Appendix B: Federal Performance Report

Assessment of the 2023-2026 TIP and 2045 Long Range Transportation Plan Investment in Addressing Federally-Mandated Performance Measures

Introduction

In 2012, the adoption of the Moving Ahead for Progress in the 21st Century Act (MAP-21) established federal requirements for performance management to ensure the most effective use of federal transportation funds. Subsequent legislation has continued and MPOs and State Departments of Transportation began receiving detailed guidance, metrics, and rules relating to Transportation Performance Management (TPM) in the following areas:

- Safety
- Infrastructure Condition
- System Reliability
- Freight Movement & Economic Vitality
- Congestion Reduction

The MPO has established targets in the areas of Safety, Infrastructure Condition, System Reliability and Freight Movement & Economic Vitality as required by the US Department of Transportation. The MPO is not in an area that is required to implement the Congestion Reduction measures although RPC does participate in the target setting process for the Boston Urbanized Area (UZA). The MPO is required to set short-range performance targets for each of the areas above and to incorporate the targets into the transportation planning process for the region.

TIP Requirements

There are two primary requirements for incorporating federal performance management requirements into the Transportation Improvement Program (TIP). The MPO is required to show that the TIP "makes progress towards achieving [the region's] performance targets" and that the TIP includes, "to the maximum extent practicable, a description of the anticipated effect of the TIP towards achieving performance targets" (23 CFR §450.326). In other words, the MPO must show that the project investments within the region are helping meet performance targets and then describe how much of an effect the investments are expected to have on reaching the targets.

LRTP Requirements

There are two requirements for incorporating federal performance management requirements into the Long Range Transportation Plan (LRTP). 23 CFR 450.324 requires the MPO include:

- A description of the performance measures and performance targets used in assessing the performance of the transportation system in accordance with § 450.306(d) [Performance Based Planning requirements].
- A system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the performance targets described in § 450.306(d), including -
 - Progress achieved by the metropolitan planning organization in meeting the performance targets in comparison with system performance recorded in previous reports, including baseline data

In other words, the MPO must identify the measures and targets, and report how the project investments are helping achieve them.

<u>Performance Report Organization</u>

This Performance Report is structured to provide the required information regarding TIP and Plan progress towards achieving targets, and is organized by goal area as listed in the introduction above and the supporting performance measures with each section providing:

- **Performance Measure Background**: This section includes an overview of the national goal area and each of the federally-required metrics for that goal, a summary of the target setting process and the most recent established targets.
- *TIP Investments:* This section lists the projects and funding in the 2023-2026 Transportation Improvement Program that are anticipated to provide some advancements towards the performance target area being discussed.
- *LRTP Investments*: Anticipated investments in the 2045 LRTP related to each goal area (Safety, Infrastructure Condition, etc.), overall performance benefits within the goal area from the LRTP, as well as specific projects identified with the primary purpose of addressing issues related to the goal area.
- **Performance Assessment**: For each goal area, the report includes an overall assessment of the anticipated impact of the 2023-2026 TIP and the 2045 LRTP on achieving performance targets and a discussion of related efforts related to the specific target.

Safety

Federal performance management regulations identify two areas of transportation safety that must be addressed: road safety from traffic collisions, and transit safety. The overall goal of the safety performance area is to make the nation's transportation systems safer for all users, including bicyclists and pedestrians. While the Transit Safety performance measure requirements are not in effect for the MPO as the regional transit systems are below the system size thresholds, and so this will focus solely on the roadway safety measures included in the final rule on the Highway Safety Improvement Program (HISP) that was effective on April 14, 2016.

Safety Goal

The overall goal of the safety performance area is to make the nation's transportation systems safer for all users, including transit users, bicyclists, and pedestrians through significant reduction in fatalities and serious injuries on the roadways, and through reductions in fatalities, injuries, and safety events for transit systems.

Safety Performance Measures and Targets

Five performance measures were established in the HSIP final rule. These metrics are intended to identify trends and assess progress towards reducing traffic-related fatalities and serious injuries on public roads. The Public Transportation Agency Safety Plan (PTASP) final rule includes seven safety related performance metrics for transit agencies to track.

Highway Safety Performance Measures	 Number of Fatalities Rate of Fatalities per 100 million vehicle miles traveled (VMT) Number of serious injuries
	 Rate of serious injuries per 100 million VMT Number of non-motorized fatalities and non-motorized serious injuries
Public Transportation Safety Performance Measures	 Total number of reportable fatalities Rate of fatalities per 500,000 Vehicle Revenue Miles Total number of reportable injuries Rate of injuries per 500,000 Vehicle Revenue Miles Total number of reportable safety events Rate of safety events per 500,000 Vehicle Revenue Miles
	Distance between major mechanical failures

Highway Safety Performance Targets

States establish Highway Safety Improvement Program (HSIP) targets and report them for the upcoming calendar year in the HSIP annual report that is submitted to FHWA by August 31st each year. Targets are applicable to all public roads, regardless of functional classification or ownership. The targets established for number and rate of fatalities, and number of serious injuries must be identical to those established for

the National Highway Transportation Safety Agency (NHTSA) Highway Safety Grant program in the annual Highway Safety Plan. MPOs have the option of supporting State targets or setting regional-specific targets for each of the five measures.

In New Hampshire, the process used to develop the required safety measures included in the annual Highway Safety Plan formed the basis for the establishment of the five FHWA mandated targets by NHDOT and the MPOs. This involved coordination and consultation between the New Hampshire Departments of Transportation and Safety, as well the four MPOs in the state. Currently available fatality, serious injury, and volume data were analyzed to establish baseline conditions in terms of total fatalities, fatality rates, total serious injuries, serious injury rates, as well as total non-motorized fatalities and serious injuries. Five year rolling averages were developed from these values and utilized to compute projected values for 2023. In August, 2022 NHDOT adopted statewide targets for each of the five measures. The MPO chose to support the State's safety targets through ongoing planning and project programming in November, 2022. At the same time, the MPO established a separate performance target relating to motorcycle fatalities that is not required by FHWA.

The 2023 Statewide Targets and trend information are included in the table below for each of the five required metrics and for motorcycle fatalities.

State of NH 2023 HSIP Targets 2021 Values 2023 Targets

Measure	Yearly	5-Year Average	Trend Based Target	Current Trend	Desired Trend	2023 Target
Number of Fatalities	118	114.2	115.2	^	4	111.6
Fatality Rate per 100 Million VMT	0.898	0.861	0.861	$lack \Psi$	$lack \Psi$	0.857
Number of Serious Injuries	482	466.4	472.7	^	$lack \Psi$	466.4
Serious Injury Rate per 100 Million VMT	3.670	3.532	3.559	^	$lack \Psi$	3.532
Non-Motorized Fatalities and Serious Injuries total	39	41.6	37.0	$oldsymbol{\Psi}$	$lack \Psi$	33.2
Motorcycle fatalities (MPO Only)	2	2.8	2.9	↑	$lack \Psi$	1.6

Public Transportation Agency Safety Plan PTASP Targets

On July 19, 2018 the Federal Transit Administration published the <u>Public Transportation Agency Safety Plan (PTASP) final rule</u> which requires certain transit operators to develop safety plans and implement Safety Management Systems (49 CFR Part 673). The initial rule required compliance for transit agencies July 20, 2020; however this deadline was extended to December 31, 2020 with MPOs provided another 180 days to implement regional transit safety targets based on the PTASPs. The targets address four aspects of transit safety: Fatalities, Injuries, Safety Events, and System Reliability. Separate targets for

each of these four areas are required for fixed route transit services and for demand responsive transit services.

For Fatalities, Injuries and Safety Events targets are set for the actual number of projected incidents as well as for incidence rate. The denominator for the rate measure is Vehicle Revenue Miles (VRM), and is up to individual transit agencies to set. COAST's safety plan used 100,000 miles in its rate calculations while MTA's plan used 500,000 miles. For MPO regional targets, rates are calculated per 500,000 miles.

A "safety event" is an event that occurs on a transit right-of-way or infrastructure, at a transit revenue facility, at a maintenance facility or rail yard, during a transit related maintenance activity, or involving a transit revenue vehicle that includes, but is not limited to: 1) A fatality confirmed within 30 days; 2) an injury requiring transport away from the scene for medical attention; 3) a serious injury; or 4) substantial property damage to facilities equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency.

The 2023 MPO Targets and trend information are included in the table below for each of the required metrics.

RPC MPO 2023 PTASP Targets

		COAST FY2022	MTA FY2023	RPC MPO
	Performance Measure	Target	Target	FY2023 Target
	Fatalities - Total	0		0
	Fatalities - Rate	0		0
Fixed	Injuries - Total	0		0
Route	Injuries - Rate	0		0
Route	Safety Events - Total	0		0
	Safety Events - Rate	0		0
	System Reliability	16,000		19,000
	Fatalities - Total	0	0	0
	Fatalities - Rate	0	0	0
Demand	Injuries - Total	0	1	1
Response	Injuries - Rate	0	2.75	1.69
Response	Safety Events - Total	0	7	7
	Safety Events - Rate	0	19.55	11.8
	System Reliability	100,000	13,764	13,764
	Fatalities - Total			0
	Fatalities - Rate			0
Intercity	Injuries - Total			1.8
Bus	Injuries - Rate			1.27
Dus	Safety Events - Total			9.9
	Safety Events - Rate			6.98
	System Reliability			425,110

2023-2026 TIP Investment

The 2023 TIP includes just over \$44.5 million in funding for fourteen projects that have the primary purpose of improving safety which is about 13% of the \$390.5 million in funding that is programmed for the region over the upcoming four years. In addition, the Highway Safety Improvement Program includes

	# of	% of		% of
Project Focus	Projects	Projects	Total Funding	Funding
2023 TIP Totals*	49		\$ 390,502,368	
Primarily Safety	14	28.6%	\$44,478,741	11.4%
Other w/ Safety Benefits	14	28.6%	\$165,601,631	42.4%
Transit Funding**	7	14.3%	\$79,587,518	20.4%
Total Safety Benefits	35	71.4%	\$289,667,890	74.2%

^{*}Does not include Statewide Programs

approximately \$47.5 million in a statewide funding pool for projects that directly work to reduce fatality and serious injury crashes, some of which will be spent in the region. There are another 14 projects where safety is not the primary purposes but that there is also a benefit. These projects are generally intended to address poor infrastructure conditions, or improve capacity and reduce travel times, however they will also help to reduce crashes and improve overall safety through modernized design, traffic control systems, and other changes. While there are no projects in the TIP explicitly for public transportation safety, it is an important part of the operations and maintenance programs for each of the agencies in the region and are included in this assessment. Overall, over 70% of the projects and nearly 75% of the funding will go towards investments that improve transportation safety in the region.

