Four	Yr Five
	2018	2019	2020	2021	2022	2023	2024
Farebox	\$2,025,035	\$1,907,935	\$1,851,640	\$1,921,120	\$1,947,070	\$1,973,465	\$2,000,305
Section 5307	\$3,901,185	\$4,195,800	\$4,227,745	\$4,322,300	\$4,553,355	\$4,786,105	\$5,028,365
Section 5311							
CMAQ/TDM							
Fully Funded*							
Job Access/ Reverse Commute							
New Freedom							

MVRTA Transit Operations and Maintenance Summary Table

State Fiscal Year 2018 (Actual), 2019 (Adopted Budget), and 2020 to 2024 (Projected) (Continued)

	Audit	Adopted Budget	Draft Budget	Projected	Projected	Projected	Projected
Operating Revenue	Actual	Current	Yr One	Yr Two	Yr Three	Yr Four	Yr Five
	2018	2019	2020	2021	2022	2023	2024
Advertising	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Interest Income	\$0	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Rental Income							
State Contract Assistance**	\$6,669,430	\$6,836,165	\$7,411,505	\$7,545,845	\$7,734,490	\$7,927,850	\$8,126,045
Local Assessment	\$3,470,925	\$3,725,510	\$3,810,715	\$3,917,740	\$4,017,545	\$4,119,895	\$4,224,955
Other: (Define)	\$961,680	\$962,855	\$1,041,510	\$995,780	\$1,012,735	\$1,030,030	\$1,047,645
Total Revenue	\$17,053,255	\$17,646,465	\$18,378,115	\$18,729,785	\$19,292,195	\$19,864,345	\$20,456,625

MVRTA Transit Operations and Maintenance Summary

State Fiscal Year 2018 (Actual), 2019 (Adopted Budget), and 2020 to 2024 (Projected) (Continued)

Operating Expenses ***	Actual	Current	Yr One	Yr Two	Yr Three	Yr Four	Yr Five
	2018	2019	2020	2021	2022	2023	2024
Total (See Below)	\$17,053,255	\$17,646,465	\$18,378,115	\$18,729,785	\$19,292,195	\$19,864,345	\$20,456,625

Footnotes:

* Fully funded refers to contract work often to Human Service Agencies

** Operating assistance provided by the State

*** Description of Operating Expenses: Salaries and Wages; Fringe Benefits: Legal, Accounting and Professional Services; Promotion/Marketing; Insurance; Equipment Leases and Rentals; Real Property Leases and Rentals; Non-capitalized Maintenance/Repair; Fuel costs; Tire costs; Office Supplies and Equipment; Interest expense; Utilities; Management Fees; Travel and Training; and Other miscellaneous expense items.

Part C. 3. Status on Implementation of FFY 2019 TIP Projects
FFY 2019 Highway Project List

Regional Target Projects

Project ID	Location	Project Description	Mass DOT District	Funding Category	Total Programmed Funds	Project Status
602418	Amesbury	Amesbury – Reconstruction of Elm Street	4	STP	\$4,065,071	Final design stage. Expect to Advertise 7/13/2019.
MV0001		Flex to FTA for MVRTA New Bus Upgrade to Cleaner Fuel Buses	4	STP	\$698,541	Order placed. Delivery June 2020
606159	North Andover	North Andover – Intersection & Signal Improvements at Route 125 & Massachusetts Avenue	4	STP, HSIP and EARMARK	\$5,446,662	Advertised 1/12/2019.
605306	Haverhill	Haverhill – Bridge Replacement, H-12-039, I-495 (NB & SB) over Merrimack River	4	NHPP-ON	\$23,703,426	Contract Awarded 5/14/2018. Under Construction. AC Year 2 of 6. Total project cost to \$118,786,388.
608792	Newburyport	Newburyport – Improvements at Nock Middle School & Molin Upper Elementary School (SRTS)	4	TAP	\$1,866,615	Final Design stage. Expect to Advertise 6/29/2019.

Part C. 3. Status on Implementation of FFY 2019 TIP Projects

FFY 2019 Transit Project List

5307								
Project Number	Project Description	Carry Over	Federal Funds	State Funds	TDC	Local Funds	Total	Project Status
RTD0006769	Preventative Maintenance Expense		\$2,600,075	\$650,020	\$0	\$0	\$3,250,095	Ongoing
RTD0006770	ADA Operating Expense		\$1,165,135	\$291,285	\$0	\$0	\$1,456,420	Ongoing
RTD0006771	SHORT RANGE TRANSIT PLANNING		\$80,000	\$0	\$0	\$20,000	\$100,000	Ongoing
RTD0006772	OPERATING ASSISTANCE		\$390,125	\$390,125	\$0	\$0	\$780,250	Ongoing
RTD0006785	Replace 1 Model Yr 2013 Support Vehicle		\$36,165	\$9,040	\$0	\$0	\$45,205	Complete
RTD0007126	SGR Refurbish 4 vehicle lifts		\$320,000	\$80,000	\$0	\$0	\$400,000	Ongoing
RTD0007127	SGR Riverbank stabilization Design/Permitting		\$188,025	\$47,010	\$0	\$0	\$235,035	Ongoing

Part C. 3. Status on Implementation of FFY 2019 TIP Projects

FFY 2019 Transit Project List (Cont.)

5310								
Project Number	Project Description	Carry Over	Federal Funds	State Funds	TDC	Local Funds	Total	Project Status
RTD0007485	Travel Training Video		\$24,000	\$6,000	\$0	\$0	\$30,000	Ongoing
RTD0007429	Up to 50% Federal Share (Also for Travel Training Video)		\$3,000			\$3,000	\$6,000	Ongoing
Other Non-Federal								
RTD0006786	Newburyport Intermodal Transit Facility Year 2		\$0	\$3,151,756	\$0	\$0	\$3,151,756	Under Construction.
RTD0006792	Replacement Buses – cleaner fuel (CMAQ Match on HWY TIP)		\$0	\$139,708	\$0	\$0	\$139,708	Order placed, delivery June 2020.

