



RHODE ISLAND CONGESTION MANAGEMENT PROCESS ANNUAL REPORT: MAY 2022



Congestion Performance Monitoring Report

Introduction

A Congestion Management Process (CMP) is a systematic process for identifying congestion and its causes, developing monitoring processes to measure transportation system performance and reliability, and developing congestion management strategies and moving them into the funding and implementation stages.

All metropolitan areas with populations greater than 200,000 residents, known as Transportation Management Areas, are required by Federal regulations (23 U.S.C. 134(k)(3)) to develop a Congestion Management Process. The original Federal regulations on the Congestion Management Process date back to the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users. These regulations were retained and largely unchanged by subsequent Federal legislation, including the Moving Ahead for Progress in the 21st Century Act (MAP-21), the Fixing America's Surface Transportation (FAST) Act, and the Bipartisan Infrastructure Law (BIL), also known as the Infrastructure Investment and Jobs Act.

Designation of a Metropolitan Planning Organization (MPO) as a Transportation Management Area (TMA) invokes the requirement for the CMP as well. Although the CMP does not have an update cycle established by federal regulations, both the four-year certification review cycle and the four- or five-year Metropolitan Transportation Plan (MTP) update cycle for each TMA provide a baseline for a re-evaluation/update cycle in the absence of an identified requirement. The CMP must, at minimum, be updated often enough to provide relevant, recent information as an input to each MTP update. In order to establish a routine CMP review, many MPOs chose to link CMP updates to either the MTP or the Transportation Improvement Plan (TIP) development cycle. The CMP may also operate on an independent update schedule and provide input to both the MTP and the TIP. Completing this annual report helps to meet the requirements of both reviewing the CMP every year and providing updates on the data that is contained within it.

The Rhode Island Congestion Management Process/Plan (CMP) was reviewed by the State Planning Council in the Summer of 2020 and adopted as a component of Transportation 2040 – Rhode Island's Long-Range Transportation Plan (LRTP) in December 2020.

As a part of the CMP, the Congestion Management Task Force (CMTF) recommended that an annual report be generated to monitor the status of ongoing projects related to congestion and to update performance measures with data from the last year. This is the second annual report occurring as a result of the CMP, with the first being completed in June 2021.

The 2020 CMP collected travel time performance data from 2018 as a baseline. In this 2022 report, performance measure data is being collected from 2020. The reasoning for the delay in data collection is that some data cannot be confidently reported until very late in the following year. Rather than compile an incomplete data set, we have opted to report on the older data on a year to year basis until data collection methods have been improved. Trends, project status, and other elements of this report, however, will be up to date as of Spring 2022.

Congestion Management Process Review

Rhode Island's Congestion Management Process is composed of eight actions and associated questions that represent the critical elements of a successful CMP. Below, these actions are broken down as a way of assessing the functionality of the CMP.

- **Develop Objectives for Congestion Management**
 - The existing objectives of the CMP remain consistent with the goal areas of the LRTP and have been largely unchanged since the inception of the plan (contained within Table 2.1 of the CMP). These objectives remain key parts of the MPO planning process. This area is likely to remain consistent until the next update of the LRTP.
- **Define CMP Network**
 - The CMP Network, which includes the Freight Network, was originally defined in the constraints of the INRIX roadway dataset. This dataset is updated as roadways are improved across the State. The map within the CMP network may need minor revisions in the future as roadways are altered, however, for the purposes of this annual report, the up-to-date INRIX roadway dataset is used to ensure that roadway updates are accounted for when reporting on performance in Rhode Island.
- **Develop Multimodal Performance Measures**
 - The performance measures from the CMP (as reported on above) are still telling of the important metrics that are in place to measure congestion progress. The Congestion Management Task Force, as well as the performance measure group that meets to discuss the tracking and calculating of the metrics, have discussed changing some of the non-federally required measures to better represent the details of what the original plan wanted to capture. These discussions are ongoing, and it is likely that we will see changes or additions to some of these measures in future reporting.
- **Collect Data/Monitor System Performance**
 - Data collection has improved since the original plan was completed. The MPO has access to new traffic tools through INRIX and the University of Maryland's CATTLab/PDA Suite. The MPO is working with INRIX to develop a Congested Corridors Dashboard that will be able to track corridors on a more regular and granular basis. This will help keep the ongoing efforts at programming projects current.
 - System performance monitoring is done on an ongoing basis, as well as through this annual report. Again, with the addition of new data resources, monitoring will be easier and more frequent, which was a goal of the original plan.
- **Analyze Congestion Problems and Needs**
 - Working in conjunction with groups at RIDOT (Traffic Management Center (TMC), Planning, and Traffic Safety) the CMP has assisted in programming projects based on the original congested corridors layer and the ongoing bottleneck layers that were produced in the 2020 CMP and in subsequent annual reporting efforts. This is evident in the CMP project update tables, as well as in the updated CMP project pool that resulted from this annual report which lists projects from the FFY 2022-2031 STIP that were not programmed when the original document was approved.
- **Identify and Assess Strategies**
 - The priority strategy types in the CMP remain consistent with efforts being set out by both the MPO and RIDOT to improve congestion.
- **Program and Implement Strategies**

- Strategy implementation and programming has become more evident since the approval of the FFY 2022-2031 STIP. There are more efforts in place to improve congested corridors and bottleneck locations especially through the use of INRIX data. The MPO is also targeting a few new projects such as procuring bicycle/pedestrian count data, writing a complete streets plan, and utilizing data capabilities to retime signals and reduce car idling time to improve both congestion and greenhouse gas emissions.
- **Evaluate Strategy Effectiveness**
 - While the State has been effective at implementing the congestion process into the four key action divisions (Planning, Implementation, Data Collection and Monitoring, and Coordination) it is still working to implement the CMP more fully. For instance, the State's new E-STIP project intake tool will utilize congestion map data layers to prioritize the programming of projects. The recommendation from RIDOT to evaluate the effectiveness of the CMP by comparing bottleneck locations has begun as a result of these monitoring efforts. As more data becomes available, tracking of congested corridors and bottlenecks will become more granular and the results of the implementation of the CMP will be more prevalent. Although it has been challenging to compare the data on a year-to-year basis due to traffic fluctuations as a result of the COVID-19 pandemic, procedures are being discussed on how to integrate the strategies and review them with more quantitative methods.

Congestion Management Performance Measures

Congestion data was compiled in the original CMP for baseline year 2018. This year, we are reporting the data from calendar year 2020. This data composition is a joint effort from RIDOT, RIPTA, RIDSP, and our consulting team. Performance measure definitions, data sources, and calculation procedures can be found in Appendix A of the CMP. The color-coding **red** and **green** in the Congestion Management Performance Measure Tracking below indicates if a performance measure **improved** or **worsened** from year to year.

Five performance measures could not be computed for 2020 as of the completion of this report due to staff turnover in the data section at RIPTA. These measures will be calculated as soon as those positions are filled, and the report will be updated accordingly.

Congestion Management Performance Measure Tracking

Objective	Performance Measure	2018 (Baseline)	2019	2020
A. Improve Reliability of the Transportation System	A.1 Interstate Reliability	78.6%	80.6%	94.9%
	A.2 Non-Interstate Reliability	88.7%	88.4%	93.7%
	A.3 CMP Network Reliability	92.0%	92.3%	98.0%
	A.4 Reliability During Inclement Weather on CMP Network	91.9%	92.3%	98.2%
	A.5 Reliability Through Work Zones on CMP Network	91.1%	87.8%	97.3%
	A.6 RIPTA Bus Reliability (ratio of 80 th to 50 th percentile time)	1.16	1.21	TBD
	A.7 Average Incident Clearance Time (minutes)	29	30	28
	A.8 Average Incident Rate (incidents/million VMT)	1.75	1.59	2.48
B. Reduce Recurring Congestion	B.1 Peak-Hour Excessive Delay (PHED) (millions of hours)	14.71	15.45	7.12
	B.2 PHED on CMP Network on CMP Network (millions of hours)	9.34	10.91	5.81
	B.3 PHED During Inclement Weather on CMP Network (millions of hours)	3.72	4.93	1.97
	B.4 PHED Through Work Zones on CMP Network (millions of hours)	0.37	1.09	0.35
	B.5 Number of Bottlenecks	160	148	127
	B.6 Total Delay at Bottlenecks (millions of hours)	2,900	2,489	1,229
	B.7 Transit Vehicle Load Factor (% of passenger-hours at load factor >1)	2.9%	4.7%	TBD
	B.8 Passenger-Hours of Delay on RIPTA Buses	9,000	94,569	TBD
C. Improve Freight and Goods Movement	C.1 Truck Reliability on Interstates	1.79	1.79	1.40
	C.2 Truck Reliability on Freight Corridors	1.48	1.50	1.29
	C.3 Number of Freight Bottlenecks	27	30	15
	C.4 Truck Congestion Costs	\$82M	\$90M	\$29M
D. Increase Modal Choice and Competitiveness	D.1 Bike Path Mileage	75	77	105
	D.2 Bike Path Usage [Future Measure]	–	–	--
	D.3 HOV/Dedicated Bus-Lane Route Miles	0.8	0.8	TBD
	D.4 Percent of Non-SOV Travel	18.2%	20.4%	19.1%
	D.5 Commuter Rail Ridership (million trips)	1.21	1.28	0.47
	D.6 RIPTA Bus Ridership (million trips)	16.3	16.4	TBD
	D.7 Providence/Newport Ferry Ridership	42,778	46,405	15,412
E. Improve Intermodal Connectivity	E.1 Percent of Population with Transit Access	18.1%	18.1%	18.1%
	E.2 Percent of Jobs with Transit Access	21.8%	21.8%	21.8%
	E.3 Bike System Connectivity	0.3	0.3	0.21
F. Promote and Invest in Innovative Congestion Management Technologies	F.1 Number of Intersections with Advanced Traffic Control	*720/1182	*728/1190	**989/1108
	F.2 Number of Intersections with Remote Monitoring	*4/1182	*15/1190	**15/1108
	F.3 Number of Real-time Travel Time Signs Per Route Mile	0	0	0
	F.4 Number of RIPTA Bus Routes with Transit Priority Treatment	1	1	2
G. Promote Land Development and Infill Development/ Redevelopment in Transportation-Efficient Locations	G.1 Percent of Permits in Transit Propensity Areas [Future Measure]	–	–	–
	G.2 Transportation Funds Invested in Transit Propensity Areas	TBD	TBD	TBD
H. Reduce Emissions and Improve Air Quality	H.1 Total Vehicle-Miles of Travel Per Capita	7,577	7,159	5,274
	H.2 Emission Reductions by CMAQ Projects [Future Measure]	–	–	--
	H.3 Counties in Air Quality Attainment [Future Measure]	5 of 5		
	H.4 GHG Emissions (MMTCO _{2e}) [Future Measure]	–	–	--