List of Regional Safety Projects in the 2023-2026 TIP (Includes transit programs)

			Total Funds
Project #	Project Name	Scope	Programmed
FTA5307	Boston Urbanize Area	Boston Urbanized Area (UZA) FTA Section 5307 apportioned funds for NHDOT transit projects.	\$30,012,928
COAST5307	COAST	COAST operating, ADA, capital PM, planning, FTA 5307 funds plus pending CMAQ-to-FTA transfer.	\$13,832,369
41717	Hampstead	Improve the intersection of NH121/Derry Rd/ Depot Rd.	\$476,448
42606	Hampton	Complete Streets improvements Winnacunnet Road and High Street between Tobey Rd and Five Corners	\$172,209
26485A	Hampton- Portsmouth	Construct the NH Seacoast Greenway, from Drakeside Rd north to the Hampton/North Hampton Town Line	\$1,080,000
42610	Kensington	NH 107/NH 150 Intersection re-alignment and upgrades	\$378,861
MTA5307	MTA	MTA operating, ADA, capital PM, planning utilizing FTA Section 5307 funds. Includes CART area.	\$22,717,518
MTA5310	МТА	Funding for seniors and individuals w/ disabilities. Annual FTA Section 5310 apportionment - CART.	\$646,281
MTA5339	MTA	Capital bus and bus facilities - FTA 5339 Program for statewide public transportation.	\$208,490
41713	New Castle-Rye	Bicycle and pedestrian safety accommodations on NH 1A & 1B.	\$500,084

^{**}Includes FTA5307 program for Boston Urbanized Area

11238S	Newington- Dover	Remove the superstructure General Sullivan Br & provide the most cost effective bike/ped connection	\$33,504,000
29617	Newton	Improvements to Rowe's Corner (Maple Ave, Amesbury Rd)	\$1,576,960
40641	Plaistow	Main Street Traffic Calming and Safety Improvements	\$1,123,585
40644	Portsmouth	Railroad crossing upgrade on Market Street	\$724,270
20258	Portsmouth	Const. new sidewalk and striped bicycle shoulders and associated drainage along Peverly Hill Road.	\$1,213,754
42608	Portsmouth	Market St/ Russell St intersection improvements	\$236,042
41752	Portsmouth	Add a multi-use path for bike/ped along Elwyn Rd extending from Rt1 to Harding Rd.	\$1,113,296
41750	Salem	Add .3 miles to Salem Bike-Ped Corridor which runs along abandoned Manchester & Lawrence rail line.	\$692,194
41711	Stratham	Signalization, Turn Lanes and Intersection Realignment at the NH108/Bunker Hill Intersection.	\$189,720

\$124,066,259

2045 LRTP Investment

The Long Range Transportation Plan, including the projects in the TIP and State Ten Year Plan, programs over \$787 million in funding for 104 projects that are anticipated to improve the safety of the transportation system over the next 20+ years. This equates to about 78% of the \$1.015 billion in funding that is programmed for specific projects in the region between 2023 and 2045. The full list of these projects is shown in the *Long Range Transportation Plan Project Performance Area* table at the end of the document. That table lists the 169 LRTP projects, the performance areas in which they are anticipated to provide some benefit and progress towards achieving targets, and a current estimated cost. A large percentage of these projects are for the development of bicycle or pedestrian facilities to better balance the available transportation network in the region. This also includes funding for the regional transit

systems which provide both safe travel to the users as well as reducing the number of cars on the roadway and in so indirectly reducing crashes. This does not include statewide programs such as the Highway Safety Improvement Program which includes approximately \$150

LRTP Safety Projects Summary

Project Focus	# of Projects	Est. Cost
2045 LRTP Total Projects*	169	\$1,015,988,000
Projects with Safety Benefits**	104	\$787,759,000
Percent of projects with Safety Benefits	62%	78%

^{*}Includes projects in MPO TIP and State Ten Year Plan but not Statewide Programs.

million in a statewide funding pool for projects that directly work to reduce fatality and serious injury crashes, some of which will likely be spent in the region.

Performance Assessment

In the 2023-2026 TIP, 14 projects in the region (\$44.5 million in investment) a programmed with a primary purpose of improving safety on the transportation system while \$79.6 million is dedicated to transit,

^{**} There are 9 projects benefiting safety for which there is no cost estimate available

including operations and maintenance. Another 14 projects (\$165.6 million) are intended to address congestion, bridge or pavement condition, or some other purpose but will have safety improvements as a byproduct. There are also 12 Statewide Programs (\$101.7 million) that focus on safety improvements to the transportation network. In the long term, the program of projects in the MPO Long Range Transportation Plan represent a significant investment in addressing safety concerns by directly addressing areas of fatal and serious injury crashes, enhancing the bicycle and pedestrian networks in the region to both provide safe spaces as well as shift some trips away from single-occupancy vehicles, and also through continued support of the regional transit systems that provide an alternative to driving. Total investment in the LRTP is estimated at over \$787 million in addressing this issue.

About half of the projects in the TIP and nearly two-thirds of those in the LRTP with the purpose of improving safety are focused on addressing bicycle and pedestrian safety concerns while the remaining focus on general roadway safety through intersection improvements, guardrail upgrades, and other changes. The projects that have a safety benefit but were not primarily intended as safety projects tend to address roadway safety more broadly in that many are located on heavily travelled corridors with substantial numbers of crashes, will occur in areas that have experienced fatal or serious injury crashes in the past, or will implement modern design improvements that will provide safety benefits. Nearly 30% of the funding in the TIP (Including Statewide Programs) and 78% of the funding in the LRTP will be spent on projects that will improve the safety of travel in the region, indicating a substantial commitment by the MPO and NHDOT to reducing fatalities and serious injuries through planning and project programming.

Safety projects in the transit operations sector include ongoing implementation and monitoring of COAST's and MTA's safety procedures and investigation and reporting of safety events. Among this work are routine elements of new operator training and in-service training, and similar training for mechanic, dispatchers, supervisors and vehicle cleaners related to safety needs. During COVID the transit agencies instituted extensive new safety procedures related to infectious disease control which continue to be standard. These include elements such as enhanced vehicle cleaning, air filtration and barriers for drivers. COAST equips all vehicles with interior and exterior video cameras to aid in post-safety-event investigation; and is in the process of equipping all vehicles with electronic fare payment systems which reduce potential conflict between drivers and riders as part of fare collection.

Capital funding is included in the TIP for construction of COAST's new Operations, Maintenance and Administrative facility which will yield significant safety and security benefits. These include indoor storage of vehicles which will reduce problems with ice buildup on bus roofs that then releases while the bus is in service causing safety issues for trailing vehicles. Indoor storage will similarly improve safety conditions for operators and maintenance staff reducing outside work in icy conditions.

Note that relatively little of the \$30 million in FTA Section 5307 funding from the Boston Urbanized Area shown in the project list is spent in the MPO region. Approximately \$75,000/year of this is allocated to MTA for CART service in Salem, and perhaps \$500,000/year is spent on facility maintenance and operating support for the Boston Express intercity bus service on the I93 corridor. Additional Boston UZA funding supports the Boston Express service on the F.E. Everett Turnpike and development of the Capitol Corridor rail project.

Infrastructure Condition

There are two final rules establishing performance measures for State DOT's and MPOs related to the condition of infrastructure and assets. The *Transit Asset Management (TAM)* final rule was effective on October 1, 2016 and establishes four performance measures for Transit Agencies and MPOs to track regarding asset performance. *The Pavement and Bridge Condition Performance Measures Final Rule*, effective, May 20, 2017, establishes six measures to monitor to carry out the National Highway Performance Program (NHPP). The overall goal of these performance areas is to improve the condition of existing pavements, bridges, and transit assets.

Goal

The overall goal of these performance areas is to maintain and improve the condition of existing pavements, bridges, and transit vehicles and facilities.

Performance Measures and Targets

Six measures were established in the Pavement and Bridge Condition rule and an additional four metrics were set in the Transit Asset Management rule. These metrics are intended to identify trends and assess progress towards improving the overall condition of transportation infrastructure.

Goal Area	Pavement Condition
Performance	Percent of Interstate Miles in Good Condition
Measures	Percent of Interstate Miles in Poor Condition
	Percent of Non-Interstate National Highway System Miles in Good Condition
	Percent of Non-Interstate National Highway System Miles in Poor Condition
Goal Area	Bridge Condition
Performance Measures	Percent of Bridges by deck area on the National Highway System in Good Condition
	Percent of Bridges by deck area on the National Highway System in Poor Condition
Goal Area	Transit Asset Condition (State of Good Repair)
Performance Measures	Rolling Stock: The percentage of revenue vehicles that exceed the useful life benchmark (ULB)
	Equipment: The percentage of non-revenue service vehicles that exceed the ULB
	 Facilities: The percentage of facilities that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale.
	 Infrastructure: The percentage of track segments that have performance restrictions.

Performance Targets

States are required to establish 2-year and 4-year targets for Pavement Condition and Bridge Condition reporting progress on a biennial basis beginning in May 2018. MPOs are required to establish 4-year targets for those same measures within 180 days of the State target setting. MPOs have the option to support the statewide targets or to establish their own for each of the pavement and bridge measures. The Transit Asset Management rule requires Transit Agencies to set targets for their assets by January 1st, 2017 for the following fiscal year, and Metropolitan Planning Organizations (MPOs) to set regional targets 180 days after that and update every four years. The targets deal with 4 broad areas of asset categories; Equipment, Rolling Stock, Infrastructure, and Facilities. The RPC region contains no relevant infrastructure as defined under 49 CFR part 625 (e.g. fixed guideway for light rail mass transit), and therefore the MPO is only required to set targets for equipment, rolling stock, and facilities.

Pavement Condition

Pavement Condition data is collected by NHDOT annually through specialized equipment mounted to a vehicle. For the second set of 4-year targets pavement condition will be measured based on the "full distress and IRI" measures. The result is that these 4-year targets set for pavement condition may be substantially different than those set for the initial 2 and 4-year periods. FHWA allowed this transition and phase-in period as many states did not historically collect the information required to make the calculations for rutting, cracking, and Present Serviceability Rating (PSR) and therefor did not have the information needed to establish baseline conditions and targets. The table below shows baseline conditions, NHDOT's 2 and 4-year targets, and the MPO 4-year targets for the current period.