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Part C. 4. Air Quality Conformity

Air Quality Conformity Determination Merrimack Valley MPO FFY 2020-2024 Transportation Improvement Program and 2020-2040 Regional Transportation Plan

This section documents the latest air quality conformity determination for the 1997 ozone National Ambient Air Quality Standards (NAAQS) in the Merrimack Valley MPO Region. It covers the applicable conformity requirements according to the latest regulations, regional designation status, legal considerations, and federal guidance. Further details and background information are provided below:

Introduction

The 1990 Clean Air Act Amendments (CAAA) require metropolitan planning organizations within nonattainment and maintenance areas to perform air quality conformity determinations prior to the approval of Long-Range Transportation Plans (LRTPs) and Transportation Improvement Programs (TIPs), and at such other times as required by regulation. Clean Air Act (CAA) section 176(c) (42 U.S.C. 7506(c)) requires that federally funded or approved highway and transit activities are consistent with (“conform to”) the purpose of the State Implementation Plan (SIP). Conformity to the purpose of the SIP means that means Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) funding and approvals are given to highway and transit activities that will not cause or contribute to new air quality violations, worsen existing violations, or delay timely attainment of the relevant NAAQS or any interim milestones (42 U.S.C. 7506(c)(1)). EPA’s transportation conformity rules establish the criteria and procedures for determining whether metropolitan transportation plans, transportation improvement programs (TIPs), and federally supported highway and transit projects conform to the SIP (40 CFR Parts 51.390 and 93).

A nonattainment area is one that the U.S. Environmental Protection Agency (EPA) has designated as not meeting certain air quality standards. A maintenance area is a nonattainment area that now meets the standards and has been re-designated as maintaining the standard. A conformity determination is a demonstration that plans, programs, and projects are consistent with the State Implementation Plan (SIP) for attaining the air quality standards. The CAAA requirement to perform a conformity determination ensures that federal approval and funding go to transportation activities that are consistent with air quality goals.

Legislative and Regulatory Background

The entire Commonwealth of Massachusetts was previously classified as nonattainment for ozone, and was divided into two nonattainment areas. The Eastern Massachusetts ozone nonattainment area included Barnstable, Bristol, Dukes, Essex, Middlesex, Nantucket, Norfolk, Plymouth, Suffolk, and Worcester counties. Berkshire, Franklin, Hampden, and Hampshire counties comprised the Western Massachusetts ozone nonattainment area. With these classifications, the 1990 Clean Air Act Amendments (CAAA) required the Commonwealth to reduce its emissions of volatile organic compounds (VOCs) and nitrogen oxides (NO_x), the two major precursors to ozone formation to achieve attainment of the ozone standard.

The 1970 Clean Air Act defined a one-hour national ambient air quality standard (NAAQS) for ground-level ozone. The 1990 CAAA further classified degrees of nonattainment of the one-hour standard based on the severity of the monitored levels of the pollutant. The entire commonwealth of Massachusetts was classified as being in serious nonattainment for the one-hour ozone standard, with a required attainment date of 1999. The attainment date was later extended, first to 2003 and a second time to 2007.

In 1997, the EPA proposed a new, eight-hour ozone standard that replaced the one-hour standard, effective June 15, 2005. Scientific information had shown that ozone could affect human health at lower levels, and over longer exposure times than one hour. The new standard was challenged in court, and after a lengthy legal battle, the courts upheld it. It was finalized in June 2004. The eight-hour standard is 0.08 parts per million, averaged over eight hours and not to be exceeded more than once per year. Nonattainment areas were again further classified based on the severity of the eight-hour values. Massachusetts as a whole was classified as being in moderate nonattainment for the eight-hour standard, and was separated into two nonattainment areas—Eastern Massachusetts and Western Massachusetts.

In March 2008, EPA published revisions to the eight-hour ozone NAAQS establishing a level of 0.075 ppm, (March 27, 2008; 73 FR 16483). In 2009, EPA announced it would reconsider this standard because it fell outside of the range recommended by the Clean Air Scientific Advisory Committee. However, EPA did not take final action on the re-consideration so the standard would remain at 0.075 ppm.

After reviewing data from Massachusetts monitoring stations, EPA sent a letter on December 16, 2011 proposing that only Dukes County would be designated as nonattainment for the new proposed 0.075 ozone standard. Massachusetts concurred with these findings.

On May 21, 2012, (77 FR 30088), the final rule was published in the Federal Register, defining the 2008 NAAQS at 0.075 ppm, the standard that was promulgated in March 2008. A second rule published on May 21, 2012 (77 FR 30160), revoked the 1997 ozone NAAQS to occur one year after the July 20, 2012 effective date of the 2008 NAAQS.

Also, on May 21, 2012, the air quality designations areas for the 2008 NAAQS were published in the Federal Register. In this Federal Register, the only area in Massachusetts that was designated as nonattainment is Dukes County. All other Massachusetts counties were designated as attainment/unclassified for the 2008 standard. On March 6, 2015, (80 FR 12264, effective April 6, 2015) EPA published the Final Rulemaking, “Implementation of the 2008 National Ambient Air Quality Standards (NAAQS) for Ozone: State Implementation Plan Requirements; Final Rule.” This rulemaking confirmed the removal of transportation conformity to the 1997 Ozone NAAQS.

However, on February 16, 2018, the United States Court of Appeals for the District of Columbia Circuit in *South Coast Air Quality Mgmt. District v. EPA* (“South Coast II,” 882 F.3d 1138) held that transportation conformity determinations must be made in areas that were either nonattainment or maintenance for the 1997 ozone NAAQS and attainment for the 2008 ozone NAAQS when the 1997 ozone NAAQS was revoked. These conformity determinations are required in these areas after February 16, 2019. On November 29, 2018, EPA issued Transportation Conformity Guidance for the South Coast II Court Decision (EPA-420-B-18-050, November 2018) that addresses how transportation conformity determinations can be made in areas. According to the guidance, both Eastern and Western Massachusetts, along with several other areas across the country, are now defined as “orphan nonattainment areas” – areas that were designated as nonattainment for the 1997 ozone NAAQS at the time of its revocation (80 FR 12264, March 6, 2015) and were designated attainment for the 2008 ozone NAAQS in EPA’s original designations rule for this NAAQS (77 FR 30160, May 21, 2012)

Current Conformity Determination

After 2/16/19, as a result of the court ruling and the subsequent federal guidance, transportation conformity for the 1997 NAAQS – intended as an “anti-backsliding” measure – now applies to both of Massachusetts’ orphan areas. Therefore, this conformity determination is being made for the 1997 ozone NAAQS on the Merrimack Valley MPO FFY 2020-2024 Transportation Improvement Program and 2020-2040 Regional Transportation Plan.