* Intersection metrics include those under the jurisdiction of the State and City of Providence only. Total intersection number is estimate only.

** Intersection metrics include all signalized intersections (both State- and City-owned) open to public travel in Rhode Island EXCEPT those owned by the Cities of Cranston, East Providence, and Woonsocket. Total intersection number is estimate only.

TBD - RIPTA measures to be calculated later this year.

Baseline is under review

Bottlenecks Outside Top 30 from 2018 & 2019		
2019 Rank	2018 Rank	Head Location
1	2	I-95 N @ RI-1A/THURBERS AVE/EXIT 18
3	24	EDDY ST S @ I-95/THURBERS AVE
5	19	RI-4 N @ I-95
6	NR	I-295 S @ RI-14/PLAINFIELD PIKE/EXIT 4
7	NR	EDDY ST N @ I-95/THURBERS AVE
8	12	RI-146 N @ SAYLES HILL RD
11	NR	UNION AVE E @ RI-10/HUNTINGTON AVE
16	29	RI-146 S @ SAYLES HILL RD
17	NR	RI-2 N @ RI-3/COWESETT RD
21	15	RI-4 S @ W ALLENTON RD
22	30	I-295 N @ RI-37/EXIT 3
23	NR	RI-2 N @ RI-113/EAST AVE
26	NR	UNION AVE W @ TERRACE AVE
27	NR	RI-2 S @ RI-12/PARK AVE
29	25	RI-15 E @ RI-146/LOUISQUISSET PIKE
NR	4	I-195 W @ I-95
NR	6	I-95 N @ RI-7/RI-146/CHARLES ST/EXIT 23
NR	8	I-95 N @ RI-10/EXIT 16
NR	9	I-195 W @ BROADWAY/EXIT 6
31	10	US-1 S @ AIRPORT RD
NR	13	I-195 W @ US-44/4TH ST/TAUNTON AVE/EXIT 4
70	16	RI-2 S @ RI-117/CENTERVILLE RD
NR	21	US-6 W @ HARTFORD PIKE
33	22	RI-15 E @ RI-7/DOUGLAS AVE
NR	23	US-1 S @ RI-4
51	26	RI-2 N @ RI-115/TOLL GATE RD
32	27	US-44 W @ RI-5/SANDERSON RD/CEDAR SWAMP RD
56	28	US-44 W @ I-195

2020 Bottleneck Analysis

Bottlenecks are defined as having at least ¼ mile of average queue length and at least 45 minutes of average daily duration along the CMP Road Network.

In the following charts, bottleneck tracking was broken down into three sections which include:

- Bottlenecks Outside Top 30 from 2018 and 2019
 - This list details bottlenecks that were ranked in the top 30 in either 2018 or 2019 but were not within that rank in 2020.
- 2020 Bottleneck Comparison
 - This list shows the top 30 bottlenecks and where they ranked in both 2019 and 2018, along with the congestion metrics.
- 2020 Freight Bottlenecks
 - Freight bottlenecks are defined as meeting the criteria of a regular bottleneck but are contained within Rhode Island's Freight Network
 - This list shows all freight bottlenecks from 2020 and their corresponding bottleneck rank, along with the congestion metrics.

2020 Bottleneck Comparison

2020 Rank	2019 Rank	2018 Rank	Head Location	Average max length (1)	Average daily duration (2)	Base Impact (3)	Speed differential (4)	Congestion (5)	TOTAL DELAY (6)
1	NR	1	I-95 S @ RI-7/RI-146/CHARLES ST/EXIT 23	2.29	1 h 56 m	87,470	2,905,210	144,238	185,608,647
2	NR	3	I-95 N @ US-6/US-1/RI-10/EXIT 22	1.68	1 h 21 m	46,310	1,432,466	72,834	117,309,055
3	2	5	RI-146 S @ I-95	0.79	2 h 20 m	48,164	1,821,927	102,688	74,661,638
4	12	20	RI-15 E @ RI-126/SMITHFIELD AVE	1.33	2 h 42 m	78,266	887,380	96,210	43,436,130
5	4	7	US-6 E @ I-95	0.54	2 h 6 m	23,903	673,131	40,641	36,654,787
6	13	NR	CRANSTON ST S @ RI-10/HUNTINGTON AVE	0.36	10 h 10 m	58,622	570,560	75,694	33,759,790
7	18	NR	HARTFORD AVE E @ SERVICE RD 1	0.35	2 h 28 m	14,025	147,168	17,793	26,155,379
8	10	18	RI-15 W @ RI-7/DOUGLAS AVE	1.76	1 h 5 m	39,005	470,610	47,943	21,277,968
9	9	NR	US-1 FRONTAGE N @ I-95	0.39	1 h 4 m	8,015	109,363	10,906	21,150,190
10	28	NR	US-44 E @ RI-15/MINERAL SPRING AVE	0.68	2 h 23 m	38,612	654,307	60,225	19,601,258
11	14	17	US-1 N @ RI-117/CENTERVILLE RD/GREENWICH AVE	1.13	52 m	23,252	411,512	35,416	19,378,113
12	15	NR	US-44 W @ OAKLAND AVE	0.76	1 h 33 m	25,797	280,867	32,299	19,323,200
13	24	11	RI-103 E @ RI-114/MAIN ST	1.14	1 h 49 m	43,533	569,777	53,599	17,147,109
14	20	14	RI-114 N @ RI-103/CHILD ST/BAKER ST	0.61	3 h 25 m	44,974	617,100	57,454	16,525,040
15	NR	NR	US-6A E @ PETTEYS AVE/GLENBRIDGE AVE	0.42	1 h 20 m	12,119	148,085	14,937	15,255,683
16	25	NR	US-6A W @ RI-128/KILLINGLY ST	0.55	1 h 25 m	15,455	173,042	18,838	15,132,771
17	NR	NR	RI-138A N @ THAMES ST (NORTH)	0.41	3 h 11 m	27,883	268,687	36,931	13,571,091
18	NR	NR	US-1 N @ RI-78/WESTERLY BYP/AIRPORT RD	0.39	5 h 23 m	30,462	445,591	36,835	13,129,935
19	19	NR	US-6 W @ HOPKINS AVE	0.47	2 h 41 m	26,917	605,618	40,141	12,436,714
20	NR	NR	RI-12 W @ RI-2/RESERVOIR AVE	0.39	3 h 45 m	28,537	308,161	37,569	12,142,175
21	NR	NR	RI-138 W @ RI-114/MAIN RD	0.25	5 h 52 m	24,693	321,978	33,752	12,048,734
22	30	NR	RI-5 N @ US-6A/HARTFORD AVE	0.27	7 h 44 m	24,407	295,055	32,025	11,834,108
23	NR	NR	RI-2 S @ SOCKANOSSET CROSS RD	0.25	3 h 33 m	19,075	299,338	25,843	11,600,750
24	33	22	RI-15 E @ RI-7/DOUGLAS AVE	0.63	1 h 42 m	21,546	268,631	27,811	11,390,754
25	NR	NR	RI-114 S @ RI-103/CHILD ST/BAKER ST	0.89	1 h 26 m	25,710	321,217	31,720	11,195,281
26	NR	NR	RI-33 W @ RI-3/TIOGUE AVE	0.54	5 h 47 m	66,805	1,001,396	90,778	11,044,649
27	NR	NR	US-6A E @ US-6 (PROVIDENCE)	0.27	1 h 24 m	6,398	64,672	7,631	10,508,703
28	23	NR	RI-2 N @ RI-113/EAST AVE	0.27	3 h 14 m	11,021	140,847	14,369	9,691,461
29	NR	NR	RI-5 S @ US-6	0.36	3 h 3 m	20,231	271,675	26,098	9,537,073
30	NR	NR	RI-138 W @ CLAIBORNE PELL BRG (WEST)	1.96	54 m	37,174	773,904	43,090	9,506,309

(1) - Average of the maximum queues formed during each occurrence of the bottleneck.