Pavement Condition Baseline Estimates and Targets

	NHDOT				N	MPO
System & Measure	Baseline Estimate ¹	2-Year Target	4-Year Target	Baseline Estimate ¹	4-Year Target	Current Status
Interstate: % Good Condition	62%	57.0%	57.0%	100%	<i>57.0%</i>	Fuse ding toward
Lane miles in Good Condition	479	≥444	≥444	162	≥92	Exceeding target
Interstate: % Poor Condition	0.3%	0.5%	0.5%	0.0%	0.5%	Fuse ding toward
Lane Miles in Poor Condition	3	≤4	≤4	0	≤1	Exceeding target
Non-Interstate NHS: % Good	44%	35.0%	35.0%	54.2%	<i>35.0%</i>	Fuse ding toward
Lane Miles in Good Condition	898	≥712	≥712	141	≥91	Exceeding target
Non-Interstate NHS: % Poor	2%	7.0%	7.0%	0.3%	7.0%	Fuse ding toward
Lane Miles in Poor Condition	38	≤142	≤142	2.3	≤18	Exceeding target

¹NHDOT utilizes 2021 as the base year for Pavement and Bridge Condition.



Meeting or Exceeding Target



Not meeting Target

Bridge Condition

Bridge Condition data is collected by NHDOT through the regular inspection of bridges and includes all structures that meet the federal definition of a bridge. Conditions are reported in square feet of deck area and are based on the condition of the deck, superstructure, and substructure, or culvert. Each of those 3 bridge components is evaluated and the lowest rating determines the overall bridge rating. Overall ratings

of 7 or better indicate that the bridge is in "Good" condition, while overall ratings of 4 or less indicate that the bridge is in "Poor" condition. The table below shows baseline NHS bridge conditions, NHDOT 2 and 4-year targets, and MPO 4-year targets.

Bridge Condition Baseline Estimates and Targets

NHDOT				M	IPO	
	Baseline	2-Year	4-Year	Baseline	4-Year	
System & Measure	Estimate ¹	Target	Target	Estimate ¹	Target	Current Status
NHS Bridges in Good Condition	58.4%	57.0%	57.0%	54.2%	57.0%	Not meeting
Square Feet in Good Condition	4,341,869	≥4,236,920	≥4,236,920	88,672	≥93,214	target
NHS Bridges in Poor Condition	4.3%	5.0%	5.0%	3.6%	5.0%	Fuggeding target
Square Feet in Poor Condition	319,678	≤371,660	≤371,660	5,955	≤8,176.3	Exceeding target

¹NHDOT utilizes 2021 as the base year for Pavement and Bridge Condition.



Meeting or Exceeding Target



Not meeting Target

Transit Assets

The MPO developed Transit Asset Management targets by reviewing the asset portfolios for the three transit providers in the region; Cooperative Alliance for Regional Transit (CART), Cooperative Alliance for Seacoast Transportation (COAST), and the University of New Hampshire Wildcat Transit. Calculation of regional targets for rolling stock and equipment was based on comparison of the existing regional inventory to anticipated additions and replacements. For each asset class, the total number of vehicles was compared to the number of vehicles at or above their Useful Life Benchmark (ULB). Regional baseline and target calculations will be updated on an annual basis as part of the RPC Long Range Transportation Plan (LRTP) and Transportation Improvement Program (TIP).

Transit Asset Management (State of Good Repair) Baseline Estimates and Targets

Asset				
Category*	Performance Measure	Asset Class	2022 Baseline	2023 Target
Rolling Stock	Age - % of revenue vehicles within a particular	Van	(3 of 13) 23%	(4 of 13) 31%
	asset class that have met or exceeded their	Cutaway Bus	(3 of 25) 12%	(3 of 25) 12%
Useful Life Benchmark (ULB)		Large Bus	(14 of 56) 25%	(14 of 56) 25%
Equipment	Age - % of non-revenue vehicles that have met or exceeded their Useful Life Benchmark (ULB)	All vehicles	(8 of 13) 62%	(10 of 13) 77%
Facilities	Condition - % of facilities with a condition rating below 3.0 on the FTA <u>TERM Scale</u>	Facilities	(1 of 6) 17%	(1 of 6) 17%

^{*}The category for Infrastructure deals solely with fixed guideway/rail systems, which are not owned by any FTA funding recipients in NH and are therefore not shown in this table.

The preceding table shows the combined regional targets for the State of Good Repair performance measures for Transit Assets that are included in the TAM Plans for the three providers in the RPC Region.

At the time of publication each of the three transit agencies has either pending grants for new vehicles or vehicles on order but with no clear delivery date. Target setting did not assume those grants would be successful or these vehicles delivered by the end of 2023. Most bus orders currently require a lead time of 18-24 months due to supply chain delays and manufacturing capacity. These assumptions are consistent with those made by the Strafford Planning Commission MPO, with whom the COAST and Wildcat service areas are shared, and the Southern New Hampshire Planning Commission MPO, with whom the MTA/CART service region is shared.

2023-2026 TIP Investment

The bulk of the funding for making improvements to the condition of the bridges and highways in New Hampshire is contained within 15 statewide programs (\$295 million) from which individual projects are carved out. In addition to those statewide funds, the 2023-2026 TIP includes 10 projects (\$137.5 million) with the primary purpose of improving the condition of the region's infrastructure. Finally, both the statewide and regional transit

funding programs are utilized to operate and maintain the fleets and other aspects of the transit systems. There are 10 of these programs totaling \$135.4 million in funding. In all, about 44% of the projects and nearly 70% of the funding in the TIP (Including Statewide

Project Focus	# of Projects	% of Projects	Total Funding	% of Funding
2023 TIP Totals*	89		\$ 837,410,086	
Bridge/Highway Infrastructure	22	25%	\$404,770,935	48%
Other w/ Infrastructure benefit	7	8%	\$41,011,028	5%
Transit	10	11%	\$135,450,000	16%
Total	39	44%	\$581,133,937	69%

^{*}Includes Statewide Programs

Programs) over the upcoming four years are dedicated to improvements in bridge, pavement, and transit infrastructure condition. This funding includes money for rehabilitation or replacement of nine bridges in the region (including the replacement of the moveable Neil Underwood Bridge over the Hampton River) and one roadway rehabilitation project (NH 101 in Candia and Raymond). There are also two projects in the region that will result in improved infrastructure condition but exist primarily to address safety and capacity concerns. In addition, while most of the Federal Transit Administration (FTA) funds for regional transit systems operations and capital improvements is used to operate the systems, the funding is also utilized for maintaining facilities and assets.

TIP Projects addressing PM2 and TAM Targets

	Project		Total Funds
Project #	Name	Scope	Programmed
43430	EPPING	Address Red-Listed bridge carrying NH 125 over Piscassic River (Br. No. 108/030)	\$174,369
40623	EXETER	Bridge Replacement to address Priority Bridge carrying NH 111A over Little River (Br No 075/078)	\$863,931
43849	GREENLAND	Engineering assessment to improve resiliency and capacity to NH33 bridge over Winnicut River.	\$125,000
42573	HAMPTON	Address Red List bridge (163/184) carrying US 1 over PAR (Abd) in the Town of Hampton	\$1,163,121

43104	STATEWIDE	Underwater Bridge Inspection for years from 2021 to 2023.	68,810 \$509 368 375
15904	SEABROOK - HAMPTON	Reconstruction of Red List bridge carrying NH 1A over Hampton River(Br#235/025)Debt Serv.Proj#42710 Underwater Bridge Inspection for years from 2021 to 2022	\$88,788,590
FTA5307	PROGRAM	Boston Urbanized Area (UZA) FTA Section 5307 apportioned funds for NHDOT transit projects.	\$30,012,928
FTA5310	PROGRAM	Capital, Mobility Mgmt, and Operating for Seniors & Individuals w/ Disabilities - FTA 5310 Program	\$14,288,231
COAST5307	PROGRAM	COAST operating, ADA, capital PM, planning, FTA 5307 funds plus pending CMAQ-to-FTA transfer.	\$13,832,369
STBG-FTA	PROGRAM	Funds transferred from STBG to FTA to supplement public/human services transportation statewide.	\$14,450,000
FTA5339	PROGRAM	Capital bus and bus facilities - FTA 5339 Program for statewide public transportation.	\$27,024,978
MTA5310	PROGRAM	Funding for seniors and individuals w/ disabilities. Annual FTA Section 5310 apportionment - CART.	\$646,281
MTA5307	PROGRAM	MTA operating, ADA, capital PM, planning utilizing FTA Section 5307 funds. Includes CART area.	\$22,717,518
MTA5339	PROGRAM	Funding for capital vehicles and equipment for CART area. Annual FTA Section 5339 apportionment.	\$208,490
CRDR	PROGRAM	Culvert Replacement/Rehabilitation & Drainage Repairs (Annual Project)	\$16,743,300
BRDG-HIB-M&P	PROGRAM	Maintenance and preservation efforts for High Investment Bridges	\$12,520,728
BRDG-T1/2-M&P	PROGRAM	Maintenance & preservation of tier 1 & 2 bridges.	\$29,800,000
СВІ	PROGRAM	Complex Bridge Inspection (PARENT)	\$1,080,000
BRDG-T3/4-M&P	PROGRAM	Maintenance and preservation of tier 3 & 4 bridges.	\$15,340,000
UBI	PROGRAM	Underwater Bridge Inspection (Annual Project)	\$221,000
PAVE-T2-RESURF	PROGRAM	Resurfacing Tier 2 Roadways	\$91,350,000
MOBIL	PROGRAM	Muncipal Bridge Rehabilitation and Replace Projects	\$27,000,000
MOBRR	PROGRAM	Municipal Owned Bridge Rehabilitation & Replacement Projects (MOBRR PROGRAM)	\$18,925,000
PAVE-T1-RESURF	PROGRAM	Resurface Tier 1 Highways	\$51,817,310
PAVE-T2-REHAB	PROGRAM	Rehab of Tier 2 roads.	\$7,470,000
24457	NORTH HAMPTON	Superstructure replacement of bridge carrying US 1 over Boston & Maine RR (Red List Br No 148/132)	\$5,506,081
41436	NEWTON	Address the Red List bridge carrying Pond Street over PAR in the Town of Newton (064/107)	\$267,250
28393	NEWFIELDS - NEWMARKET	Bridge Replacement for bridges carrying NH 108 over BMRR lines Br No 127/081 & 125/054	\$6,593,917
16127	NEW CASTLE - RYE	Bridge replacement, Single Leaf Bascule Bridge, NH 1B over Little Harbor (Red List) Br No 066/071	\$10,369,173

\$509,368,375

2045 Plan Investment

There are nearly 100 projects in the Long Range Transportation Plan that will have outcomes that improve the condition of the regional bridge and roadway infrastructure and seven transit programs/projects that will aid in maintaining the condition of regional transit system assets and facilities. All of the projects are shown in the *Long Range Transportation Plan Project Performance Area* table at the end of this document. The LRTP includes approximately \$680 million in funding for projects that have the purpose of improving the condition of the region's road and bridge infrastructure which is about 67% of the total funding that is programmed for the region between 2023 and 2045. This includes projects and funding for the replacement of both of the region's remaining moveable bridges:

- The replacement of the moveable Neil Underwood Bridge (NH1A) over the Hampton River.
- The replacement of the NH 1B bascule bridge between Rye and New Castle

The remaining projects address a range of infrastructure needs from shoulder improvements and culvert replacements to full depth reconstruction of roadways, interchange reconfigurations, and other bridge

replacements. This includes work to address the condition of 15 culverts and bridges through rehabilitation or replacement projects while the remainder are largely improvements to road segments and intersections.