The transportation conformity regulation at 40 CFR 93.109 sets forth the criteria and procedures for determining conformity. The conformity criteria for TIPs and RTPs include: latest planning assumptions (93.110), latest emissions model (93.111), consultation (93.112), transportation control measures (93.113(b) and (c), and emissions budget and/or interim emissions (93.118 and/or 93.119).

For the 1997 ozone NAAQS areas, transportation conformity for TIPs and RTPs for the 1997 ozone NAAQS can be demonstrated without a regional emissions analysis, per 40 CFR 93.109(c). This provision states that the regional emissions analysis requirement applies one year after the effective date of EPA’s nonattainment designation for a NAAQS and until the

effective date of revocation of such NAAQS for an area. The 1997 ozone NAAQS revocation was effective on April 6, 2015, and the South Coast II court upheld the revocation. As no regional emission analysis is required for this conformity determination, there is no requirement to use the latest emissions model, or budget or interim emissions tests.

Therefore, transportation conformity for the 1997 ozone NAAQS for the Merrimack Valley MPO FFY 2020-2024 Transportation Improvement Program and 2020-2040 Regional Transportation Plan can be demonstrated by showing that remaining requirements in Table 1 in 40 CFR 93.109 have been met. These requirements, which are laid out in Section 2.4 of EPA's guidance and addressed below, include:

Latest planning assumptions (93.110)

- Consultation (93.112)
- Transportation Control Measures (93.113)
- Fiscal Constraint (93.108)

Latest Planning Assumptions:

The use of latest planning assumptions in 40 CFR 93.110 of the conformity rule generally apply to regional emissions analysis. In the 1997 ozone NAAQS areas, the use of latest planning assumptions requirement applies to assumptions about transportation control measures (TCMs) in an approved SIP (See following section on Timely Implementation of TCMs).

Consultation:

The consultation requirements in 40 CFR 93.112 were addressed both for interagency consultation and public consultation. Interagency consultation was conducted with FHWA, FTA, US EPA Region 1, MassDEP, and the other Massachusetts MPOs, with the most recent conformity consultation meeting held on March 6, 2019 (this most recent meeting focused on understanding the latest conformity-related court rulings and resulting federal guidance). This ongoing consultation is conducted in accordance with the following:

- Massachusetts' Air Pollution Control Regulations 310 CMR 60.03 "Conformity to the State Implementation Plan of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 USC or the Federal Transit Act"
- The Commonwealth of Massachusetts Memorandum of Understanding by and between Massachusetts Department of Environmental Protection, Massachusetts Executive Office of Transportation and Construction, Massachusetts Metropolitan Planning Organizations concerning the conduct of transportation-air quality planning in the development and implementation of the state implementation plan" (note: this MOU is currently being updated)

Public consultation was conducted consistent with planning rule requirements in 23 CFR 450.

Title 23 CFR Section 450.324 and 310 CMR 60.03(6)(h) requires that the development of the TIP, RTP, and related certification documents provide an adequate opportunity for public review and comment. Section 450.316(b) also establishes the outline for MPO public participation programs. The Merrimack Valley MPO's Public Participation Plan was formally adopted in 2017. (MVMPO Public Participation Plan as Amended through March 2017) is posted on the MVPC.org website under Transportation Reports. The Public Participation Plan ensures that the public will have access to the TIP/RTP and related documents, provides for public notification of the availability of the TIP/RTP and the public's right to review the document and comment thereon, and provides a 21-day public review and comment period prior to the adoption of the TIP/RTP and related certification documents.

The public comment period for this conformity determination commenced on May 1, 2019. During the 21-day public comment period, any comments received were incorporated into this Plan. This allowed ample opportunity for public comment and MPO review of the draft document. The public comment period will close on May 21, 2019 and subsequently, the Merrimack Valley MPO is expected to endorse this air quality conformity determination before June 2019. These procedures comply with the associated federal requirements.

Timely Implementation of Transportation Control Measures:

Transportation Control Measures (TCMs) have been required in the SIP in revisions submitted to EPA in 1979 and 1982. All SIP TCMs have been accomplished through construction or through implementation of ongoing programs. All of the projects have been included in the Region's Transportation Plan (present or past) as recommended projects or projects requiring further study. These projects are:

- Extension/ Addition of Bus Routes
- Construction of Park and Ride Lots
- Intersection Improvements
- Demand Responsive Transit
- Institution of Express/ Shuttle Bus Services
- Subscription Van Service
- Double peak-hour fixed route bus service in Lawrence and Haverhill

DEP submitted to EPA its strategy of programs to show Reasonable Further Progress of a 15% reduction of VOCs in 1996 and the further 9% reduction of NO_x toward attainment of the National Ambient Air Quality Standards (NAAQS) for ozone in 1999. Within that strategy there are no specific TCM projects. The strategy does call for traffic flow improvements to reduce congestion and, therefore, improve air quality. Other transportation-related projects that have been included in the SIP control strategy are listed below:

- *Enhanced Inspection and Maintenance Program*
- *California Low Emission Vehicle Program*

- *Reformulated Gasoline for On- and Off-Road Vehicles*
- *Stage II Vapor Recovery at Gasoline Refueling Stations*
- *Tier I Federal Vehicle Standards*

Fiscal Constraint:

Transportation conformity requirements in 40 CFR 93.108 state that TIPs and transportation plans must be fiscally constrained consistent with DOT's metropolitan planning regulations at 23 CFR part 450. The Merrimack Valley MPO 2020-2024 Transportation Improvement Program and 2020-2040 Regional Transportation Plan are fiscally constrained, as demonstrated in the MVMPO RTP Fiscal Constraint Chapter and in the MVMPO TIP Part C.1. Highway Program Financial Plan and Part C.2. Transit program Financial Plan.

In summary and based upon the entire process described above, the Merrimack Valley MPO has prepared this conformity determination for the 1997 Ozone NAAQS in accordance with EPA's and Massachusetts' latest conformity regulations and guidance. This conformity determination process demonstrates that the FFY 2020-2024 Transportation Improvement Program and the 2020-2040 Regional Transportation Plan meet the Clean Air Act and Transportation Conformity Rule requirements for the 1997 Ozone NAAQS, and have been prepared following all the guidelines and requirements of these rules during this time period.