(2) - Average of the duration of each occurrence of the bottleneck.

(3) - Base Impact is the sum of the queue lengths over the duration of the bottleneck

(4) - Speed differential is base impact weighted by the difference between free-flow speed and observed speed.

(5) - Congestion is base impact weighted by the measured speed as a percentage of free-flow speed.

(6) - Total Delay is Base impact weighted by the difference between free-flow travel time and observed travel time multiplied by the average daily volume (ADT).

2020 Freight Bottlenecks								
Freight BN Rank	BN Rank	Head Location	Average max length (1)	Average daily duration (2)	Base Impact (3)	Speed differential (4)	Congestion (5)	TOTAL DELAY (6)
1	1	I-95 S @ RI-7/RI-146/CHARLES ST/EXIT 23	2.29	1 h 56 m	87,470	2,905,210	144,238	185,608,647
2	2	I-95 N @ US-6/US-1/RI-10/EXIT 22	1.68	1 h 21 m	46,310	1,432,466	72,834	117,309,055
3	3	RI-146 S @ I-95	0.79	2 h 20 m	48,164	1,821,927	102,688	74,661,638
4	5	US-6 E @ I-95	0.54	2 h 6 m	23,903	673,131	40,641	36,654,787
5	9	US-1 FRONTAGE N @ I-95	0.39	1 h 4 m	8,015	109,363	10,906	21,150,190
6	19	US-6 W @ HOPKINS AVE	0.47	2 h 41 m	26,917	605,618	40,141	12,436,714
7	30	RI-138 W @ CLAIBORNE PELL BRG (WEST)	1.96	54 m	37,174	773,904	43,090	9,506,309
8	33	RI-138 E @ CLAIBORNE PELL BRG (EAST)	1.98	48 m	36,226	814,250	47,274	9,198,182
9	40	US-1 S @ AIRPORT RD	0.53	1 h 18 m	14,731	212,838	17,579	8,180,165
10	87	CRANSTON ST S @ RI-37	0.32	52 m	8,836	130,636	11,241	2,874,826
11	98	RI-401 W @ RI-2/QUAKER LN/S COUNTY TRL	0.45	51 m	7,691	107,522	8,932	2,137,471
12	101	US-6 W @ HARTFORD PIKE	0.38	2 h 18 m	13,991	348,989	18,427	1,869,168
13	107	RI-116 N @ US-6/HARTFORD	0.43	2 h 33 m	23,411	391,434	28,557	1,637,079
14	111	THURBERS AVE E @ I-95	0.27	52 m	4,497	33,853	5,284	1,398,851
15	120	RI-138 E @ I-95	0.3	1 h 50 m	10,868	165,032	13,426	993,888

(1) - Average of the maximum queues formed during each occurrence of the bottleneck.

(2) - Average of the duration of each occurrence of the bottleneck.

(3) - Base Impact is the sum of the queue lengths over the duration of the bottleneck

(4) - Speed differential is base impact weighted by the difference between free-flow speed and observed speed.

(5) - Congestion is base impact weighted by the measured speed as a percentage of free-flow speed.

(6) - Total Delay is Base impact weighted by the difference between free-flow travel time and observed travel time multiplied by the average daily volume (ADT).

Congestion Mitigation Project Inventory Update

In the CMP, an inventory of over 130 projects was compiled to understand which projects from the State Transportation Improvement Program (STIP) and other plans were going to contribute to congestion mitigation. In this section, we provide any updates to the status of those projects that have been made since last year in 2021.

A new STIP for Federal Fiscal Years 2022 – 2031 was approved in September 2021, after the last CMP annual report. With the approval of this new STIP, 48 new projects have been added to the CMP inventory that may impact congestion. In addition, some projects have been completed and therefore removed from the prior list. The new project list below contains nearly 180 projects that address congestion from the FFY 2018-2027 STIP, FFY 2022-2031 STIP, LRTP, BMP, and TMP. In addition, the MPO has sought input from RIDOT and RIPTA to provide updates to the status of these projects to better track progress on the plans most relevant to congestion in Rhode Island. This updated list is provided in the following pages.

2022-2031 STIP

Project Name	STIP ID	Location	Year Funded	Amount (\$M)	Description	Intervention Type	Addresses Top Bottlenecks/ Corridors?	2021 Status Update	2022 Status Update
US-6 (RI-10 to I-95)	1281	Providence	2026	3.00	This line item involves resurfacing of the roadway.	Pavement - Resurfacing	BN 5	N/A	No update
RI-103, Willett Ave. (Bullocks Point Ave. to Wampanoag Trail)	1298	Barrington/East Providence	2022	10.05	This line item involves resurfacing of the roadway, limited sidewalk replacement, handicapped ramp installation, and addition of sidewalks between County Road and Willet Avenue. This project may include improvements to traffic and pedestrian safety and stormwater drainage.	Pavement - Resurfacing		N/A	This project is currently being scoped and designed.
Reservoir Rd. (US-44 to South Main St.)	1304	Burrillville/Glocester	2022	1.95	This line item involves resurfacing of the roadway. This project may include active transportation improvements, such as a dashed advisory bike lane, alongside additional improvements to traffic safety and stormwater.	Pavement - Resurfacing		N/A	This project is currently being scoped and designed.
Pell Bridge Ramps, Phase 1	1364	Middletown/Newport	2022	3.50	This project, previously named JT Connell Hwy (Admiral Kalbfus to Rt 114), involves full reconstruction of JT Connell and Coddington Highway, improvements to traffic safety, and construction of a shared use path. This line item represents Phase 1 of the Pell Bridge Ramps project.	Pavement - TAP	BN 21	N/A	This project achieved substantial completion August 31st, 2021.
US-6A (Hartford Ave, C-3)	1429	Johnston/Providence	2023	9.10	This line item involves reconstructing the roadway, replacement of sidewalks, handicapped ramp installation, and drainage improvements.	Pavement - Sidewalks	BN 22/16	N/A	This project will begin scoping in Fiscal Year 2023. RIDOT's Planning Division recently evaluated conditions in the area with field reviews.
Ferry Boat Capital Funding	2067	Statewide	2067	5.00	This line item provides capital funding for ferry operators to support eligible projects on terminal facilities or ferry boats. Eligibility is subject to federal criteria and processes.	Transit Operations		N/A	This project remains in the STIP and is funded annually.
Henderson Bridge Improvements, Phase 2	3062	Statewide	2023	40.00	This line item provides funding to support design of Phase 2 improvements to the Henderson Bridge and surrounding roadways. Improvements on the Providence side will include traffic calming measures, transit improvements, and the completion of shared-use path tie-ins. An overlook on the southern side of the bridge will also be designed. On the East Providence side, design will focus on shared use path connections to the work started during Phase 1 and the completion of a Henderson Parkway from Massasoit Ave to beyond Broadway.	Active Transportation - Design and Construction/Shared Use Path Connections		N/A	This project was moved out of Study and Development in Minor Amendment 2 to become a full capital project as a second phase for improvements to the Henderson Bridge. Scoping will commence in 2023, but RIDOT is actively working with local stakeholders to prepare for this effort.
Bridge Group 57TB - Washington Bridge North	3082	East Providence	2022	63.00	Phase II work on Washington Bridge Westbound, this project includes repairs to bridge #070001 as well as restriping the approach to the bridge along I-195 Westbound. A new ramp connecting I-195 to Waterfront Drive in East Providence will also be constructed, and I-195 West will be resurfaced from Broadway in East Providence to the Providence River Bridge in Providence. This project is partially supported by a \$25M grant from the BUILD program.	Bridge		N/A	This project is in Active Construction as of September 1st, 2021.
6/10 Project	3122	Providence	2022	140.00	This project includes reconstructing the entire interchange of US-6 and RI-10 within the existing highway right of way, while replacing or removing the seven structurally deficient bridges within the project area. The project also includes new shared use paths extending from Union Avenue to Tobey Street to enhance connectivity between neighborhoods and link the Woonasquatucket River Bikeway and Washington Secondary Bike Path.	Bridge and Active Transportation/Bicycle and Pedestrian		N/A	This project is in active construction as of December 21st, 2017. Completion is expected in November 2023.
Bridge Group 51A - RI 37 C-2	3132	Cranston/Warwick	2022	35.35	Bridge #062601, 062701, 062801, 062901, and 063501: Total bridge replacement. Safety Improvements to Pontiac Avenue, Sockanosset Cross Road, and the Route 37 on- and off-ramps, including the introduction of dual left-turn lanes northbound onto Sockanosset Cross Road, widening of the Route 37 West off-ramp onto Pontiac Avenue (Bridge #126401), and signal improvements to improve traffic flow. All other structures will be addressed with preservation activities to extend the useful service life of the structures.	Bridge Replacement		N/A	This project is in active construction as of January 27th, 2020. Completion is expected May 2023.