As with the TIP, statewide programs that are focused primarily on maintenance and preservation of the existing

Transportation Infrastructure Condition Summary

Project Focus	# of Projects	% of Projects	Total Funding	% of Funding
2045 LRTP Totals	169		\$1,015,988,000	
Roadway/Bridge Infrastructure benefit*	95	56%	\$415,788,000	41%
Transit Infrastructure Benefits**	7	4%	\$264,707,000	26%
Total	102	60%	\$680,66,000	67%

^{*} Includes 28 projects without a cost estimate available

transportation network carry a substantial portion of the funding for those activities. There are 15 statewide programs focused on the maintenance, preservation, and operation of the highway and bridge system in the state. Nearly \$300 million is programmed in those fifteen programs over the four years of the 2023-2026 TIP and continuing the funding out to 2045 would allocate approximately \$2.5 billion towards operations and maintenance of the system around the state over the 22 years. Applying a formula to establish a share of statewide programs, the RPC would expect about an additional \$340 million in investment over the course of the plan.

Performance Assessment

The stated priority of NHDOT for the last several years has been to focus on improving the overall condition of the roads and bridges in the state and maintaining that good condition. This is seen in the generally good condition of the roadways in the region and performance targets that maintain high percentages of the system in good condition. While there are many bridges in poor condition, the funding levels included in the TIP and the State Ten Year Plan include the resources to address all of those that are currently identified. The TIP includes nearly \$600 million in funding that will improve the condition of major pieces of infrastructure in the region including replacing or rehabilitating or replacing the two remaining moveable bridges in the region and the General Sullivan Bridge which provides a critical bicycle

^{** 5} of the 7 transit projects are the annual support programs that are funded each year

and pedestrian link over the Great Bay. In addition to the bridge projects approximately \$295 million is included for statewide operations, maintenance, and preservation programs. The programming in the LRTP continues this investment. There are nearly 100 projects addressing bridge and roadway conditions identified in the Plan and the state will dedicate \$2.5 billion towards statewide operations and maintenance programs during that same timeframe.

On the transit side of the system, there has been a focus on understanding the current condition of assets and establishing transit asset management plans that help to monitor when replacement vehicles and other large investments are needed. The TIP includes over \$135 million for transit operations, maintenance, and capital investment and this will allow the systems to continue to operate and replace vehicles as needed. Additionally, COAST has received substantial funding towards the construction of a new maintenance facility that will allow that agency to better care for their fleet. Approximately \$49.5 million of the total transit funding in the TIP is dedicated to the regional transit systems while the remaining \$85 million is included in Statewide Programs and will be utilized throughout New Hampshire. The fiscal programming in the LRTP continues Transit funding in the long term using the same assumptions as in the TIP with approximately \$238 million dedicated to the operation of the two transit systems over the course of the Plan.

System Reliability

The System Performance Final Rule, effective, May 20, 2017, establishes six measures in three performance areas to carry out the National Highway Performance Program (NHPP), the National Highway Freight Program (NHFP) and Congestion Mitigation and Air Quality Program (CMAQ). The overall goal of these performance areas is to promote effective use of Federal transportation funds in addressing congestion and highway capacity needs, as well as reducing emissions from the transportation system. The CMAQ emissions reduction measure is applicable only to those areas designated as nonattainment or maintenance for ozone, carbon monoxide or particulate matter. The CMAQ traffic congestion measures are applicable only to those nonattainment areas that are also in urbanized areas of over 1 million people. As the RPC region is in attainment, those three measures do not apply and are not discussed in this system report.

Goal

The overall goal of these performance areas is to improve the efficiency and reliability of the transportation system for both passenger travel and goods movement.

Performance Measures and Targets

Six measures in three performance areas were established in the System Performance rule and three of them (in two areas) are applicable to the RPC MPO region. These metrics are intended to identify trends and assess progress towards improving the overall function of the highway system.

Goal Area Performance Measures	 Reliability of the National Highway System Percent of reliable person-miles traveled on the Interstate Percent of reliable person-miles traveled on the non-Interstate National Highway System (NHS)
Goal Area Performance Measures	Freight Movement and Economic Vitality • Percentage of Interstate system mileage providing for reliable truck travel time (Truck Travel Time Reliability Index)

Performance Targets

States are required to establish 2-year and 4-year targets for reporting progress on NHS travel time reliability and Interstate Freight Movement reliability on a biennial basis beginning in May 2018. MPOs are required to establish 4-year targets for those same measures within 180 days of the State target setting. MPOs have the option to support the statewide targets or to establish their own for each of the measures. These three measures are defined in the following paragraphs.

Travel Time Reliability

Travel Time Reliability is defined as the percent of person-miles traveled that are reliable, or, in other words, how frequently does congestion on the system produce travel times that are excessively long. The

measure utilizes person-miles to account for transit, van pools and other high-occupancy vehicle users as well as travel by automobile and truck.

Travel Time Reliability data is collected utilizing vehicle probe data in the National Performance Measure Research Data Set (NPMRDS). This data consists of average travel times for each segment of the National Highway System and is calculated at 5-minute intervals for each day of the year and aggregated to different levels for the purposes of calculating travel time reliability measures. For Interstate Travel Time Reliability and Non-Interstate NHS Travel Time Reliability, data is collected in 15-minute segments between 6:00 AM and 8:00 PM daily. The 80th percentile travel times (longer) are then divided by the 50th percentile (normal) travel time and periods where this ratio is less than 1.5 are considered "reliable". These are converted to person-miles and collected into monthly and annual totals to determine the overall percentage of reliable travel. The goal is for all segments to be "reliable" at a rate that is greater than or equal to the target value over the course of the year.

Truck Travel Time Reliability

Truck Travel Time Reliability (TTTR), the Freight Reliability measure, is limited to interstate travel and is calculated somewhat differently than general travel time reliability. The data for TTTR is collected utilizing vehicle probe data in the National Performance Measure Research Data Set (NPMRDS). The 95th percentile truck travel time is divided by the 50th percentile (normal) truck travel time for each segment during each of 5 periods: weekday morning peak (6-10 AM), midday (10AM-4PM), and afternoon peak (4-8PM), weekends (6AM-8PM), and overnights for all days (8PM-6AM). The largest ratio for each day is multiplied by the length of the segment. The sum of all length-weighted segments is then divided by the total length of interstate in the state/region. The goal in this instance is that the interstate system has truck travel times that are less than 1.5 times the "normal" travel time over the course of the year.

Travel Time Reliability and Truck Travel Time Reliability Baseline Estimates and Targets

			NHDOT		<u> </u>			МРО
		Baseline	2-Year	4-Year	Baseline	4-Year		
Area	System & Measure	Estimate ¹	Target	Target	Estimate ¹	Target	Current	Status (2021)
Travel	Interstate: Person Miles	99.4%	95.0%	95.0%	100%	95%	98.1% (Exceeding target
Time Reliability	Non-Interstate NHS: Person Miles	87.8%	85.0%	85.0%	89.8%	85%	97.4% (Exceeding target
Freight Movement	Interstate Truck Travel Time Reliability (TTTR)	1.35	1.50	1.50	1.41	1.50	1.37 (Exceeding target

¹Both RPC and NHDOT utilize 2017 values as the baseline for Travel Time Reliability measures.



Meeting or Exceeding Target



Not meeting Target

Boston UZA Coordination

23 CFR 490.105 and 490.105 require that all State DOTs and MPOs serving an applicable urbanized area (UZA) establish a single, unified target for each of the traffic congestion measures for each applicable urbanized area in the country. As described in the regulation, if an MPO is not required to establish targets for the traffic congestion measures for an urbanized area, but NHS highways cross any part of an urbanized area with a population more than 200,000 within a metropolitan planning area (MPA) and that urbanized

area contains a nonattainment or maintenance area (for any one of the criteria pollutant) outside of its MPA, then that MPO is encouraged to coordinate with relevant State DOT(s) and MPO(s) in the target establishment process for the

Boston Urbanized Area Traffic Congestion
Performance Targets

	Baseline	Two-Year	Four-Year
	(2017)	Target (2023)	Target (2025)
Percentage of Non-SOV Travel	37.2%	38.7%	39.8%
Annual hours of Peak Hours of	18.0	24.0%	22.0%
Excessive Delay per capita	10.0	24.070	22.070

traffic congestion measures for that urbanized area. For that reason, RPC coordinates the setting of Congestion Mitigation and Air Quality Performance Measure Targets with seven other MPOs as well as the State Departments of Transportation for Massachusetts and New Hampshire. Boston UZA MPOs include the Boston Region MPO, Northern Middlesex MPO, Central Massachusetts MPO, Merrimack Valley MPO, Montachusett MPO, Old Colony MPO, and Southeastern Massachusetts MPO as well as RPC. Of these agencies, only Boston and Northern Middlesex MPOs and the Department of Transportations are required to establish Traffic Congestion Targets while the remaining entities are encouraged to participate in the target selection process but do not need to establish or support CMAQ targets. The Current Boston UZA CMAQ targets are included in the table in this document and the full documentation of the measures and targets can be found at the Boston MPO website here: https://www.bostonmpo.org/performance.