Therefore, the implementation of the Merrimack Valley MPO's FFY 2020-2024 Transportation Improvement Program and the 2020-2040 Regional Transportation Plan are consistent with the air quality goals of, and in conformity with, the Massachusetts State Implementation Plan.

Part C. 5. Special Efforts - ADA

Projects Required for Implementation of ADA

Another requirement of 23 CFR 450.324 is that projects required for the implementation of the Americans with Disabilities Act (ADA) should be so marked. There are no projects in this TIP listing that are required for the implementation of the Americans with Disabilities Act and therefore no projects are marked as such. There are projects to replace existing accessible transit vehicles with new accessible transit vehicles, but these are replacements not implementations.

Part C. 6. Title VI Notice to Beneficiaries

The Merrimack Valley Planning Commission (MVPC) operates its programs, services and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of **race, color or national origin** (including **limited English proficiency**) be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal assistance. Related federal nondiscrimination laws administered by the Federal Highway Administration, the Federal Transit Administration, or both, prohibit discrimination on the basis of **age, sex and disability**. These protected categories are contemplated within MVPC's Title VI Program consistent with federal interpretation and administration. Additionally, MVPC provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with U.S. Department of Transportation policy and guidance on federal Executive Order 13166.

MVPC also complies with the Massachusetts Public Accommodation Law, M.G.L. Chapter 272, Sections 92a, 98, and 98a prohibiting making any distinction, discrimination, or restriction in admission to or treatment in a place of public accommodation based upon **race, color, religious creed, national origin, sex, sexual orientation, disability, or ancestry**. Likewise, MVPC complies with the Governor's Executive Order 526, Section 4 requiring that all of its programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for shall be conducted without unlawful discrimination based upon **race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status** (including Vietnam-era veterans), or **background**.

Additional Information

To request additional information regarding Title VI and related federal and state nondiscrimination obligations, please contact:

Title VI Program Coordinator
Merrimack Valley Metropolitan Planning Organization
c/o Merrimack Valley Planning Commission
160 Main Street
Haverhill, MA 01830-5061
(978) 374-0519, extension 15
akomornick@mvpc.org

Complaint Filing

To file a complaint alleging a violation of Title VI or related federal nondiscrimination law, contact the Title VI Program Coordinator (above) within one hundred and eighty (180) days of the alleged discriminatory conduct.

To file a complaint alleging a violation of the Commonwealth's Public Accommodation Law, contact the Massachusetts Commission Against Discrimination within three hundred (300) days of the alleged discriminatory conduct at:

Massachusetts Commission Against Discrimination (MCAD)
One Ashburton Place, 6th Floor
Boston, MA 02109
(617) 994-6000
TTY: (617) 994-6196

Translation

English

If this information is needed in another language, please contact the MVMPO Title VI/Nondiscrimination Coordinator at 978-374-0519 ext. 15.

Spanish

Si necesita esta información en otro idioma, por favor contacte al coordinador de MVMPO del Título VI/Contra la Discriminación al 978-374-0519 ext. 15.

Portuguese

Caso estas informações sejam necessárias em outro idioma, por favor, contate o Coordenador de Título VI e de Não Discriminação da MVMPO pelo telefone 978-374-0519, Ramal 15.

Chinese Simple

如果需要使用其它语言了解信息，请联系Merrimack Valley大都会规划组织（MVMPO）《民权法案》第六章协调员，电话978-374-0519，转15。

Chinese Traditional

如果需要使用其他語言瞭解資訊，請聯繫Merrimack Valley大都會規劃組織（MVMPO）《民權法案》第六章協調員，電話978-374-0519，轉15。

Vietnamese

Nếu quý vị cần thông tin này bằng tiếng khác, vui lòng liên hệ Điều phối viên Luật VI/Chống phân biệt đối xử của MVMPO theo số điện thoại 978-374-0519, số máy nhánh 15.

French Creole

Si yon moun vle genyen enfòmasyon sa yo nan yon lòt lang, tanpri kontakte Kowòdinatè kont Diskriminasyon/MVMPO Title VI la nan nimewo 978-374-0519, ekstansyon 15.

Russian

Если Вам необходима данная информация на любом другом языке, пожалуйста, свяжитесь с Координатором Титула VI/Защита от дискриминации в MVMPO по тел: 978-374-0519, добавочный 15.

French

Si vous avez besoin d'obtenir une copie de la présente dans une autre langue, veuillez contacter le coordinateur du Titre VI/anti-discrimination de MVMPO en composant le 978-374-0519, poste 15.

Italian

Se ha bisogno di ricevere queste informazioni in un'altra lingua si prega di contattare il coordinatore del MVMPO del Titolo VI e dell'ufficio contro la discriminazione al 978-374-0519 interno 15.

Mon-Khmer, Cambodian

ប្រសិនបើលោក-អ្នកត្រូវការបកប្រែពីភាសានេះ

សូមទាក់ទងអ្នកសម្របសម្រួលជំពូកទី6/គ្មានការរើសអើងរបស់ MVMPO តាមរយៈលេខទូរស័ព្ទ 978-374-0519 រួចភ្ជាប់ទៅលេខ 15។

Arabic

إذا كنت بحاجة إلى هذه المعلومات بلغة أخرى، يُرجى الاتصال بمنسق الفقرة السادسة لمنع التمييز التابع لمنظمة التخطيط الحضري في ميريماك فالي على الهاتف: 978-374-0519 و ثم اضغط الأرقام 15.

Part C. 7. Environmental Justice

Environmental Justice from a transportation perspective is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of transportation laws, regulations, and policies.

"Each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

MVMPO Merrimack Valley Transportation Committee Equity Working Group

The MVMPO Merrimack Valley Transportation Committee's (MVTC) purpose is to advise the MVMPO and participate in the MVMPO region's federally certified transportation planning process. Its membership provides for the involvement of local government officials, transportation professionals, transportation providers, and individuals experienced in economic development, freight, commuter rail, smart growth, environmental issues, regional planning, and other interest groups, ensuring broad representation and a geographical balance of its participants.

MVTC Equity Working Group

The MVMPO is responsible for promoting, securing and evaluating public involvement in its transportation planning process. In particular, it is responsible for identifying and seeking meaningful participation of the region's minority and low-income (Environmental Justice) populations – and in working to reduce participation barriers for such populations.