2022-2031 STIP

Project Name	STIP ID	Location	Year Funded	Amount (\$M)	Description	Intervention Type	Addresses Top Bottlenecks/ Corridors?	2021 Status Update	2022 Status Update
Bridge Group 75T 5B (I)--Providence Viaduct Northbound	3153	Providence	2022	215.50	This project will replace the 1,295-foot long northbound section of the Providence Viaduct Bridge which carries I-95 over numerous local roads and highway ramps, Amtrak's Northeast Corridor and the Woonasquatucket River. Construction of a new collector-distributor (C-D) road along the right side of the Interstate will eliminate the weaving conflicts and congestion that plague the segment of I-95 Northbound from the 6/10 Connector and Downtown on-ramps to the Route 146/State Offices interchange. Ramps will also be reconfigured to disentangle conflicting movements, improving motorist safety.	Bridge	BN 1/2/9	N/A	This project is in active construction as of July 27th, 2020. Completion is expected September 2025.
Bridge Group 13D - Rt 146 C-3	3179	Lincoln/North Providence/Providence	2022	57.10	This project includes total replacement of the Wanskuck (#042801) and Admiral Street (#043001) bridges. Major rehab of the Cobble Hill Road Bridge (#041801) was previously included in Bridge Group 47C. At the merge of RI-146S and I-95S, a new collector-distributor road will be constructed linking traffic from RI-146S and I-95S directly to the US-6/RI-10 off-ramp, eliminating a conflicting weave that generates frequent congestion.	Bridge Replacement		N/A	Scoping for this project will commence in 2023.
Bridge Group 96 - Route 146 Reconstruction	3250	Lincoln/North Smithfield	2022	147.50	Bridges #074801, 074821, and 044001: Major rehabilitation, superstructure and/or total bridge replacement. Bridges #018801 and 098701: Preservation to extend the useful service life of the structure. New construction of Bridge #134201, a new structure to be known as the Sayles Hill Road Flyover. RI-146 from I-295 to the Massachusetts State Line: Resurfacing the roadway in both directions, signage, striping, safety, and drainage improvements throughout the corridor. RI-146 Southbound from RI-15 to I-95: Installation of bus-on-shoulder lane.	Bridge and Pavement		N/A	This project is in active construction as of March 24th, 2022. Completion is expected August 2026.
Bridge Group 51B - RI 37 C-3	3300	Cranston/Johnston	2022	78.10	Replacement of bridges #072801, 072821, 062101, and 062201. Bridge #083101 will be replaced with the new structure being wider to support an additional lane, alongside installation of a high-friction surface treatment (HSFT). Bridge #062001: Preservation and realignment as a new fly-over bridge to allow a righthand merge from RI-37 East to I-295. Installation of a new off-ramp to RI-37 West. I-295 North from RI-37 to US-6: Creation and extension of an auxiliary travel lane through the Cranston Canyon.	Bridge and Pavement		N/A	This project advertised August 11th, 2021. Substantial completion is expected November 2026.
Corridor - Saylesville	3346	Lincoln/Pawtucket	2025	14.00	This line item includes repairs to several bridges along the Moshassuck River, and pavement on RI-123 and RI-126. Bridge work includes major rehabilitation, superstructure and/or total bridge replacement.	Bridge and Pavement	BN 4	N/A	This project will begin scoping in Fiscal Year 2026. RIDOT is actively addressing sections of this project with numerous potholes as part of a 2022 immediate repairs contract.
Bridge Group 95 - I-95 / Rt 4 Missing Move	3350	Warwick	2022	103.85	This line item will support design and development of a potential future project to address the missing moves between RI-4 and I-95 and construct three deferred ramps linking US-1 and West Davisville Rd to RI-403. The funding for this line item includes a BUILD grant awarded in 2020 to plan the project, and funding to support construction if the project receives INFRA Grant support. RIDOT and QDC requested \$60M from the INFRA program in 2021.	Bridge		N/A	RIDOT is in the process of scoping this project in preparation for submission for an INFRA grant for 2022.
Corridor - RI-104 Waterman/Farnum	3394	North Providence/Smithfield	2027	8.15	This line item involves the major rehabilitation of the Esmond-Georgiaville Bridge (#159). The project also includes resurfacing and sidewalk improvements (including sidewalk replacement) along RI-104 Farnum Pike and Waterman Avenue between US-44 and RI-116. This resurfacing work was previously included under TIPID 1394. Funding for this project may extend beyond 2031.	Bridge and Pavement	BN 10	N/A	This project will begin scoping in Fiscal Year 2027.

2022-2031 STIP

Project Name	STIP ID	Location	Year Funded	Amount (\$M)	Description	Intervention Type	Addresses Top Bottlenecks/Corridors?	2021 Status Update	2022 Status Update
Sandy Bottom Road Streetscape (Wood St. to Main St.)	5018	Coventry	2027	1.25	Install sidewalks and curbing on both sides of the road, install landscape areas and lighting for pedestrians and traffic, improved street conditions and new pavement, bike route/paths, park benches and other foot amenities	Active Transportation - Streetscape/Bicycle and Pedestrian	BN 26	N/A	This project will begin scoping in Fiscal Year 2027.
Washington Secondary Bike Path Extension	5215	Providence	2025	1.71	This project will study, design, and construct an approximately 1 mile on-and-off-road multi-use trail to connect Olneyville Square to the current terminus of the Washington Secondary Bike Path at Depot Avenue in Cranston.	Active Transportation - Bicycle and Pedestrian	BN 6	N/A	This project will begin scoping in Fiscal Year 2025.
Roundabout at Intersection of RI-138 and RI-112	5219	Richmond	2022	3.65	Install new roundabout to alleviate congestion and safety hazards at the intersection of RI-138 Kingstown Road and RI-112 Richmond Townhouse Rd.	Traffic Safety - Roundabout		N/A	This project will begin scoping in Fiscal Year 2022.
Quonset Ferry Terminal	5283	Statewide	2022	2.52	Construct a passenger ferry terminal at Rhode Island Fast Ferry's docks in the Quonset Business Park.	Transit Capital		N/A	In Project Management for subrecipient oversight
URI/CCRI Bus Hubs	5297	South Kingstown/Warwick	2022	10.05	Construction of bus hubs at CCRI's Knight campus and URI's Kingston campus.	Transit Capital		N/A	CCRI is in design, delays with URI
Travel Demand Management	7003	Statewide	2022	11.00	This program's funds are used towards distribution of timetables and transit marketing materials, as well as commuter outreach and education, travel training, promotion of transit incentive programs, and transit fare subsidies or similar efforts.	Transit Operations		N/A	Ongoing
Job Access and Reverse Commute (JARC)	7007	Statewide	2022	30.7575	This program offsets the costs of providing fixed route service associated with the Jobs Access Reverse Commute program. These routes support urban residents commuting to jobs in lower density areas.	Transit Service		N/A	Ongoing
ITS/Computers	7008	Statewide	2022	29.5002	This program funds the purchase of a variety of intelligent Transportation Systems (ITS) equipment, including both regular replacement of standard information systems as well as upgrades.	Transit Operations/ITS		N/A	Ongoing
Service Initiatives	7015	Statewide	2022	33.75	This program's funds are used to support continuing operations of the R-Line and to defray three years of the cost of new pilot service projects.	Transit Service		N/A	Ongoing
High Capacity Transit Development	7020	Statewide	2022	2.0625	These funds will be used to support planning efforts to develop high capacity transit as called for by the transit master plan.	Transit Operations		N/A	In scoping/procurement
AMTRAK Access Fee	7101	Statewide	2022	23.26	This line item provides funding to support the flat fee assessed to all rail operators utilizing the Amtrak-owned Northeast Corridor. This fee covers Amtrak's costs for providing access to the Northeast Corridor, including dispatching, police, station operating costs, and routine maintenance. RIDOT's fee covers the MBTA operations for the territory from Providence to Wickford Junction.	RIDOT Transit Program		N/A	Administrative line item.
Other Operating Expenses	7105	Statewide	2022	5.55	This line item provides funding to address miscellaneous expenses incurred by RIDOT as a result of passenger rail operations. Expenses may include any coordination efforts with MBTA, Amtrak or RIPTA, passenger surveys, or cross-honoring programs.	RIDOT Transit Program		N/A	Administrative line item.
MBTA Operations (Capital for Operations)	7107	Statewide	2022	20.20	This line item makes funding available for RIDOT to reimburse MBTA with capital funds that are used on infrastructure to support the MBTA's Providence line in exchange for passenger rail service.	RIDOT Transit Program		N/A	Administrative line item.
Summer Service	7109	Statewide	2022	9.70	This line item involves the start-up operations and further development of limited seasonal bus/rail/ferry services connecting major tourist attractions and recreational facilities along Narragansett Bay. It is anticipated that the initial service in FY16 will be limited to weekends during the summer season at select locations, and depending upon usage and demand, could be expanded with additional locations and operations in subsequent years.	Transit Service		N/A	Administrative line item.