2023 TIP Investment

The 2023-2026 TIP includes just over \$66.5 million in funding for 14 projects that have the primary purpose of improving travel time reliability through addressing bottlenecks on the system and another three projects and \$1 million where improved reliability is a byproduct of the project or service. Additionally, funding for transit programs in the region and around the state account for another 10 projects and over \$135 million in funding. In total, about 24% of the \$837 million in funding that is programmed in the STIP is being utilized in a way that helps to address congestion and travel time reliability issues in the region and the state as a whole. The expansion work occurring on I-93 and the

Spaulding Turnpike (Newington-Dover) has been completed and so the remaining projects addressing travel time reliability tend to be smaller such as the final segment of the NH 125 Plaistow-Kingston

Project Focus	# of Projects	% of Projects	Total Funding	% of Funding
2023 TIP Totals*	89		\$ 837,410,086	
Primarily Travel Time Reliability*	14	16%	\$66,567,376	8%
Other w/ TTR Benefits	3	3%	\$1,045,028	<1%
Transit Programs*	10	11%	\$135,351,150	16%
Total TTR Benefits	13	30%	\$160,591,047	24%

^{*}Includes Statewide Programs

corridor (\$12 million), NH 125 in Epping between NH 101 and NH 87 (\$9 million), and improvements on US 1 in Portsmouth (\$15 million). The funding also includes resources for the State TSMO center as well as projects that incorporate Intelligent Transportation Systems (ITS) projects. The NH 125 project in Epping will add signal coordination and another project will expand signal coordination from the state line with Massachusetts through all the signals in Plaistow. The rehabilitation of the I-95 bridge over the Piscataqua river also includes work to be able to utilize the shoulders as a travel lane during peak hours to help reduce congestion.

The TIP includes the transit programs for COAST and MTA transit systems that improve travel time reliability through reducing the number of vehicles on the roadway. Similarly, the statewide programs that provide support for Transportation Systems, Management & Operations (TSMO), Intelligent Transportation Systems (ITS), and traffic management resources benefit the region through reducing the impacts and extent of congestion along major roadways corridors.

TIP Projects addressing System Reliability Measures

Project #	Project Name	Scope	Total Funds Programmed
44175	COAST	Discretionary funding for capital projects/design & construction of upgraded facility in Dover.	\$9,670,355
44176	COAST	Congressionally directed spending for COAST capital project: upgraded Dover facility	\$2,500,000
29608	Epping	NH Rte 125 Capacity and traffic management improvements from Brickyard Plaza to NH 87	\$8,703,076
40797	Hampton	Improvements to NH 1A (Ocean Boulevard) from State Park Road to NH 27 (High St).	\$8,082,477
42879	Newington	Construct right turn lane on the Northbound direction of New Hampshire Ave Intersection	\$592,382
11238	Newington - Dover	NH 16 Widen Turnpike Including Little Bay Bridges from Gosling Road To Dover Toll.	\$1,400,000
40645	Plaistow	Signal coordination and control along corridor from Mass S/L to Old County Rd	\$1,094,485
10044E	Plaistow - Kingston	Reconstruct NH 125: anticipated 3 lanes, from south of town line northerly approx 1.8 mi	\$12,190,820
29640	Portsmouth	US 1 Improvements (1.7 mi.) from Constitution Ave to Wilson Rd & from Ocean Rd to White Cedar Blvd	\$15,568,557
42608	Portsmouth	Market St / Russell St Intersection Improvements	\$236,042
42611	Portsmouth	Intersection improvements on Grafton Drive by Portsmouth Transportation Center & Pease Golf Course	\$118,021
16189B	Portsmouth, NH - York, ME	ITS Improvements to I-95 from Portsmouth, NH to York, ME	\$4,589,064
TSMO	Program	Statewide Transportation Systems Management and Operations, ITS Technologies, Traveler Info	\$13,210,042
FTA5310	Program	Capital, Mobility Mgmt, and Operating for Seniors & Individuals w/ Disabilities - FTA 5310 Program	\$14,288,231
FTA5339	Program	Capital bus and bus facilities - FTA 5339 Program for statewide public transportation.	\$27,024,978
FTA5307	Program	Boston Urbanized Area (UZA) FTA Section 5307 apportioned funds for NHDOT transit projects.	\$30,012,928

MTA5307	Program	MTA operating, ADA, capital PM, planning utilizing FTA Section 5307 funds. Includes CART area.	\$22,717,518
MTA5310	Program	Funding for seniors and individuals w/ disabilities. Annual FTA Section 5310 apportionment - CART.	\$646,281
MTA5339	Program	Funding for capital vehicles and equipment for CART area. Annual FTA Section 5339 apportionment.	\$208,490
COAST5307	Program	COAST operating, ADA, capital PM, planning, FTA 5307 funds plus pending CMAQ-to-FTA transfer.	\$13,832,369
STBG-FTA	Program	Funds transferred from STBG to FTA to supplement public/human services transportation statewide.	\$14,450,000
42884	Salem	Improve signal operation at 28 intersections to identify hardware and software upgrades needed.	\$140,000
41712	Seabrook	Capacity Improvements on US 1 between New Zealand Road and the Hampton Falls Town Line.	\$617,410
41756	Statewide	Evaluate signalized intersections and develop & implement signal timings to improve traffic flow.	\$25,000

\$201,918,526

2045 Plan Investment

The 2045 Long Range Transportation Plan includes \$680 million in funding for 61 projects that will provide benefits of reducing congestion and improving travel time reliability through addressing bottlenecks on the system. All of the projects are shown in the *Long Range Transportation Plan Project Performance Area* table at the end of this document. The last ten years have seen the completion of multiple large-scale capacity expansion projects (I-93, Spaulding Turnpike) in the region and as those projects have been finished the focus has largely moved towards addressing smaller improvements at locations that are disrupting traffic flow. In addition, priorities have shifted towards mitigating safety problems and

providing additional resources for maintaining and operating the existing infrastructure. Projects providing Travel Time Reliability benefits total about 67% of the \$1.015 billion in funding that is programmed for the region between 2023 and 2045. This includes funding for the final project of the NH 125 Plaistow-

System Reliability and Freight Movement Summary

	# of	% of		% of
Project Focus	Projects	Projects	Total Funding	Funding
2045 LRTP Totals	169		\$1,015,988,000	
Travel Time Reliability	61	36%	\$681,850,000	67%
Transit Programs	10	6%	\$264,707,000	26%
Total Reliability Benefits	71	42%	\$946,557,000	93%

Kingston corridor plan, additional capacity and traffic management on NH 125 in Epping and signal coordination in Plaistow. In addition to addressing a "Red List" bridge, the replacement of the NH 1A bridge between Hampton and Seabrook will provide traffic flow improvements as it will no longer be moveable and stop traffic for boats to cross under.

In addition to the individual projects within the MPO region, the LRTP includes the transit programs for COAST, MTA/CART, and UNH Wildcat transit that improve travel time reliability through improving transit service to induce mode shift and reduce the number of vehicles on the roadway. COAST's comprehensive redesign of its fixed route network in 2020 improved transit service reliability for riders through both a modified route system and improved real-time information on bus locations and anticipated arrival times.

Lastly, there are statewide programs in the TIP and LRTP that provide benefits to travel time reliability. These include support for Transportation Systems, Management & Operations (TSMO) and the New Hampshire Traffic Monitoring Center (TMC) provide Intelligent Transportation Systems (ITS) and traffic management support that provides benefits along major roadways corridors.

Performance Assessment

Several large-scale capacity expansion projects have been completed in the region in recent years and these have produced benefits to system reliability. In particular, the implementation of open-road tolling at the Hampton toll plaza on I-95 has drastically reduced delays and stoppages on that roadway during peak summer travel times. The expansion of I-93 to four lanes from Salem to Manchester and the Spaulding Turnpike in Newington and Dover are expected to provide similar improvements to system reliability by reducing bottlenecks, improving the function of the toll plaza, and providing additional shoulder space for disabled vehicles.

The rehabilitation of the I-95 Bridge over the Piscataqua River between New Hampshire and Maine included work to ready the shoulders of the bridge for peak period use. While this facility remains a system bottleneck on I-95, it is anticipated that once the ITS improvements are completed, the additional lane during peak periods will reduce congestion that occurs around the bridge. Combined with the removal of the toll booths in York, Maine and replacement with an open-road tolling system, this is expected to reduce congestion along that corridor. The replacement of the NH1A bridge between Hampton and Seabrook will also provide reliability benefits by being a fixed structure that no longer needs to raise to allow boat traffic to pass, while also providing safety improvement for bicycle and pedestrian travel. The reconfiguration of Stratham Circle and Portsmouth Circle will likely reduce congestion at those locations as well as improve safety.

The improvements proposed for US 1 in Portsmouth will provide a more consistent cross-section for that corridor and will enhance bike and pedestrian access to provide a safe and convenient way to access the homes and businesses in that part of the city without an automobile. Further projects are planned on the southern section of the corridor to address congestion issues in Seabrook, Hampton Falls, and Hampton. Phases 1A and 1B of the NH Seacoast Greenway rail trail will complete construction from Portsmouth to Hampton in late 2024 and provide a safer, lower-stress alternative to pedestrian and bicycle travel on US1, also removing ped/bike traffic from the highway and reducing modal conflicts.

On Route 125, work was completed in recent years to create a five-lane corridor and access management controls from near the state border through Old County Road, and the engineering work for the last segment of the NH 125 Plaistow-Kingston corridor plan is under way. Work further north on NH 125 in Epping will help to address an area of growing congestion from both commercial growth and increased commuting and help to provide a facility that supports the flow of vehicles and freight along the corridor, and both segments are slated to get signal coordination improvements.

Transit continues to play a small but important role in mitigating congestion in the region. The two regional systems (COAST and MTA/CART) provide services along major corridors and allow users to travel without a car. In addition, intercity services along the Spaulding Turnpike, I-93, and I-95 corridors and the Downeaster rail service provide an alternative for Boston-bound commuters and airport travelers that have fully recovered from COVID-era ridership declines and will continue to evolve throughout the life of the LRTP.