The MVMPO's established EJ process includes identification of Census-based statistical areas within its region where:

- a) the percentage of minority populations exceeds the average percentage of minority population for the region as a whole;
- b) household incomes are 65% or less of area median income (AMI), and
- c) there are concentrations of households with limited English proficiency (LEP).

The MVMPO established an Equity Working Group to provide the MVMPO members and staff with the perspectives of individuals and organizations representing low-income and minority populations. It is also an opportunity for MVMPO staff and EJ stakeholders to exchange information, evaluate policies, plans and projects, and generate ideas for future projects. The MVMPO staff regularly consults with members of the Equity Working Group.

To help inform the work of the MVMPO, it is helpful to have members of the Equity Working Group who have individual and/or collective knowledge and expertise in working with EJ populations on:

- a) Disabilities
- b) Education
- c) English proficiency
- d) Elder Affairs
- e) Faith-based community service
- f) Minority advocacy
- g) Neighborhood organization
- h) Non-profit community development
- i) Public Health
- j) Veterans Affairs
- k) Workforce training and development

Part C. 8. Equity Analysis

The following tables illustrate a geographic and social equity analysis of highway funding in the Merrimack Valley MPO region. Haverhill, Lawrence and Methuen are designated as Title VI and Environmental Justice (EJ) communities. The Title VI communities have Census Tracts with higher than average percentage of minorities than the regional average percentage and the same three communities are EJ communities with lower than average median income in some Census Tracts.

The following table shows the percent of population in Title VI / EJ communities relative to the percent of Federal highway funding programmed in the 2020 to 2024 TIP.

	Region Population (ACS 11 to 15)	Percent of Total Population	TIP Project Investment	Percent of Projects by Total Investment
Within Title VI / EJ community	189,490	55%	\$176,826,483	73%
Outside Title VI / EJ community	154,420	45%	\$66,942,190	27%
Total	343,910	100%	\$243,768,673	100%

This table illustrates consistency between the percent of population in Title VI/ EJ areas and the percent of funding in those areas.

Persons with Limited English Proficiency (LEP) are those who self-report on the Census as speaking English ‘less than very well’. USDOT guidance defines “Safe harbor” languages as those non-English languages that are spoken by LEP persons who make up at least 5% of the population, or 1,000 individuals, whichever is less. Using this definition for LEP people ages 5+ living in the region the number of LEP individuals exceeds the 1,000-person threshold in Spanish (32,513 people) and Chinese (1,124 people). The LEP persons in these two languages represent 83% of all LEP people in the region. Communities with more than 1,000 individuals whose “Safe-harbor” language is Spanish are Haverhill (3,010 people), Lawrence (25,355 people) and Methuen (3,352 people). Andover has the highest number of individuals (630 people) whose “Safe-harbor” language is Chinese. Therefore these 4 communities are considered LEP communities.

The following table shows the percent of population age 5+ in LEP communities relative to the percent of Federal highway funding programmed in the 2020 to 2024 TIP.

	Region Population Age 5+ (ACS 11 to 15)	Percent of Total Population Age 5+ (ACS 11 to 15)	TIP Project Investment	Percent of Projects by Total Investment
Within LEP community	208,754	65%	193,113,114	80%
Outside LEP community	112,973	35%	49,737,796	20%
Total	321,727	100%	\$242,850,910	100%

This table illustrates consistency between the percent of population in LEP areas and the percent of funding in those areas.

All of the Federal transit funding (100%) is considered to benefit Title VI, EJ and LEP communities because all of the MVRTA fixed routes originate in the Title VI / EJ / LEP communities of Haverhill or Lawrence, or provide connections to these routes. The paratransit service also provides access to and from the Title VI, EJ and LEP communities.

All of the MVMPO region communities have had, or are programmed to have, Federally funded projects from 2015 to 2024. (Looking at the tables that follow it appears that Rowley, which is not a Title VI / EJ community, does not have a federally funded project in the ten-year period, however it is included in Statewide projects listed in the Boston MPO Region TIPs in those ten years.)

The tables on the following pages show the projects included in the analysis for FFYs 2020 to 2024 and a summary chart showing the number of projects and the funding by community, and whether the community is a Title VI (high percentage of minorities), an EJ (high percentage of low-income households) and/or LEP community. This is followed by a table and analysis chart for projects programmed in FFYs 2015 to 2019.

For Title VI and EJ communities, the results show that for FFYs 2020 to 2024, 32% of the total number of projects are in Title VI and EJ communities. Considering the data for percent of funding, 73% of the funding is in Title VI and EJ communities.

For LEP communities, the results show that for FFYs 2020 to 2024, 36% of the total number of projects are in LEP communities. Considering the data for percent of funding, 80% of the funding is in LEP communities.

For Title VI and EJ communities, the results show that for FFYs 2015 to 2019, 45% of the total number of projects are in Title VI communities and EJ communities. Considering the data for percent of funding, 53% of the funding is in Title VI communities and EJ communities.

For LEP communities, the results show that for FFYs 2015 to 2019, 50% of the total number of projects are in LEP communities. Considering the data for percent of funding, 60% of the funding is in LEP communities.

All of the Transit funding (100%) is considered to benefit Title VI, EJ and LEP communities because all of the MVRTA fixed routes originate in Haverhill or Lawrence, or provide connections to these routes. The paratransit service also provides access to and from the Title VI and EJ communities. The only mappable transit project in the FFYs 2020 to 2024 TIP is the SGR Riverbank Stabilization project it is labelled on the relevant maps as RTD - 7695. The mappable transit projects in the FFYs 2015 to 2019 list are labelled on the 2015 to 2019 relevant maps as follows: RTD-4286 is the SGR Buckley Center and RTD-4284 is the SGR Maintenance Facility, and RTD-7695 is the SGR Riverbank Stabilization project. The transit project maps also include the fixed-route bus service routes.