2022-2031 STIP

Project Name	STIP ID	Location	Year Funded	Amount (\$M)	Description	Intervention Type	Addresses Top Bottlenecks/ Corridors?	2021 Status Update	2022 Status Update
Transit Master Plan Investments	7151	Statewide	2023	67.10	Rhode Island's Transit Master Plan is being implemented through various line items throughout this TIP, sometimes as stand-alone projects, and sometimes incorporated into broader projects. This line item funds the development of additional TMP projects with a focus on project development in the constrained years. The outer-years provide larger sums for implementation of fleet enhancements, transit corridor expansion, state match funds to support future federal discretionary grants, or other projects to be developed.	RIDOT Transit Program		N/A	This project had its funding increased in Amendment 2 to the FY22-31 STIP.
Transit Master Plan Carbon Reduction Investments	7152	Statewide	2022	5.90	This line item funds the development of additional Transit Master Plan (TMP) projects with a focus on project implementation in the constrained years using Carbon Reduction funding provided under the IJA. This project may be bundled with TIPIID 7151, Transit Master Plan Investments, at a later date.	RIDOT Transit Program		N/A	This project is new to the STIP as of Minor Amendment 2 and represents an increased funding commitment to implementing projects in the Transit Master Plan beyond what is contained in TIPIID 7151.
TMC Equipment Asset Management	7508	Statewide	2022	7.15	This line item supports the regular maintenance, repair, and replacement of equipment utilized by the Traffic Management Center (TMC). This funding may be used to replace the most obsolete TMC equipment on an asset management basis.	RIDOT Maintenance		N/A	The resources allocated to this line item were increased under Minor Amendment 2.
Maintenance Facilities and Related Expenses	7910	Statewide	2022	50.00	This line item provides RICAP funding to support expenses related to maintenance facilities and operations, including facility asset protection, salt brine and storage facilities, and annual maintenance and rental costs associated with park and ride facilities.	RIDOT Maintenance		N/A	Administrative line item.
Broad Street Regeneration Project	9007	Central Falls/Cumberland/Pawtucket	2022	5.60	Reconstruct full length of Broad Street through three communities to create complete street; include pavement, stormwater drainage, turning/parking lanes, sidewalks, streetscape amenities, shade trees. This project combines project IDs #1307 and 1317.	Pavement		N/A	This project received notice to proceed on December 2nd, 2019. Substantial completion is anticipated in June 2023.
Pell Bridge Ramps, Phase 2	9201	Newport	2022	33.00	This project, previously named "Reconstructing Pell Bridge Approaches, involves reconstructing and constructing roadways and ramps. This line item represents the second phase of the project and also includes sidewalk improvements, roundabout construction, and a shared-use path.	Pavement - Sidewalks	BN 21	N/A	Notice to proceed was provided for this project on June 1st, 2021. Substantial completion is anticipated in December 2024.
Corridor - RI-2 Bald Hill Road and Quaker Lane	9273	Warwick	2030	1.40	This line item involves resurfacing RI-2 Bald Hill Road/Quaker Lane from East Greenwich Avenue to I-295. Resurfacing may include limited sidewalk replacement and handicapped ramp installation. This resurfacing was previously included under TIPIID 5273. The Centerville Road Bridge (#042501) will receive additional steel and concrete repairs. Additional traffic and pedestrian safety improvements may be studied. This line item may require additional funding beyond 2031.	Bridge and Pavement	BN 28	N/A	This project will begin in 2030 and represents a continued investment in Route 2 Bald Hill Road, a critical commercial corridor, following the completion of the East Avenue project.
Intersection Safety Improvements 2019	9601	Johnston/Middletown/Portsmouth/Providence	2022	6.00	This line item include signing, striping, traffic signal phasing, turn lanes (through striping only), and other enhancements at signalized and unsignalized (including driveways) intersections statewide.	Traffic Safety	BN 19	N/A	NTP was provided for this project on December 29th, 2021. Completion is expected May 2023.
Bridge Group 97 -- East Ave Corridor	9998	Warwick	2022	67.00	This project includes major rehabilitation work of bridges #682 and replacement of bridge #720, which carry RI-113 over I-295 and I-95. This project will also resurface RI-113 and improve sidewalks and ADA ramps between RI-5 Greenwich Ave and RI-2 Bald Hill Rd. A shared-use path maybe added to connect the Washington Secondary Bike Path to the CCRI Knight Campus. Improvements to turn lanes and signals at the Knight Campus intersection will also be incorporated into this corridor.	Bridge Rehabilitation and Replacement	BN 28	N/A	This project is currently being scoped and evaluated, and may be part of a future grant application under the RAISE program.

2022-2031 STIP

Project Name	STIP ID	Location	Year Funded	Amount (\$M)	Description	Intervention Type	Addresses Top Bottlenecks/ Corridors?	2021 Status Update	2022 Status Update
Bridge Group 16D-Route 6 Corridor Improvements	9999	Johnston/Providence	2022	53.00	This project will complete bridge a pavement repairs along the limited-access portion of US-6 in Providence and Johnston. Bridges #060701, 060801, and 060901: Major rehab, superstructure and/or total bridge replacement. US-6 West and US-6 East from RI-128 to I-295: Resurfacing. US-6 West off-ramp to Hartford Ave: Geometry modifications and safety improvements. This project will require additional funding to complete, potentially through a discretionary grant.	Bridge and Pavement	BN 29	N/A	This project is currently being scoped. Elements of the westbound section of this roadway are being resurfaced as part of an immediate action contract to remediate potholes and safety concerns.
Statewide Congested Corridor Upgrades	12113	Statewide	2022	9.50	This project will upgrade signal controller and detection equipment to mitigate congestion and improve air quality through signal coordination.	Traffic Safety		N/A	This project is new to the STIP as of Minor Amendment 2.
ITS Additions to Capital Projects	12117	Statewide	2022	8.50	This line item provides funding to incorporate ITS assets into capital projects. Annual add ons may include any combination as-needed of: Camera sites for monitoring congestion and improving response times for highway incidents New/upgraded RVD sites for tracking congestion and movement of freight on NHS Workzone safety systems for real time safety and congestion management Standalone CMS signs Road Weather monitoring sites for winter operations.	RIDOT Maintenance/ITS		N/A	This project is new to the STIP under Amendment 2.
ATMS Development and Integration	12118	Statewide	2023	3.40	Develop software-based Advanced Traffic Management System (ATMS) to improve highway traffic management by integrating/streamlining all ITS Functions, improving collaboration incl. future Statewide CAD System and RI EMA Integration Activities and providing better notifications to the Public	RIDOT Maintenance/ATMS		N/A	This project is new to the STIP under Amendment 2.
Safety Service Patrols	12119	Statewide	2022	3.50	Dedicated service patrol program to cover I-95 and I-195 to quickly reach the scene of an incident and aid motorists, set up traffic control, and clear the road to reducing delay, emissions, fuel consumption and secondary incidents. Ramping up with additional vehicles /roads in future if benefits are realized. Deploy 2-vehicle fleet in Y1/Y2, 3-vehicle fleet in Y3/Y4, 4-vehicle fleet in Y5.	RIDOT Maintenance		N/A	This project is new to the STIP under Amendment 2.
Refurbishment and Expansion of CMS and Hybrid Travel Time Network	12120	Statewide	2022	5.50	Replacing 95 NB/SB Cowesett CMS in Y1, and remaining 5 overhead CMS in Y2/Y3 to provide useful traveler information and congestion mitigation. Deploying new arterial CMS to support arterial management and evac planning, phasing out HARs. Initial roll out of 10-15 hybrid travel time signs to provide multiple destination times, and alt route travel times to assist motorists in avoiding congestion.	RIDOT Maintenance/CMS		N/A	This project is new to the STIP under Amendment 2.
RIDOT Traffic Signal Systems Management Program	12121	Statewide	2022	2.50	Support for traffic-signal management related initiatives such as signal loop monitoring, diagnostics, repair/refurbish and integration.	RIDOT Maintenance		N/A	This project is new to the STIP under Amendment 2.
Smart Corridors Initiatives	12122	Statewide	2022	0.30	Complete configuration and implement statewide streetlight mesh data network features in Y1, manage highway smart lights and support innovative new technology deployments for Connected Vehicle Infrastructure and Smart Corridor development in subsequent years	RIDOT Maintenance		N/A	This project is new to the STIP under Amendment 2.