PROJECT NUMBER LOCATION	PROJECT SCOPE	HSIP & PTASP	Bridge & Road Condition	Transit Asset Management	Travel Time Reliability	RESILIENCE	ACCESSIBILITY	LIVABILITY	ESTIMATED COST (NA = Not Available)
6055002 Brentwood	Reconfigure the intersection of NH 111A and Pickpocket Road from a "Y" to a "T" alignment	Х					 		\$216,513
6077001 COAST	Construct an Administration, Operations, and Maintenance Facility along with a Vehicle Storage Building	Х		Х			Х		\$12,632,500
6077002 COAST	COAST Annual FTA5307 Capital and Operating (23 Years)	Х		Χ	Х		Χ	Х	\$87,495,968
6078001 MTA	MTA Annual FTA5307 Capital and Operating (23 Years)	Х		Х	Х		Х	Х	\$145,709,868
6078002 MTA	MTA Annual FTA5310 Capital Program (23 Years)	Х		Χ	Х		Χ	Χ	\$4,153,057
6078003 MTA	MTA Annual FTA5339 Bus and Bus Facilities (23 Years)	Х	İ	Х	Х		Х	Х	\$1,254,750
6147005 Epping	Signalize the southern intersection of NH 125 with North River Road. Realign North River Road to eliminate skewed angle approaches to NH 125	Х			Х				\$1,372,665
6147006 Epping	Signalize intersection of NH 125 with Lee Hill Road (NH 155)	Х	İ	į	Х	į	į	<u> </u>	\$1,870,513
6147007 Epping	Widen NH 125 from NH 87 to Lee Hill Road	Х			Х				\$9,880,426
6147011 Epping	Reconfiguration of the intersection to improve safety and operations	Х	Х	;] 			<u> </u>	NA
6147001 Epping	NH Rte 125 Capacity and traffic management improvements from Brickyard Plaza to NH 87	Х			Х				\$15,169,028
6147012 Epping	Address Red-Listed bridge carrying NH 125 over Piscassic River (BR. NO. 108/030)		Х	İ	!		İ	<u> </u>	\$2,421,939
6153010 Exeter	Address impacts of sea-level rise induced flooding on Water Street in Exeter		Х			Х			NA
6153009 Exeter	Bridge Replacement to address Priority Bridge carrying NH 111A over Little River (Br No 075/078)		Х						\$3,320,875
6001024 Exeter to Raymond	Conduct capacity and safety analyses at NH 101 Interchanges	Х			Х				\$250,000
6167002 Fremont	Scribner Road over Exeter River - Structurally deficient bridge 106/076. Source: NHDOT 2017 Municipal Red List Bridge Summary		Х			i i i i	 		NA
6167001 Fremont	Martin Road over Piscassic River - 155/133. Source: NHDOT 2002 Red List Bridge Summary		Х						\$687,979
6187003 Greenland	Mitigate congestion issues at the intersection of NH 33 with Bayside & Winnicut Roads. Adjacent bridge may be impacted.		Х		Х				\$10,317,797
6187002 Greenland	Address Capacity Issues on NH 33 between Bayside Road and NH 151	Х			Х				NA
6187004 Greenland	Engineering Assessment to improve resiliency and capacity		Х	Į	Х	Х			\$125,000
6001025 Greenland- Stratham	Undertake analysis of the corridor to determine appropriate improvements.	Х			Х		Х	Х	\$350,000
6195001 Hampstead	Improve The Intersection Of NH 121/ Derry Rd/ Depot Rd In Hampstead	Х	ĺ	ļ	Х				\$2,499,938
6197006 Hampton	Reconstruct Exeter Road (NH 27) within the urban compact area including drainage, sidewalks, traffic signals and street lighting.		Х						\$28,593,930

PROJECT NUMBER LOCATION	PROJECT SCOPE	HSIP & PTASP	Bridge & Road Condition	Transit Asset Management	Travel Time Reliability	RESILIENCE	ACCESSIBILITY	LIVABILITY	ESTIMATED COST (NA = Not Available)
6197009 Hampton	Reconstruct High Street (NH 27) within the urban compact area including drainage, sidewalks, traffic signals and street lighting.		Х					<u> </u>	\$19,650,123
6197010 Hampton	Reconstruct Winnacunnet Road within the urban compact area including drainage, sidewalks, traffic signals and street lighting.		Х						\$20,215,183
6197011 Hampton	Reconstruct Church Street within the urban compact area including drainage, sidewalks, traffic signals and street lighting.		Х	 	 			 	\$3,655,628
6197002 Hampton	Realignment of the US 1 / NH 27 intersection including addressing bridge over rail trail.	Х			Х		Х		\$14,129,150
6197004 Hampton	Shoulder bicycle lanes on NH 27 from Exeter town line to US 1 and bike route markers.	Х					Х		\$3,625,540
6197013 Hampton	Construction of an intermodal facility in the vicinity of the interchange of NH 101 and US 1 in Hampton	Х		Х		! ! ! !	Х	Х	\$10,075,436
6197014 Hampton	Capacity and traffic flow improvements on Ocean Boulevard from the Highland Avenue Intersection to the Church Street Intersection	Х	Х	i I I I	Х	i I I I	Х	Х	\$6,756,784
6197015 Hampton	Complete Streets improvements on Ashworth Avenue	Х	Х	<u> </u>	Х		Х	Х	\$5,608,456
6197016 Hampton	Capacity and traffic flow improvements on Ocean Boulevard from the Hampton Harbor Bridge to the Southern Ashworth Avenue/Ocean Blvd split	Х	Х	! ! !	Х		Х	Х	\$7,103,608
6197022 Hampton	Address sea-level rise induced flooding on Cusack Road in Hampton		Х	!	!	Х		Х	NA
6197023 Hampton	Address the impacts of sea-level rise and storm surge induced flooding on High Street		Х			Х		Х	NA
6197024 Hampton	Address impacts of sea-level rise and storm surge induced flooding on Winnacunnet Road and NH 1A south of Winnacunnet Road		Х			Х		Х	NA
6197025 Hampton	Address impacts of sea-level rise and storm surge induced flooding on NH 101, Highland Avenue, Church Street, and Brown Avenue.		Х			Х		Х	NA
6197026 Hampton	Address impacts of sea-level rise and storm surge induced flooding on Ashworth Avenue and side streets		Х			Х		Х	NA
6197017 Hampton	Capacity and traffic flow improvements on Ocean Boulevard from Church Street to Great Boars Head Avenue	Х	Х	! ! !	Х	1 	Х	Х	\$8,456,215
6197018 Hampton	Capacity and traffic flow improvements on Ocean Boulevard from Great Boars Head Avenue to Dumas Avenue	Х	Х		Х		Х	Х	\$4,373,066
6197019 Hampton	Capacity and traffic flow improvements on Ocean Boulevard from Dumas Avenue to the Winnacunnet Road Intersection	Х	Х		Х	i ! ! !	Х	Х	\$10,387,858
6197020 Hampton	Capacity and traffic flow improvements on Ocean Boulevard from Winnacunnet Road to High Street	Х	Х		Х		Х	Х	\$15,294,974
6197001 Hampton	Phase I: Reconstruction of Ocean Boulevard from Haverhill Avenue in the south to Ashworth Avenue in the north. Includes new sidewalks, curbing, crosswalks and drainage.	Х	Х		Х		Х	Х	\$10,324,365

PROJECT NUMBER	LOCATION	PROJECT SCOPE	HSIP & PTASP	Bridge & Road Condition	Transit Asset Management	Travel Time Reliability	RESILIENCE	ACCESSIBILITY	LIVABILITY	ESTIMATED COST (NA = Not Available)
6197012	Hampton	Reconstruct Winnacunnet Road as a "Complete Street" including accessible sidewalks, travel way and shoulder delineation, new signage, markings and crossings. Construction new sidwalk between Tobey Road and Five Corners.	Х	Х				Х	Х	\$1,181,661
6197021	Hampton	Address Red List bridge (163/184) carrying US 1 over PAR (Abd) in the Town of Hampton		Х	i ! ! !			i ! ! !		\$7,121,031
6197005	Hampton	NH 101/ US 1 interchange reconfiguration as per the outcome of the feasibility study	Х			Х				\$7,408,518
	Hampton Falls	Route 1 - Provide full shoulder and access management improvements from Lincoln Avenue to Hampton town line. From US 1 Corridor Study.		Х				Х		\$3,051,112
6199001	Hampton Falls	Traffic flow and management improvements between NH 84 and NH 88 in Hampton Falls, including streetscape improvements.	Х			Х		Х		NA
	Hampton Falls	Improve Route 1 from Seabrook Town line to Kensington Road (NH 84). Includes provision of full shoulder, access management improvements. From US 1 Corridor Study.	х	х				Х		\$2,847,116
	Hampton- Hampton Falls	Address impacts of sea-level rise and storm surge induced flooding on US 1 through the Hampton-Seabrook Estuary		Х			Х			NA
	Hampton- Hampton Falls	Construct rail trail on 2.3 miles of the abandoned Hampton Branch rail corridor, elevatiing the causeway through the marsh 2'-3' for resiliency purposes and span washouts with sections of boardwalk.	Х					Х	Х	\$3,799,072
	Hampton- Portsmouth	Purchase ROW for Hampton Branch Rail Line from end of current state owned portion in Hampton to the end of the line in Portsmouth. [Some potential overlap with Portsmouth Proposal in terms of construction costs (RPCID 6379019)]	Х					х	х	\$14,198,304
6239001	Kensington	Realign and upgrade the intersection of NH 150 and NH 107 in Kensington. Possible location for a roundabout. Source: NH 107/150 Intersection Study	Х							\$2,469,461
6323001	New Castle	Feasibility study to understand the impacts of sea level rise and storm surge on the NH 1B Causeway between New Castle and Portsmouth and estimate the improvements needed to mitigate these impacts as well as determine costs.	Х	Х			х		Х	\$7,830,427
6323003	New Castle	Mitigate sea-level rise induced flooding on NH 1B adjacent to Neals Pit Lane and address water flow in culverts under NH 1B and Neals Pit Lane	Х	Х			Х	i	Х	\$1,150,000
6323002	New Castle	Construct Bicycle Shoulders and SW along Wentworth Road, NH 1B from Beach Hill Rd. to Neals Pit Ln.	Х					Х		\$464,811
	New Castle- Rye	Bridge replace, Single Leaf Bascule Bridge, NH 1B over Little Harbor (Red List) Br No 066/071	Х					Х		\$13,570,283