Equity Analysis Maps

[MVMPO: FFYs 2020 to 2024 TIP Projects by Community](#)

[MVMPO: FFYs 2015 to 2019 Projects by Community](#)

[MVMPO: FFYs 2020 to 2024 Statewide and Regional Target Highway Projects overlaid on Low Income and Minority Tracts](#)

[MVMPO: FFYs 2020 to 2024 Transit Projects and MVRTA Bus Routes overlaid on Low Income and Minority Tracts](#)

[MVMPO: FFYs 2015 to 2019 Statewide and Regional Target Highway Projects overlaid on Low Income and Minority Tracts](#)

[MVMPO: FFYs 2015 to 2019 Transit Projects and MVRTA Bus Routes overlaid on Low Income and Minority Tracts](#)

**FFYs 2020 to 2024 MVMPO Statewide and Regional Target Highway Funding
Projects by Community for Equity Analysis**

Community	Project Number	Project Description	Total Funding Programmed	FFY	Title VI Community	EJ Community	LEP Community
Amesbury	602418	Amesbury - Elm St. Reconstruction	\$7,223,053	2020	No	No	No
Andover	606522	Andover- Bridge Rehab., I-495 over Rt. 28 and RR	\$17,204,394	2024	No	No	Yes
Georgetown/ Boxford	607541	Georgetown/ Boxford Border to Boston Trail	\$1,812,628	2021	No	No	No
Georgetown/ Newbury	607542	Georgetown/ Newbury Border to Boston Trail	\$4,341,120	2023	No	No	No
Groveland	608298	Groveland Community Trail	\$2,064,255	2021	No	No	No
Haverhill	605306	Haverhill- Bridge Replacement I-495 over Merrimack (H-12-039)	\$61,809,676	2020 to 2023	Yes	Yes	Yes
Haverhill	609466	Haverhill- Bridge Replacement I-495 over Merrimack (H-12-040)	\$68,379,326	2023 to 2024	Yes	Yes	Yes
Haverhill	605304	Haverhill- Bridge Replacement Bridge St (Rt 125) over Merrimack and B&M RR	\$13,142,589	2024	Yes	Yes	Yes

**FFYs 2020 to 2024 MVMPO Statewide and Regional Target Highway Funding
Projects by Community for Equity Analysis (Cont.)**

Community	Project Number	Project Description	Total Funding Programmed	FFY	Title VI Community	EJ Community	LEP Community
Haverhill	608027	Haverhill Bradford Rail Trail Ext.	\$1,766,108	2020	Yes	Yes	Yes
Haverhill	608761	Haverhill- Intersection Reconstruction Rt 108 (Newton Rd) at Rt 110	\$2,099,520	2022	Yes	Yes	Yes
Haverhill	608788	Haverhill- Roadway Reconstruction on North Avenue	\$13,678,560	2023 to 2024	Yes	Yes	Yes
Lawrence	608930	Lawrence- Lawrence Manchester Rail Corridor (LMRC) Rail Trail	\$15,950,704	2023	Yes	Yes	Yes
Newbury/ Newburyport/ Salisbury	608494	Newbury/ Newburyport/ Salisbury Resurfacing Route 1	\$9,807,200	2021	No	No	No
North Andover	608095	North Andover- Corridor Rt.114 from Andover St. to Stop & Shop	\$17,399,023	2021 to 2022	No	No	No
Salisbury	602202	Salisbury Reconstruction of Route 1 (Lafayette Rd)	\$7,090,517	2023	No	No	No
	Total	Projects 20 to 24	\$243,768,673				

FFYs 2020 to 2024 MVMPO Equity Analysis Highway Funding

Community	Number of Projects	Percent Of Projects	TIP Funding	Percent of Funding	Title VI Community	EJ Community	LEP Community
Amesbury	1	5%	\$7,223,053	3.0%	No	No	No
Andover	1	5%	\$17,204,394	7.1%	No	No	Yes
Boxford	1	5%	\$906,314	0.4%	No	No	No
Georgetown	2	9%	\$3,076,874	1.3%	No	No	No
Groveland	2	9%	\$2,064,255	0.8%	No	No	No
Haverhill	6	27%	\$160,875,779	66%	Yes	Yes	Yes
Lawrence	1	5%	\$15,950,704	6.5%	Yes	Yes	Yes
Merrimac	0	0%	\$0	0.0%	No	No	No
Methuen	0	0%	\$0	0.0%	Yes	Yes	Yes
Newbury	2	9%	\$5,439,627	2.2%	No	No	No
Newburyport	2	9%	\$3,269,067	1.3%	No	No	No
North Andover	2	9%	\$17,399,023	7.1%	No	No	No
Rowley	0	0%	\$0	0.0%	No	No	No
Salisbury	2	9%	\$10,359,584	4.2%	No	No	No
West Newbury	0	0%	\$0	0.0%	No	No	No
MVRTA	0	0%	\$0	0.0%			
Total	22		\$243,768,673				

Percent of Projects in Title VI Community = 32%

Percent of Projects in EJ Community = 32%

Percent of Projects in LEP Community = 36%

Percent of Funding in Title VI Community = 73%

Percent of Funding in EJ Community = 73%

Percent of Funding in LEP Community = 80%

**FFYs 2015 to 2019 MVMPO Statewide and Regional Target Highway Funding
Projects by Community for Equity Analysis**

Community	Project Number	Project Description	Total Funding Programmed	FFY	Title VI Community	EJ Community	LEP Community
Amesbury	603682	Amesbury- Bridge Replacement, A-07-026, Route I-495 (NB & SB)	\$9,310,817	2015	No	No	No
Amesbury	602418	Amesbury - Elm St. Reconstruction	\$3,955,071	2019	No	No	No
Amesbury	606669	Amesbury- Powwow Riverwalk	\$671,207	2017	No	No	Yes
Amesbury/ Salisbury	607737	Amesbury- Salisbury Trail Connector at I-95	\$3,167,723	2018	No	No	No
Andover/ Lawrence	606574	Andover/ Lawrence IM I-495	\$14,396,000	2016	No/ Yes	No/ Yes	Yes/ Yes
Andover/ Methuen	607561	Andover/ Methuen IM I-93	\$13,932,707	2017	No/ Yes	No/ Yes	Yes/ Yes
Georgetown/ Newbury/ West Newbury/ Newburyport	606549	Georgetown/ Newbury/ West Newbury/ Newburyport IM on I-95	\$21,240,000	2015	No	No	No

**FFYs 2015 to 2019 MVMPO Statewide and Regional Target Highway Funding
Projects by Community for Equity Analysis (Cont.)**