2018-2027 STIP

Project Name	STIP ID	Location	Year Funded	Amount (\$M)	Description	Intervention Type	Addresses Top Bottlenecks/Corridors?	2021 Status Update	2022 Status Update
Bridge Group 51A	6638; 6639; 6770	Coventry, Cranston, Warwick	2018	\$72.18	Safety Improvements to Pontiac Avenue, Sockanosset Cross Road, and the Route 37 on- and off-ramps, including the introduction of dual left-turn lanes northbound onto Sockanosset Cross Road, widening of the Route 37 West off-ramp onto Pontiac Avenue (TIP ID 6770, Bridge #126401), and signal improvements to improve traffic flow.	ITS and Operations	Other	No update.	Active construction, anticipated completion May 2023.
Transportation Management Center	7505	Statewide	2018	\$35.00	This program provides ITS throughout the State, including variable message boards and real-time monitoring of traffic. The TMC's broad-based information gathering and sharing capability enables the TMC to identify highway incidents and congestion with the primary goal of minimizing the environmental and economic impacts of planned and unplanned incidents and events and to improve roadway safety.	ITS and Operations	Other; statewide	Other	Other, recently had an increase in funding under Amendment 2 thanks to funds made available by the Bipartisan Infrastructure Law (BIL).
Two Mile Corner	1356	Middletown	2018	\$3.90	Reconstruction of Two Mile Corner (Routes 138/114) East Main Road (West Main Rd to Bailey Brook) and West Main Rd (Smythe St to Maplewood Rd), Middletown. Remove and replace pavement structure, widening to accommodate additional turn lanes, new drainage system, new traffic signal systems, and new sidewalk/ADA improvements.	New Capacity; ITS and Operations	Other	No update.	Completed.
Pell Bridge Ramps, Phase 1	1364	Middletown, Newport	2018	\$15.25	Full reconstruction of JT Connell & Coddington Highway, miscellaneous safety and traffic signal improvements in preparation for Phase 2, and the construction of a shared use path.	ITS and Operations; Bicycle and Pedestrian	Other	Construction	Achieved substantial completion August 31st, 2021.
Pedestrian and Bicycle Safety Improvements— Exchange Street	1461	Providence	2018	\$1.30	This project utilizes Federal Transit Administration grant funding and highway safety improvement program funding to provide connections for bicycle and pedestrian traffic along this heavily traveled corridor providing access to Providence Station, along Exchange Street in Providence between Fulton Street/Finance.	Bicycle and Pedestrian	Other	No update.	Project was completed as a component of RIPTA's Downtown Transit Connector project.
Arterial Traffic Signal Improvements—Allens Avenue	1510	Providence	2019	\$3.20	This line item includes transit signal priority improvements to Allens Avenue corridor.	Transit Operations	Other	No update.	Completed December 11th, 2018.
Arterial Traffic Signal Improvements to Route 1 and Route 3	1536	East Greenwich, West Warwick	2021	\$1.40	This line item includes establishing the coordination and communication between appropriate traffic signals on selected arterial corridors with the purpose of improving traffic operations and enabling improved traffic management.	ITS and Operations	Other	No update.	TBD
Arterial Traffic Signal Improvements— Warwick Ave	1537	Cranston, Warwick	2021	\$2.80	This line item includes improvements to corridor travel efficiency by coordinating the operation of adjacent signals.	ITS and Operations	Other	No update.	TBD

2018-2027 STIP

Project Name	STIP ID	Location	Year Funded	Amount (\$M)	Description	Intervention Type	Addresses Top Bottlenecks/Corridors?	2021 Status Update	2022 Status Update
Roundabout at Intersection of RT. 138 and RT. 112	5219	Richmond	2018	\$3.50	Install new roundabout to alleviate congestion and safety hazards at this intersection.	Roadway/Mobility (Non-ITS)	Other	Other	Other, recently had an increase in funding under Amendment 2 thanks to funds made available by the Bipartisan Infrastructure Law (BIL). Expected to commence construction before the end of FY22.
Pawtucket/Central Falls Transit Center	5011	Pawtucket	2019	\$50.91	Proposed MBTA commuter rail station adjacent to downtown Pawtucket, and potential TOD, providing convenient access to employment centers in Boston and Providence.	Transit Operations	Potential: commuter traffic along I-95 into Providence; potential RI-15 E @ RI-126/Smithfield Ave (R20)	Construction	Construction continues with a completion date expected in 2022.
Providence Intermodal Transit Center	5204	Providence	2018	\$29.75	Creation of an expanded state-of-the-art transportation center/bus hub serving rail and bus passengers at the existing Amtrak and MBTA station.	Transit Operations	Potential: traffic along I-95 near Providence	Other	Alternatives currently being evaluated. There have been changes to the scope and budget.
RIPTA Passenger Infrastructure Enhancement	5256	Statewide	2020	\$9.60	Establish new hubs at key destinations, including two new hubs in downtown Providence and at 6 locations throughout the State; implement a Passenger Experience Enhancement Plan, bringing bus stop amenities up to the levels established by RIPTA's board-adopted Service Standards; address bus shelters, seating, signage and other amenities in a coordinated statewide campaign.	Transit Operations	Potential: traffic along I-95 near Providence	No update.	Planning underway
Urban BikeRoute Markings and Amenities (Green Economy Bond)	5023	Statewide	2022	\$0.30	Pavement marking and signage for on-road bike routes in urban areas, projects to be determined (TBD).	Bicycle and Pedestrian	Other; statewide	No update.	Completed.
Providence Bicycle Infrastructure Enhancements	5199	Providence	2023	\$1.80	Design and construction of approx. 20 miles of on road bicycle lanes, shared lane markings, bicycle boxes, bicycle signal loops, bicycle racks and other related bicycle infrastructure. RIDOT/City are developing a Vulnerable User Safety Action Plan.	Bicycle and Pedestrian	Potential: traffic along I-95 near Providence	No update.	Funding obligated.
Main Street Improvements	5309	Woonsocket	2019	\$5.00	Repaving Sidewalks, elongated bump out for pedestrian crossings, lighting improvements, new crosswalks, ADA ramps, bike parking facilities, shared lane markings, signage, street trees, creation of roundabouts, and bike/ped connections to river.	Bicycle and Pedestrian	Other	Construction	Construction. Funding runs from FY22 to FY26 with gaps.
Passenger Initiatives	7016	Statewide	2018	\$5.00	This program's funds are used towards distribution of timetables and transit marketing materials at intermodal facilities, on the web, and other key points within the State's transportation network.	Demand Management	Other; statewide	No update.	Ongoing
Mobility Technology	7017	Statewide	2018	\$6.67	This program's funds are used to support programs that attract riders by bringing new amenities to transit stations.	Demand Management	Other; statewide	Other	Ongoing
Commuter Resources	7018	Statewide	2018	\$7.27	The program includes commuter outreach and education, travel training, promotion of transit incentive programs, and transit fare subsidies or similar efforts.	Demand Management	Other; statewide	No update.	Ongoing

2018-2027 STIP

Project Name	STIP ID	Location	Year Funded	Amount (\$M)	Description	Intervention Type	Addresses Top Bottlenecks/Corridors?	2021 Status Update	2022 Status Update
Passenger Facilities	7012	Statewide	2019	\$21.85	This program funds improvements to bus stops, hubs, and intermodal facilities.	Transit Operations	Other; statewide	Construction	Ongoing
Pawtucket Transit Center	7024	Pawtucket	2019	\$7.04	Development of bus facilities at the planned Pawtucket/Central Falls MBTA Commuter Rail station. Project also is associated with TIP ID 5011.	Transit Operations	Potential: traffic along I-95 near Providence	No update.	Construction continues with a completion date expected in 2022. Combined construction project with 5011.
Downtown Transit Connector	7020	Providence	2019	\$16.80	This project will provide scheduled, frequent bus service through Downtown Providence along a 1.4-mile corridor. Project also is associated with TIP ID 5184.	Transit Operations	Potential: commuter traffic along I-95 into Providence; potential RI-15 E @ RI-126/Smithfield Ave (R20)	Other	Completed and in operation in January 2020
T-Link	5074	Statewide	2018	\$6.13	This program will allow the redesign and expansion of the fixed route bus. Service to complement MBTA operated commuter rail.	Transit Operations	Other; statewide	No update.	Completed
Vanpool	7023	Statewide	2019	\$2.79	This program supports expansion of vanpooling in the State of Rhode Island.	Demand Management	Other; statewide	Other	Ongoing
Providence Viaduct, I-95 NB and SB at U.S. 6 Woonasquatucket River, Amtrak	6357	Providence	2018	\$245.91	The proposed project will transform the I-95 Northbound for motorists, as RIDOT currently is seeking to reconstruct the viaduct's six bridges, as well as rehabilitate five bridges, and construct three new bridge structures, along with the reconfiguration of a series of ramps to separate conflicting lanes of traffic. The construction of a new collector distributor road will also eliminate merging conflicts. The new configuration is expected to significantly improve traffic safety and also reduce backup from the Route 6/10 approach by up to 96 percent.	Roadway Capacity Expansion	I-95 N @ U.S. 6/RI-10/Exit 22 (R/F/3); U.S. 6 E @ I-95 (R/F/7)	No update.	Active construction. Anticipated completion in September 2025.