PROJECT NUMBER	LOCATION	PROJECT SCOPE	HSIP & PTASP	Bridge & Road	Condition Transit Asset	Management	Travel Time Reliability	RESILIENCE	ACCESSIBILITY	LIVABILITY	ESTIMATED COST (NA = Not Available)
	New Castle- Rye	Shoulders on NH 1A in Rye from Seavey Creek Bridge to the south end of Odiorne Point State Park and on NH 1B from NH1A to the Bridge. Sidewalks on NH1B From Wild Rose Lane to Beach Hill Road, and shoulders Wild Rose Lane to USCG Station.	х						Х	Х	\$2,926,922
6327005	Newfields	The project scope is a detailed intersection study. Cost is estimated at between \$5,000 and \$15,000.	Х				Х				NA
6327002	Newfields	Widen shoulders and install sidewalks	Χ						Х	Х	\$496,540
6327003	Newfields	Rebuild roadway and sidewalks to include bike lanes and landscape features	Χ						Х	Х	\$2,916,398
6327004	Newfields	Add shoulders to NH 108 within town of Newfields	Χ	-					Х	ļ	\$577,669
	Newfields- Newmarket	Bridge replacment of bridges carrying NH 108 over BMRR lines BR NO 127/081 & 125/054		Х	 						\$6,736,917
6331001	Newington	Install a signal at the intersection of Arboretum Drive, New Hampshire Avenue, and Pease Blvd. Additional turning lanes may be required to maintain adequate operations.					Х				\$3,596,272
6331003	Newington	Install shoulders along Nimble Hill Road from Shattuck Way to Arboretum Drive.	Х		j				Х	Х	NA
6331002	Newington	Construct a Northbound right-turn-lane on New Hampshire Avenue at the intersection with Arboretum Drive.					Χ				\$690,166
	Newington- Dover	Remove the superstructure General Sullivan Br & provide the most cost effective bike/ped connection	Х						Х	Х	\$33,504,000
6341001	Newton	Pond Road Over B&M RR - Structurally Deficient 064/107		Х							\$1,565,480
6341002	Newton	The project will replace the two-way stop controlled intersection of NH 108 with Amesbury Road and Maple Avenue with a roundabout. The Pond Street intersection with NH 108 will be realighned to create a perpendicular approach	Х								\$1,851,960
6345001	North Hampton	Widen US 1 from Hampton town line to Atlantic Avenue (NH 111) to five lanes. Add fourth leg to Home Depot intersection and discontinue Fern road. From US 1 Corridor Study.		Х			Х		Х		\$22,079,875
6345003	North Hampton	Provide full shoulder to three lane section from Glendale Road to Hobbs road. From US 1 Corridor Study.	Х	Х	 						\$1,589,819
6345004	North Hampton	Connect Hobbs Road with Elm Road and discontinue north end of Elm Road. Provide traffic signal connection from mid-point of Elm road to US 1. From US 1 Corridor Study.	х	Х			Х				\$8,193,573
6345005	North Hampton	Provide full shoulder for 3 lane section from Elm Road to south of North Road. From US 1 Corridor Study.	Х	Х							\$1,138,846
6345008	North Hampton	Provide full shoulders for three lane section of US 1 between North Road and new traffic signal in the vicinity of Lafayette Terrace. From US 1 Corridor Study.	Х	Х							\$1,589,819

PROJECT NUMBER	LOCATION	PROJECT SCOPE	HSIP & PTASP	Bridge & Road Condition	Transit Asset	Travel Time Reliability	RESILIENCE	ACCESSIBILITY	LIVABILITY	ESTIMATED COST (NA = Not Available)
6345009	North Hampton	Improve shoulders from North Road to the Rye town line. New signal and widen to five lanes in the vicinity of Lafayette Terrace. US 1 Corridor Study.	Х	Х						\$6,132,428
6345010	:	Reconfigure the intersection of NH 111 and NH 151 in North Hampton to a more standard layout. Estimate assumes roundabout at the southerly 111/151 intersection.	Х	х				Х		NA
6345011	North Hampton	Capacity improvements at Intersection of US 1 and Atlantic Avenue (NH 111) including safety improvements for bicycle and pedestrian access	Х					Х		\$1,195,769
63450012		I-95 Exit 2 bridge 078/070 Rehab to include deck replacement and bridge painting				Х				\$5,565,000
6001008		Shoulder improvements (safety and bicycle improvement) on NH 151 from NH 111 to NH 33 .	Х					Х		\$4,560,321
6001027		Adress sea-level rise induced flooding on NH 1A in North Hampton and Hampton in the vicinity of North Hampton State Beach		х			Х			NA
6375002		Extension of MBTA Commuter Rail Service from Haverhill, MA to Plaistow. Construct platform & enclosed waiting area.	Х		Х	Х		Х	Х	\$3,385,276
6375004	Plaistow	Intersection improvements at North Avenue And NH 121A In Plaistow	Χ			Х	į	Χ		\$3,949,562
6375008	Plaistow	Phase II Main Street Traffic Calming improvements. Expand on work completed in Project 40641 including southern portion of Main Street corridor.	Х					Х	Х	NA
6375009	Plaistow	Main Street Traffic Calming and bicycle and pedestrian improvements from the railroad tracks north to the crossing of Little River. Includes sidewalk on Jesse George Road and Old Road. Also on Westville Road connecting NH 125 to Main St.	Х					Х	Х	NA
6375003	Plaistow	From Regional ITS Architecture: Signal coordination and control along congested corridor. Includes remote control of signals, network surveillance and monitoring, and emergency routing capabilities				Х				\$1,259,485
6375001	Plaistow	Main Street Traffic Calming/safety Improvements	Х		İ			Χ	Χ	\$1,430,045
i	Plaistow- Kingston	Reconstruct from 1/4 mile south of Plaistow/Kingston T/L northerly approx 1.8 miles including extension of Kingston Road (PE & ROW funding included under Plaistow-Kingston 10044B)(Parent = Kingston 10044B)	Х	х		Х				\$17,135,320
6379001	Portsmouth	Installation of a traffic signal and construction of left turn lanes on the approaches to New Hampshire Avenue, Corporate Drive and International Drive.				Х				\$2,377,945
6379003	Portsmouth	Installation of a traffic signal at the intersection of Corporate Drive and Grafton Drive on the Pease International Tradeport in Portsmouth.				Х				\$3,208,524
6379005	Portsmouth	Replace Maplewood Avenue culvert over North Mill Pond. Structure will consist of three concrete arches with existing stone reused to construct seawalls.		Х			Х	Χ		\$18,124,838

PROJECT NUMBER LOCATION	PROJECT SCOPE	HSIP & PTASP	Bridge & Road Condition	Transit Asset	Travel Time Reliability	RESILIENCE	ACCESSIBILITY	LIVABILITY	ESTIMATED COST (NA = Not Available)
6379012 Portsmouth	Upgrade / replace aging bridge.		Χ	İ		İ	Χ		\$2,913,524
6379013 Portsmouth	Bridge upgrade / replacement over Hodgson Brook	•	Х	İ			Х	•	\$612,898
6379015 Portsmouth	Replace bridge in collaboration with local development plans		Х	ļ		ļ	Х		\$2,962,128
6379018 Portsmouth	Replace Pierce Island Bridge over Little Harbor		Х				Х		\$6,113,918
6379006 Portsmouth	Reconstruct the US 1 Bypass to current standards between the split from Lafayette Road to just south of the traffic circle.	Х	Х		Х				\$24,594,835
6379009 Portsmouth	Create new road along North Mill Pond between Bartlett Street and Maplewood Ave	Х		 			Х		\$3,875,000
6379019 Portsmouth	Improvements to the Portsmouth segment of the NH Seacoast Greenway (East Coast Greenway).	Х		! ! ! !	! ! !	 	Х	Х	\$2,125,000
6379020 Portsmouth	Reconstruct the Northern segment of the US 1 Bypass between the traffic circle and the Sarah Long Bridge to current standards	Х	Х		Х				\$18,025,861
6379021 Portsmouth	Functional and operational Improvements to the US 1 Bypass traffic circle. Assumes at grade circle/roundabout or intersection	Х	Х	i ! ! !	Х		i ! !		\$8,678,843
6379032 Portsmouth	Interim improvement to construct NB Left Turn lane on Grafton Drive. Long-term solution includes separated Left and Right Turn lanes on Aviation Ave.		Х		Х		i ! !		\$2,020,599
6379029 Portsmouth	This project will include a new road bed, underdrains and surface drainage, sidewalk reconstruction as well as water, sewer, and gas lines work.	Х	Х				Х		\$517,595
6379035 Portsmouth	Install a signal and widen Grafton Drive, Country Club Road and the access to the Portsmouth Transportation Center to add right and left turning lanes.		Х		Х		! ! !		\$1,600,000
6379031 Portsmouth	Reconstruct Junkins Avenue including road bed, drainage, sidewalk, and bicycle lanes.	Х	Х			i i i i	Х		\$1,657,999
6379033 Portsmouth	Construct a roundabout at the intersection of New Hampshire Avenue/ Exeter Street/ Manchester Square on the Pease International Tradeport in Portsmouth	Х	Х		Х		Х		\$1,000,000
6379038 Portsmouth	Mitigate potential for flooding due to sea-level rise and storm surge on State Street/Daniel Street in Portsmouth		Х			Х		Х	NA
6379039 Portsmouth	Mitigate potential for flooding due to sea-level rise and storm surge on Marcy Street in Portsmouth adjacent to Prescott Park and vicinity		Х			Х	 	Х	NA
6379040 Portsmouth	Address sea-level rise induced flooding on Parrott Avenue and Junkins Avenue adjacent to South Mill Pond.		Х			Х		Х	NA
6379041 Portsmouth	Address the impacts of sea-level rise and storm surge induced flooding on US 1 where it crosses Sagamore Creek in Portsmouth		Х			Х			NA
6379036 Portsmouth	Install crosswalks along McKinley Road and Harding Road including 1 raised, speed radar signs, intersection improvements, curb extensions, and sidewalks along one side of McKinley Road, Harding Road, Van Buren, and Adams.	Х					Х	Х	\$1,300,000