Communi- ty	Project Num- ber	Project Description	Total Funding Pro- grammed	FFY	Title VI Com- mu- nity	EJ Com- mu- nity	LEP Com- mu- nity
Groveland	605114	Groveland Rt 97 (School St & Salem St)	\$2,040,502	2016	No	No	No
Haverhill	607573	Haverhill- Route 97 (Broadway)	\$6,526,912	2017	Yes	Yes	Yes
Haverhill	606161	Haverhill- Improve- ments on Main St (Rt. 125)	\$3,635,519	2016	Yes	Yes	Yes
Haverhill	605306	Haverhill- Bridge Re- placement I-495 over Merrimack	\$43,501,159	2018 - 2019	Yes	Yes	Yes
Haverhill/ Merrimac/ Amesbury/ Salisbury	608187	Guide Signs on I-495	\$4,451,342	2017	Yes/ No	Yes/ No	Yes/ No
Lawrence	608946	Lawrence- Haverhill St (Route 110) at Ames Street	\$1,267,500	2018	Yes	Yes	Yes
Lawrence	608075	Lawrence- Lawrence Street/ Park St Inter- section	\$1,265,561	2015	Yes	Yes	Yes
Lawrence	608261	Lawrence- Marston St./ Ferry St./ Commonwealth Ave.	\$1,350,694	2017	Yes	Yes	Yes

**FFYs 2015 to 2019 MVMPO Statewide and Regional Target Highway Funding
Projects by Community for Equity Analysis (Cont.)**

Communi- ty	Project Num- ber	Project Description	Total Funding Pro- grammed	FFY	Title VI Com- mu- nity	EJ Com- mu- nity	LEP Com- mu- nity
Lawrence	608002	Lawrence- Safe Routes to School Bruce Elementary	\$2,016,148	2017	Yes	Yes	Yes
Lawrence	608407	Lawrence- Signals/ ADA along Common & Lowell Streets	\$2,880,512	2016	Yes	Yes	Yes
Lawrence/ North Andover	608809	Lawrence- North Andover- Resurfacing Route 114	\$2,123,453	2018	Yes/ No	Yes/ No	Yes/ No
Lawrence/ North Andover	607985	Lawrence- North Andover- IM on I-495	\$7,198,000	2016	Yes/ No	Yes/ No	Yes/ No
Methuen	607476	Methuen- Rt 213 Re-surfacing and Bridge Repairs	\$11,987,868	2016	Yes	Yes	No
New- buryport	606503	Newburyport- Clipper City Rail Trail	\$4,061,158	2015	No	No	No
New- buryport	608792	Newburyport- SRTS	\$1,866,615	2019	No	No	No
North Andover	606159	North Andover- Rt 125/ Mass Ave	\$5,446,662	2019	No	No	No

**FFYs 2015 to 2019 MVMPO Statewide and Regional Target Highway Funding
Projects by Community for Equity Analysis (Cont.)**

Communi- city	Project Number	Project Description	Total Funding Pro- grammed	FFY	Title VI Com- mu- nity	EJ Com- mu- nity	LEP Com- mu- nity
North Andover	607776	North Andover- SRTS North Andover Middle School	\$1,086,000	2015	No	No	No
MVRTA	604585	Flex to FTA for MVRTA Cleaner Fuel Buses	\$645,840	2017	Yes	Yes	Yes
MVRTA	MV0001	Flex to FTA for MVRTA Cleaner Fuel Buses	\$698,541	2019	Yes	Yes	Yes
MVRTA	MV0003	Flex to FTA for MVRTA Bike Racks for Buses and for Transportation Centers	\$110,000	2019	Yes	Yes	Yes
Salisbury	605020	Salisbury- Multi-use trail extension (Borders- to-Boston), includes new bridge S-02-004	\$7,184,196	2018	No	No	No
		Total All Projects 2015 to 2019	\$182,908,965				

FFYs 2015 to 2019 MVMPO Equity Analysis Highway Funding

Community	Number of Projects	Percent Of Projects	TIP Funding	Percent of Funding	Title VI Community	EJ Community	LEP Community
Amesbury	5	13%	\$17,004,737	9%	No	No	No
Andover	2	5%	\$14,164,354	8%	No	No	Yes
Boxford	0	0%	\$0	0%	No	No	No
Georgetown	1	3%	\$5,310,000	3%	No	No	No
Groveland	1	3%	\$6,341,761	3%	No	No	No
Haverhill	4	11%	\$55,147,371	30%	Yes	Yes	Yes
Lawrence	8	21%	\$20,934,142	11%	Yes	Yes	Yes
Merrimac	1	3%	\$1,483,781	1%	No	No	No
Methuen	2	5%	\$18,954,222	10%	Yes	Yes	Yes
Newbury	1	3%	\$5,310,000	3%	No	No	No
Newburyport	3	8%	\$11,237,773	6%	No	No	No
North Andover	4	11%	\$11,488,389	6%	No	No	No
Rowley	0	0%	\$0	0%	No	No	No
Salisbury	2	5%	\$8,768,057	5%	No	No	No
West Newbury	1	3%	\$5,310,000	3%	No	No	No
MVRTA	3	8%	\$1,454,381	1%			
Total	38		\$182,908,965				

Percent of Projects in Title VI Community = 45%

Percent of Projects in EJ Community = 45%

Percent of Projects in LEP Community = 50%

Percent of Funding in Title VI Community = 53%

Percent of Funding in EJ Community = 53%

Percent of Funding in LEP Community = 60%

FFYs 2020 to 2024 Transit Projects

FFY Year	Project Number	Project Description	Total Project Cost
2020	RTD0007680	Preventive Maintenance	\$3,323,160
2020	RTD0007681	Non-Fixed Route ADA Para Serv	\$1,653,255
2020	RTD0007682	Short Range Transit Planning	\$100,000
2020	RTD0007683	Operating Assistance	\$861,550
2020	RTD0007687	Replace 3 Model Yr 2007 buses delivery 2020	\$1,377,150
2020	RTD0007695	SGR Riverbank stabilization Construction	\$1,750,330
2020	RDT0007696	SGR Replace 1 Model Year 2013 supervisory vehicle	\$46,530
2020	RTD0008295	Northern Essex Elder Transport Driving Forward 2020	\$25,000
2020		Purchase On-board Automatic Passenger Counter (APC)	\$371,280
2020	RTD0008311	Town of Andover Buy Replacement Van (1)	\$69,100
2020	RTD0008320	Town of Salisbury Buy Van for Svc Expansion (1)	\$68,000
2021	RTD0007684	Preventive Maintenance	\$3,495,970
2021	RTD0007685	Non-Fixed Route ADA Para Serv	\$1,741,065
2021	RTD0007686	Short Range Transit Planning	\$100,000
2021	RTD0007688	Operating Assistance	\$906,350
2021	RTD0007689	Replace 16 Model Yr 2015 vans with new	\$1,180,480

FFYs 2020 – 2024 MVMPO Transit Projects Funding (Cont.)