2040 Long Range Transportation Plan

Project Name	STIP ID	L RTP PoP#	Location	Description	Intervention Type	Addresses Top Bottlenecks/ Corridors?	Project Status/ Design Status	Notes	2021 Status Update	2022 Status Update
Route 4 and I-95 Interchange Connectivity	3350	40		Connect I-95N to Rt 4 S, Rt 4N to I-95S	Roadway	Other	Planning	TIP 4.16.18 edit—Unfunded, page 43	Design	Design, candidate for the next round of INFRA grants. Includes improvements to freight connectivity for Port of Quonset.
I-195 Interchange: Taunton and Warren Avenue		42		Connectivity to/from Interstate in East Providence	Roadway	I-195 W @ U.S. 44/4th St/Taunton Ave/Exit 4 (R/F/13)	Planning	TIP 4.16.18 edit—Unfunded, page 43	No update	No update
Route 146 at Sayles Hill Road	3250	16		Eliminate the traffic signal using grade separation. RIDOT requested \$90 million in INFRA 2020 application.	Roadway	RI-146 @ Sayles Hill Rd (R/F/12)	10% Design	TIP 4.16.18 edit—Unfunded, page 43	Design	Construction to commence in late 2022.
Route 403 Deferred Ramps	3350	17		Construct additional ramps to remove traffic from Devil's Foot Rd and Post Road	Roadway	Other	Planning	TIP 4.16.18 edit—Unfunded, page 43	Design	Included under TIPID 3350 for the Missing Move. Subject of potential grant awards, in design at this time.
Route 4 traffic light removal	NA	50		Grade separation to remove traffic signals from Route 4.	Roadway	Other	Planning	TIP 4.16.18 edit—Unfunded, page 43; need more information on location	No update	No update
Allens Ave and I-95 Southbound	NA	43		There currently is no direct connection between Allens Ave and I-95 South.	Roadway	I-95 N @ U.S. 1 ALT/Thurbers Ave/Exit 18 (R/F/2)	Planning	2017 Amended Freight and Goods Movement Plan Page 152	No update	No update
Create Access from ProvPort to I-95 Southbound	NA	19		Current configuration requires use of local roads with turning radius issues. Solution could add direct access to I-95 SB, identify alternate route, or add pavement/restriping to improve turning radii. Would improve marine port access.	Roadway/Port	Other; Potential U.S. 1 S @ Airport Rd (R/F/10)	Planning	2017 Amended Freight and Goods Movement Plan Page 159	No update	No update
Widen I-295 as bypass	3300	90		I-295 has been discussed as freight bypass around Providence. This project would add capacity by increasing lane capacity from 2 lanes to 3 lanes in each direction along the southern segment of this interstate.	Roadway	I-295 S @ I-95 (F20); I-295 N @ RI-37/Exit 3 (R30/F18)	10% Design	2017 Amended Freight and Goods Movement Plan Page 160	No update	No update

2040 Long Range Transportation Plan

Project Name	STIP ID	L RTP PoP#	Location	Description	Intervention Type	Addresses Top Bottlenecks/ Corridors?	Project Status/ Design Status	Notes	2021 Status Update	2022 Status Update
Alleviate Bottleneck on I-195 WB @ Broadway	3082	68		I-195 WB has a lane drop between Broadway and the Washington bridge, creating a bottleneck and high congestion. Solution would add a lane to increase capacity. Note, current ROW is constrained and would require significant rebuild of retaining wall.	Roadway	I-195 W @ Broadway/ Exit 6 (R/F/9)	Planning	2017 Amended Freight and Goods Movement Plan Page 160	Design	No update
Widen I-295 Northbound at Route 37	3300	69		Bottleneck/congestion issue on I-295 NB where Route 37 merges on and extending as far north as Route 6, where 3 lane section begins. Solution could involve climbing lane or other capacity enhancements.	Roadway	Other	10% Design	2017 Amended Freight and Goods Movement Plan Page 160	design/build advertised summer 2021	No update
Improve Ramps @ I-95 SB/Route 37		20		Traffic backs up onto I-95 from Route 37 ramp, due to short weaving direction before ramp splits to go to 37 EB or WB. Serves airport related traffic, plus surrounding area has increased in population, employment. Volumes exceed capacity of exit ramp. Ramp from 37 WB to Pontiac Avenue also backs up affecting I-95 off ramp.	Roadway	Other	Planning	2017 Amended Freight and Goods Movement Plan Page 161	No update	No update
Add Capacity to Airport Road @ Post Road		70		Many traffic signals in close proximity cause congestion on Airport Road. Signal timing and coordination would help add capacity on Airport Road, better connecting T.F. Green Air freight terminal to main roads.	Roadway	U.S. 1 S @ Airport Rd (R/F/10)	Planning	2017 Amended Freight and Goods Movement Plan Page 161	No update	No update

2040 Long Range Transportation Plan

Project Name	STIP ID	L RTP PoP#	Location	Description	Intervention Type	Addresses Top Bottlenecks/ Corridors?	Project Status/ Design Status	Notes	2021 Status Update	2022 Status Update
Improve Intersection at Route 114 and Mink Street in East Providence		21		Improve truck access by grade separation to resolve turning and access issues. Access to/from I-195 towards Fall River requires trucks to pass through commercial district on Route 6.	Roadway	Potential I-195 W @ Broadway/Exit 6 (R/F/9)	Planning	2017 Amended Freight and Goods Movement Plan Page 163	No update	No update
Improve Ramp from Post Road NB to Route 37		22		Heavy volume of trucks and other vehicles heading to 37WB from Post Road NB back up down the ramp onto Post Road. Trucks divert through surrounding neighborhood for access to Rt 37. Solution to congestion issue may be geometry or capacity enhancements.	Roadway	Potential U.S. 1 S @ Airport Rd (R/F/10)	Planning	2017 Amended Freight and Goods Movement Plan Page 163	No update	No update
Facilitate Truck Movements from Route 146 to Admiral Street		23		Trucks serving the USPS facility and West River industrial area have difficulty turning left off Route 146 onto Admiral, due to need for wide turn which conflicts with auto traffic.	Roadway/ Freight	RI-146 @ Sayles Hill Rd (R/F/12)	Planning	2017 Amended Freight and Goods Movement Plan Page 163	No update	No update
Improve Truck Access from Jefferson Blvd to Airport Connector		25		Poor turning radii from Jefferson Boulevard onto Airport Connector WB ramps limits truck access in surrounding industrial area.	Freight/Airport	Other	Planning	2017 Amended Freight and Goods Movement Plan Page 164	No update	No update
Aquidneck Island additional bus service				Extend on-Island bus service window on Route 60 (West Main and East Main Roads). Provide more off-Island limited stops or express service between Newport and TF Green Airport/Kingston Amtrak Station. Expand Flex Service areas and allow for same day scheduling.	Bus	Other		Aquidneck Island Transportation Study (2011) Page ES-4	No update	No update

2040 Long Range Transportation Plan

Project Name	STIP ID	L RTP PoP#	Location	Description	Intervention Type	Addresses Top Bottlenecks/ Corridors?	Project Status/ Design Status	Notes	2021 Status Update	2022 Status Update
Implement Rapid Bus Service for Aquidneck Island				Enhance the attractiveness of the service through new branded buses/stops and providing more frequent service. Implement transit signal priority on Route 60 along West Main Road and East Main Road, with queue jump lanes where possible. Reduce travel times by consolidating or eliminating closely spaced stops.	Bus	Other		Aquidneck Island Transportation Study (2011) Page ES-4	No update	No update
Strengthen and Expand Aquidneck Island Multimodal centers	NA			Upgrade Newport Gateway Center and create new multimodal hubs at Pell Bridge ramps and Melville. Create bicycle/ pedestrian/taxi/car sharing connections. Expand accessibility of transit passes at multimodal hubs. Integrate motor coach and intercity bus parking where appropriate. Include complementary non-transportation uses when appropriate which could help generate revenue and transit use.	General Transit	Other		Aquidneck Island Transportation Study (2011) Page ES-5	No update	No update
Traffic Signal Optimization in Aquidneck Island				Coordinate Island traffic signals along major corridors.	Technology	Other		Aquidneck Island Transportation Study (2011) Page ES-8	No update	No update
West Main Road Left-Turn Lanes				Widen West Main Road to provide left turn lanes at Oliphant Lane and Forest Avenue. Extend existing left-turn lanes at Gate 17 Access Road, Valley Road, and Admiral Kalbfus Road.	Roadway	Other		Aquidneck Island Transportation Study (2011) Page ES-9	No update	No update
Burma Road Improvements				Construct new Burma Road connections to the north and south.	Roadway	Other		Aquidneck Island Transportation Study (2011) Page ES-9	No update	No update

2040 Long Range Transportation Plan

Project Name	STIP ID	L RTP PoP#	Location	Description	Intervention Type	Addresses Top Bottlenecks/ Corridors?	Project Status/ Design Status	Notes	2021 Status Update	2022 Status Update
East Main Road Roundabouts				Construct three roundabouts with medians for access management along East Main Road between Turnpike Avenue and Middle Road at Portsmouth Town Hall.	Roadway	Other		Aquidneck Island Transportation Study (2011) Page ES-9	No update	No update
I-95 South at Route 146 South		36		Resolving merge/weave bottleneck with Route 6/10 by installing a Collector Distributor Road.	Roadway	I-95 N @ U.S. 6/RI-10/ Exit 22 (R/F/3); U.S. 6 E @ I-95 (R/F/7)	Planning	RI*STARS Bottleneck Program Update 030718—CMTF	No update	No update
I-95 South at Route 37	3132	37		Resolving weave/queue that extends from Pontiac Ave by mitigating queue from Pontiac Avenue	Roadway	Other	Planning	RI*STARS Bottleneck Program Update 030718—CMTF	No update	No update
I-95 South at I-295 South		38		Resolving merge/weave bottleneck with Route 117/Route 4. Mitigation to be determined.	Roadway	I-295 S @ I-95 (F20)	Planning	RI*STARS Bottleneck Program Update 030718—CMTF	No update	No update
Route 6 East at I-95		39		Resolving merge/weave bottleneck with Route 146 North by using a Collector Distributor Road.	Roadway	I-95 N @ U.S. 6/RI-10/ Exit 22 (R/F/3); U.S. 6 E @ I-95 (R/F/7)	Planning	RI*STARS Bottleneck Program Update 030718—CMTF	No update	No update
Route 2 between I-295 and Route 401		87		Resolving bottleneck. Mitigation to be determined.	Roadway	RI-2 S @ RI-117/Centerville Rd (R16); RI-2 N @ RI-115/Toll Gate Rd (R26)	Planning	RI*STARS Bottleneck Program Update 030718—CMTF	No update	No update
Route 117 between Route 2 and Route 1		77		Resolving bottleneck. Mitigation to be determined.	Roadway	U.S. 1 N @ RI-117/ Greenwich Ave/ Centerville Rd (R17); RI-2 S @ RI-117/Centerville Rd (R16); RI-2 N @ RI-115/Toll Gate Rd (R126)	Planning	RI*STARS Bottleneck Program Update 030718—CMTF	No update	No update
Route 5 between Route 14 and Route 6A		78		Resolving bottleneck. Mitigation to be determined.	Roadway	Other	Planning	RI*STARS Bottleneck Program Update 030718—CMTF	No update	No update
Route 15 between Smithfield Ave and Route 246		79		Resolving bottleneck. Mitigation to be determined.	Roadway	Other	Planning	RI*STARS Bottleneck Program Update 030718—CMTF	No update	No update