PROJECT NUMBER LOCA	ATION	PROJECT SCOPE	HSIP & PTASP	Bridge & Road Condition	Transit Asset Management	Travel Time Reliability	RESILIENCE	ACCESSIBILITY	LIVABILITY	ESTIMATED COST (NA = Not Available)
6379037 Ports		Reconfigure the intersection of South Street and Middle Road, construct curbing and sidewalk along Middle Road and South Street, and installation of a pedestrian crosswalk.	х	Х				Х	Х	\$517,877
6379002 Ports	smouth	Widen Grafton Drive for center turn lane at the intersection with Country Club Rd and the Portsmouth Transportation Center				Х				\$645,240
6379010 Ports	smouth	Soundwall along I-95 in Portsmouth between Southbound MM 13.3-13.5 and Southbound MM 14.8-15.3							Х	\$10,500,000
6379011 Ports		Widen US Route 1 from Constitution Ave to Wilson Rd. and from Ocean Road to White Cedar Blvd to five lanes.	Х	Х		Х		Х		\$16,833,557
6379016 Ports		Upgrade the railroad crossing on Market Street near the intersection with Russell St. This hazard elimination project, includes upgrades of the rail, the roadway approaches, drainage improvements, and installation of protective devices at the crossing.	х					Х		\$724,270
6379027 Ports		Intersection improvements are required to improve traffic flow and safety. A roundabout is currently being considered for this location.	Х	Х				Х		\$1,394,639
6379042 Ports		Add a multi-use path for Bike/Ped along Elwyn Rd extending from Rt1 to Harding Rd.	Х					Х	Х	\$1,260,480
6379043 Ports		Const. new sidewalk and striped bicycle shoulders and associated drainage along Peverly Hill Road	Х					Х	Х	\$2,400,236
6379034 Ports		Install traffic signal at the intersection of International Drive with Manchester Square and Corporate Drive on the Pease International Tradeport in Portsmouth		Х		Х				\$387,555
6001030 Ports NH-k ME	smouth, Kittery,	ITS Improvements to I-95 from Portsmouth, NH to York, ME				Х				\$10,503,160
6001026 Ports		Mitigate flooding on NH 1B in Portsmouth and New Castle due to the impacts of sea-level rise		Х			Х		Х	NA
6383001 Rayn		Modify the intersection to result in a 90 degree intersection of Blueberry Hill Rd into NH Rt 102 and to lower the crest of the hill 370' south of Blueberry Hill Rd, and to then reconstruct and and repair the resulting damage.	Х							\$851,962
6383002 Rayn	mond	Address skewed angle intersection of Dudley Road with NH 27 through realignment	Х							NA
6383005 Rayn		Install new culvert with enough strength and clearance to allow continued recreational use of this important source of outdoor recreation.		Х						NA
6383006 Rayn		To replace the deteriorated culvert and road with an engineered, properly sized fixture, designed for both resilience and the protection of any endangered or other species that need to be able to traverse Fordway Brook as a natural habitat.		Х			Х			NA

PROJECT NUMBER LOCATION	PROJECT SCOPE	HSIP & PTASP	Bridge & Road	Condition Transit Asset	Management	Travel Time Reliability	RESILIENCE	ACCESSIBILITY	LIVABILITY	ESTIMATED COST (NA = Not Available)
6383007 Raymond	Engineering, replacement and road repair due to said work must occur.	i	Х	į			į	į	į	NA
6383003 Raymond	Redesign and construction of new intersection, in either a rotary format or a redesigned intersection which creates greater sight distance and and right angles to the intersection at Route 156.	Х								\$443,132
6383004 Raymond	Address safety and capacity issues at the intersection of NH 27 and NH 156	Х	į			Х	i !	į		\$2,334,462
6001014 Region	Route 125 and Interstate 495 Interchange Cross-Border ITS: Deployment of Advanced Traveller Information Services and Communications upgrades to coordinate traffic flow information across the MA-NH border.	Х				Х				\$1,146,585
6001015 Region	Bridge Security Surveillance and Interagency Video Exchange: Establish a video distribution system to allow authorized municipal and transit organizations to view bridge conditions in real-time.	Х				Х				\$3,516,194
6001016 Region	Park-and-Ride ITS Improvements: Deploy surveillance, parking sensors, and signage at Park-and-Ride facilities. From Regional ITS Architecture.	Х								\$1,547,890
6397001 Rye	Improve shoulders on US 1 from Breakfast Hill Road to Portsmouth city line	Х	Х					Х		\$2,847,116
6397005 Rye	Address sea-level rise induced flooding on NH 1B just west of Sanders Poynt	ļ	X				Х	}	Х	\$1,150,000
6397006 Rye	Address sea-level rise induced flooding on NH 1B just east of BG's Boathouse and Marina		Х				Х		Х	\$1,150,000
6397007 Rye	Address sea-level rise induced floodiing on NH 1A between Brackett Road and Odiorne Point State Park		Х				Х		Х	NA
6397008 Rye	Address sea-level rise induced flooding on NH 1A between Odiorne State Park and Davis Road		Х				Х		Х	NA
6397009 Rye	Address sea-level rise induced flooding on Marsh Road and Parsons Road in Rye	<u>.</u>	Х				Х			NA
6397010 Rye	Address sea-level rise induced flooding on NH 1A and Wallis Road in Rye		Х				Х			NA
6397011 Rye	Address sea-level rise induced flooding on NH 1A in the vicinity of Rye Harbor		Х				Х			NA
6397012 Rye	Address sea-level rise induced flooding on Brackett Road in Rye		Х				Х			NA
6397002 Rye	Widen to five lanes and improve the Washington Road/Breakfast Hill Road intersection with US 1. Reduce vertical rise to the south to improve sight distance.	Х	х							\$5,408,493
6397003 Rye	Improve Shoulders on US 1 from North Hampton Town line to Breakfast Hill Road. Realign Dow Road to 90 degree approach.	Х	Х					Х		\$1,516,235
6397004 Rye	Extend sidewalk, add shoulder bike lane, and install crosswalks along 1,900' of Washington Road in Rye.	Х						Х	Х	\$1,170,963
6397013 Rye	Replacement of 4 ft x 5.5 ft stone walled, concrete deck culvert just north of Locke Rd						Х			\$1,537,978

PROJECT NUMBER LOCATION	PROJECT SCOPE	HSIP & PTASP	Bridge & Road Condition	Transit Asset	Travel Time Reliability	RESILIENCE	ACCESSIBILITY	LIVABILITY	ESTIMATED COST (NA = Not Available)
6399014 Salem	Install signal at intersection of NH 111 and Ermer Road in Salem	Х	Х				į		\$995,000
6399015 Salem	Extend sidewalk along north side of Cluff Road 1,300' from the BJ's Driveway to the paved Breamoor Woods Path. Install crosswalk adjacent to BJ's Driveway.	Х			 		Х	i ! ! !	\$650,000
6399001 Salem	Reconstruct intersection of NH 28 (North Broadway) & NH 97 (Main St) aka "The Depot". Includes signals, left turn lanes and approaches.	Х	Х	 	Х		Х		\$12,550,311
6399016 Salem	Construct Rail Trail along NH 28 for approximately 1 mile	Х	į	i !			Х	Х	\$1,213,254
6399017 Salem	Improve signal operations at 28 intersections to idenfity hardware and software upgrades needed				Х				\$1,786,143
6405001 Sandown	Bridge Replacement on Phillips Road over Exeter River [093/109]		Х	! !				i	\$1,037,923
6409001 Seabrook	Reconfigure rotary on US 1 at the MA state line to a four way intersection as per the US 1 Corridor Study. Widen US 1 to 5 lanes	Х	Х		Х				\$5,947,391
6409002 Seabrook	Widen US 1 to 5 lanes between Walton Road and Gretchen Road From US 1 Corridor Study.	х	Х		х				\$4,366,056
6409020 Seabrook	A feasibility study is underway that will help to identify the necessary roadway improvements on NH 107 between I-95 and the intersection with NH 150 in Kensington. This may include roadway widening as well as intersection improvements				х				\$16,372,711
6409021 Seabrook	Address impacts of sea-level rise and storm surge induced flooding on South Main Street in Seabrook		Х			Х		Х	NA
6409022 Seabrook	Address impacts of sea-level rise and storm surge induced flooding on NH 286 in Seabrook.		Х			Х			NA
6409006 Seabrook	Bicycle shoulders and curbed sidewalk linking Seabrook Beach community with Hampton Beach [future TE].	Х					Х	Х	\$835,119
6409004 Seabrook	Capacity improvements on US 1 between New Zealand Road and the Hampton Falls Town Line.	Х	Х		х				\$4,097,774
6409007 Seabrook	Construct multiple use pathway on State owned portion of B&M railroad from Mass state line to Seabrook Station. East Coast Greenway.	Х					Х	Х	\$918,000
6001018 Seabrook- Hampton	Route 1A Evacuation ITS Improvements: Deployment of Route 1A contra-flow signage, VMS, surveillance, and communications upgrades. From Regional ITS Architecture	Х			Х				\$4,289,409
6001022 Seabrook- Hampton	Rehabilitate structurally deficient bridge (235/025) over the Hampton River between Hampton and Seabrook.	Х]]]]]	Х		Х		\$94,130,852
6417001 South Hampton	Bridge Replacement on Whitehall Road over Powwow River [099/062]		Х						\$763,837
6417002 South Hampton	Bridge Replacement on Hilldale Avenue over Powwow River [069/066]		Х						\$1,805,272

PROJECT NUMBER	LOCATION	PROJECT SCOPE	HSIP & PTASP	Bridge & Road Condition	Transit Asset Management	Travel Time Reliability	RESILIENCE	ACCESSIBILITY	LIVABILITY	ESTIMATED COST (NA = Not Available)
6431001	Stratham	Reconfigure the NH 108 / NH 33 Stratham Circle including adjacent intersections for traffic and pedestrian access and safety.	Х	Х				Х	Х	\$12,621,588
6431002	Stratham	Shoulder Bike Lanes On Squamscott Road From NH 108 To NH 33	Х	ļ				Х		\$1,898,285
6431004	Stratham	NH 108/ Frying Pan Lane/ River Rd Signalization And Realignment And Lane Improvements. Source: 2001-2003 TIP Proposal	Х	Х		Х				\$1,907,907
6431005	Stratham	Full signalization of the Route 33/Portsmouth Avenue and Winnicutt Road intersection.	Х	Х		Х	 			\$382,087
6431006	Stratham	Install a roundabout (estimating 100' diameter) within a combination of the NH-111 right-ofway and modified Marin Way right-of-way (realignment, throat widening, etc.).	Х	Х						\$1,296,060
6431007	Stratham	The project would construct sidewalks linking a series of individual segments that were installed as part of private development. Signals would be upgraded to support pedestrians and bicycle accommodations would be installed.	Х					х	х	\$3,135,232
6431008	Stratham	Address impacts of sea-level rise induced flooding on Squamscott Road over Jewell Hill Brook and adjacent to the Squamscott River floodplain		Х			Х			NA
6431003	Stratham	NH 108 / Bunker Hill Avenue: Signalization And Turn Lanes And Intersection Realignment. Source: 1999-2020 LRP	Х	Х						\$1,351,084
	Stratham- Greenland	Implement safety improvements along NH 33 Corridor	Х			Х				\$3,000,000
Total			104	95	7	61	30	69	54	\$1,015,987,216

		Total w/	
Type of Benefit	Total Projects	Estimates	Estimated Cost
Roadway and Transit Safety (HSIP & PTASP)	104	95	\$787,759,229
Road and Bridge Conditions (PM2)	95	67	\$415,788,007
Transit Asset Management (TAM)	7	7	\$264,706,855
Travel Time Reliability (PM3 - TTR)	61	58	\$681,850,533
Resilience	30	7	\$31,068,244
Accessibility	69	64	\$661,687,245
Livability	54	39	\$430,460,798
Total Projects	169	134	\$1.015.987.216