FFY Year	Project Number	Project Description	Total Project Cost
2021	RTD0007697	SGR Replace 1 Model Yr 2014 supervisory vehicle	\$47,900
2022	RTD0007690	Preventive Maintenance	\$3,611,335
2022	RTD0007691	Non-Fixed Route ADA Para Serv	\$1,801,630
2022	RTD0007692	Short Range Transit Planning	\$100,000
2022	RTD0007693	Operating Assistance	\$936,260
2022	RTD0007694	Replace Model Yr 2009 buses delivery 2022 7 of 9	\$3,417,680
2022	RTD0008061	SGR Replace 2 Model Yr 2016 supervisory vehicles	\$97,740
2023	RTD0007698	Preventive Maintenance	\$3,730,510
2023	RTD0007699	Operating Assistance	\$967,150
2023	RTD0007700	Non-Fixed Route ADA Para Serv	\$1,861,090
2023	RTD0007701	Replace 2 Model Yr 2009 buses delivery 2023	\$1,005,780
2023	RTD0007702	Replace 6 Model Yr 2017 vans delivery 2023	\$469,620
2023	RTD0007703	Short Range Transit Planning	\$100,000
2024		Preventive Maintenance	\$3,853,620
2024		Non-Fixed Route ADA Para Serv	\$1,922,630
2024		Short Range Transit Planning	\$100,000
2024		Operating Assistance	\$865,320

FFYs 2020 – 2024 MVMPO Transit Projects Funding (Cont.)

FFY Year	Project Number	Project Description	Total Project Cost
2024		SGR Replace 2 Model yr 2011 Buses Delivery 2024 (2 of 8)	\$1,035,940
		Total Transit Project Funding 2020 to 2024	\$42,993,425

FFYs 2015 – 2019 MVMPO Transit Projects Funding

FFY Year	Project Number	Project Description	Total Project Cost
2015	RTD0002279	ADA Operating Expense	\$1,337,045
2015	RTD0002280	Preventive Maintenance	\$3,034,720
2015	RTD0002690	Operating Assistance	\$2,128,920
2015	RTD0003650	Short Range Transit Planning	\$50,000
2015	RTD0003651	MVPC Technical Support to MVRTA	\$50,000
2015	RTD0004281	Purchase 7 Replacement Buses	\$2,391,200
2015	RTD0004283	Acquire Support Vehicles	\$72,000
2015	RTD0004286	SGR Buckley Center	\$12,000
2015	RTD0004284	SGR Maintenance Facility	\$58,800
2015	RTD0004287	Purchase 5 Replacement Vans	\$256,000

FFYs 2015 – 2019 MVMPO Transit Projects Funding (Cont.)

FFY Year	Project Number	Project Description	Total Project Cost
2016		ADA Operating Expense	\$1,311,195
2016		Preventive Maintenance	\$3,131,330
2016		Operating Assistance	\$684,350
2016		Short Range Transit Planning	\$50,000
2016		MVPC Technical Support to MVRTA	\$50,000
2016		Replace 5 Model Yr 2011 Paratransit Vehicles	\$320,000
2016		Acquire Support Vehicles	\$90,000
2017	RTD0004541	ADA Operating Expense	\$1,371,830
2017	RTD0004542	Preventive Maintenance	\$3,054,810
2017	RTD0004552	Operating Assistance	\$1,257,050
2017	RTD0004550	Short Range Transit Planning	\$100,000
2017	RTD0004932	Replace 7 Model Yr 2004 Buses with new	\$2,989,000
2017	RTD0004919	Replace Parking Facilities Revenue Collection Equipment	\$300,000
2017	RTD0004989	Bus/ Van Mobile Location Project	\$300,000

FFYs 2015 – 2019 MVMPO Transit Projects Funding (Cont.)

FFY Year	Project Number	Project Description	Total Project Cost
2017	RTD0004540	Refurbish Engines on 8 Model Year 2011 Buses	\$280,000
2017	RTD0004990	Replace 1 Model Yr 2013 Support Vehicle	\$46,350
2018	RTD0005637	ADA Operating Expense	\$1,413,370
2018	RTD0005638	Preventive Maintenance	\$3,152,905
2018	RTD0005639	Refurbish Engine/ trans 8 model year 2012 buses	\$264,000
2018	RTD0005642	Operating Assistance	\$643,010
2018	RTD0005643	Short Range Transit Planning	\$100,000
2018	RTD0005656	Replace 6 Model Yr 2004 buses delivery 2018	\$2,689,500
2018	RTD0005662	Replace 1 Model Yr 2013 Support Vehicle	\$47,750
2019	RTD0006769	Preventive Maintenance	\$3,250,095
2019	RTD0006770	ADA Operating Expense	\$1,456,420
2019	RTD0006771	Short Range Transit Planning	\$100,000
2019	RTD0006772	Operating Assistance	\$780,250
2019	RTD0007127	SGR Riverbank stabilization Design/Permitting	\$235,035

FFYs 2015 – 2019 MVMPO Transit Projects Funding (Cont.)

FFY Year	Project Number	Project Description	Total Project Cost
2019	RTD0007126	SGR Refurbish 4 vehicle lifts	\$400,000
2019	RTD0006785	Replace 1 Model Yr 2013 Support Vehicle	\$45,205
		Total Transit Funding 2015 to 2019	\$

List of Appendices in Separate File

The following Appendices can be found in a separate file titled “Appendices to the Final MVMPO 2020 to 2024 TIP February 2020”

- Appendix A Other Regional Priority Bridge Projects
- Appendix B Other Regional Priority Roadway Projects
- Appendix C Transportation Evaluation Criteria Summary
- Appendix D Sample Project Evaluation Worksheet
- Appendix E Greenhouse Gas (GHG) Monitoring and Evaluation
- Appendix F Completed Highway and Transit Projects GHG Summary
- Appendix G List of Acronyms
- Appendix H Key to Maps Showing Locations of Transportation Projects
- Appendix I Comments Received on Draft 2020-2024 TIP
- Appendix J January 2020 Amendments and Comments
- Appendix K April 2020 Amendments and Comments