2040 Long Range Transportation Plan

Project Name	STIP ID	L RTP PoP#	Location	Description	Intervention Type	Addresses Top Bottlenecks/Corridors?	Project Status/Design Status	Notes	2021 Status Update	2022 Status Update
Route 1 between Route 37 and Airport Connector		80		Resolving bottleneck. Mitigation to be determined.	Roadway	U.S. 1 S @ Airport Rd (R/F/10)	Planning	RI*STARS Bottleneck Program Update 030718—CMTF	No update	No update
Extend Shore Line East Commuter Rail Service to Rhode Island	NA			Extend Shore Line East service from its eastern terminus in New London to Providence.	Railway	Other		Feasibility Study for Intercity Service to T.F. Green Page 9	No update	No update
Implement Bus on Shoulder on Hwy 146 Southbound	3250			Implement bus on shoulder on 146 SB from Mineral Spring to Downtown (2.3 miles). Concerns about the southern limit/terminus at I-95.	Bus	RI-15 E @ RI-146/Louisquisset Pike (R25)		RIPTA Bus on Shoulder Feasibility Study PowerPoint #2 Page 15/18	Design	Included in Route 146 Construction, which will commence construction in late 2022.
Right turn lane at intersection of SB Rt 1 and Rte. 102—North Kingstown					Traffic Safety	Other		2017-2028 10-Year STIP, Future Projects Unfunded and STIP Projects with Additional Funding Needs	No update	Programmed under 2024 Intersection & Crosswalk improvements in the STIP under TIPID 5378.
Branch River 146 Access—North Smithfield					Traffic Safety	Other		2017-2028 10-Year STIP, Future Projects Unfunded and STIP Projects with Additional Funding Needs	No update	No update
Mt. Hope Greenway Walking and Bike Path—Tiverton		88			Bike/Ped	Other	Planning	2017-2028 10-Year STIP, Future Projects Unfunded and STIP Projects with Additional Funding Needs	No update	Not programmed in the STIP.
Marine Highway Project Designation at Port of Davisville				Establish regular barge service between Quonset Development Corp (at Port of Davisville) and Port Authority of NY/NJ (at Red Hook Terminal), known as the North Atlantic Marine Highway Alliance, for service along the existing M-95 Marine Highway Corridor.	Port/Freight	Other		2017 Application to Funding Opportunity for America's Marine Highway Projects	No update	UNK

Transit Master Plan

Project Name	STIP ID	Municipality	Description/ Location	Intervention Type	Addresses Top Bottlenecks/ Corridors?	Notes	2021 Status Update	2022 Status Update
Transit priority.		Providence	Smith	Transit Operations	Other		N/A	In discussions with RIDOT
Transit priority.		Providence	Chalkstone	Transit Operations	Other		N/A	Cancelled
TMP Bus on shoulder at Rt. 37 and Thurbers.		Providence/ Cranston/ Warwick	I-95	Transit Operations	Other	Potential impacts to other Rt. 37 bottlenecks	N/A	RIDOT Task Order
TMP Bus on shoulder at I- 295 and Rt. 4.		Warwick	I-95	Transit Operations	I-295 S @ I-95 (F20); RI-4 N @ I-95 (R19/F15)		N/A	RIDOT Task Order
TMP Bus on shoulder at 401 and Merge.		Warwick	I-95_Rt. 4	Transit Operations	RI-4 N @ I-95 (R19/F15)		N/A	RIDOT Task Order
TMP Bus on shoulder Lafayette and W. Allenton		North Kingstown	Rt. 4	Transit Operations	RI-4 S @ W Allenton Rd (R15/F14)		N/A	RIDOT Task Order
TMP Bus on shoulder Broadway and S. Main.		Providence/ East Providence	I-195	Transit Operations	I-195 W @ Broadway/ Exit 6 (R/F/9)		N/A	RIDOT Task Order
TMP Bus on shoulder at Broadway and E. Bridge End.		Providence/ East Providence	Henderson	Transit Operations	Other		N/A	RIDOT Task Order
TMP Bus on shoulder at N Broadway and Pawtucket.		Providence/ East Providence	Henderson ROW	Transit Operations	Other		N/A	RIDOT Task Order
TMP Bus on shoulder at Mineral Spring and I-95.		Providence/ North Providence	Rt. 146	Transit Operations	RI-146 S @ I-95 (R/F/5)		N/A	RIDOT Task Order
TMP Bus on shoulder at Rt. 99 and Sayles Hill.		Lincoln/North Smithfield	Rt. 146	Transit Operations	Other		N/A	RIDOT Task Order
TMP Bus on shoulder at Rt. 146A and Sayles Hill.		Lincoln/North Smithfield	Rt. 146	Transit Operations	RI-146 N @ Sayles Hill Rd (R12)		N/A	RIDOT Task Order
TMP Bus on shoulder Rt. 6 and I-95.		Providence	Routes 6 to 10	Transit Operations	I-95 N @ U.S. 6/RI- 10/Exit 22 (R/F/3);U.S. 6 E @ I- 95 (R/F/7)		N/A	RIDOT Task Order

Transit Master Plan

Project Name	STIP ID	Municipality	Description/ Location	Intervention Type	Addresses Top Bottlenecks/ Corridors?	Notes	2021 Status Update	2022 Status Update
Transit priority at Bev. Hill and Main.		Pawtucket	Prospect	Transit Operations	Other		N/A	RIDOT Task Order
Transit priority at Prospect and Prospect.		Pawtucket	School-Bev. Hill	Transit Operations	Other		N/A	RIDOT Task Order
Transit priority at Rt. 113 and Division.		Warwick	Bald Hill	Transit Operations	Other		N/A	RIDOT Task Order
Transit priority at Sandy and Broad.		Cranston/ Warwick	Warwick	Transit Operations	Other		N/A	RIDOT Task Order
Transit priority at Warwick and Airport.		Warwick	Post	Transit Operations	Other		N/A	RIDOT Task Order
Transit priority Goff and Roosevelt.		Pawtucket	Exchange	Transit Operations	Other	Under development.	N/A	Under construction
Transit priority N. Main and Thayer.		Providence	Bus Tunnel	Transit Operations	Other	Already in service.	N/A	Planning underway for the tunnel
Transit priority at Providence Station and Point.		Providence	Downtown Transit Connector	Transit Operations	Other	Under development.	DTC in service	DTC in service
Transit priority at Main and Cumberland.		Woonsocket	Social-Clinton	Transit Operations	Other		N/A	Has not started
Transit priority at Rt. 6 and Killingly.		Providence	Hartford	Transit Operations	Other		N/A	Cancelled
Transit priority at 6-10 and Dave Gavitt.		Providence	Westminster	Transit Operations	Other		N/A	To be determined
Transit priority at KP and Pawtucket.		Providence/ Pawtucket	N Main	Transit Operations	Other		N/A	In service
Transit priority at 6-10 and Empire.		Providence	Broadway	Transit Operations	Other		N/A	Cancelled
Transit priority at CCRI and Dave Gavitt.		Providence/ Cranston/ Warwick	Elmwood-Reservoir	Transit Operations	Other		N/A	HCT Feasibility Study
Transit priority at CCRI and CCRI.		Providence/ Cranston/ Warwick	113	Transit Operations	Other		N/A	To be determined

Transit Master Plan

Project Name	STIP ID	Municipality	Description/ Location	Intervention Type	Addresses Top Bottlenecks/ Corridors?	Notes	2021 Status Update	2022 Status Update
Transit priority at CCRI and CCRI.	TBD	Providence/ Cranston/ Warwick	113	Transit Operations	Other		N/A	To be determined
Transit priority at CCRI and Greenwich and adding crosstown service.		Cranston	Park	Transit Operations	Other		N/A	Has not started
TMP Park and Rides at Warwick and Cranston.		Johnston	I-295 and U.S. 6	Transit Operations	Other		N/A	Has not started
TMP Park and Rides at RI-146 and Smithfield Road.		North Smithfield	RI-146A and Smithfield Rd	Transit Operations	Other		N/A	Has not started
TMP Park and Rides.		Lincoln	CCRI	Transit Operations	Other		N/A	Has not started
TMP Park and Rides.		Burrillville	Pascoag	Transit Operations	Other		N/A	Has not started
TMP Park and Rides.		Portsmouth	Mount Hope Bridge	Transit Operations	Other		N/A	Has not started
BRT.	7020	Providence/ Cranston/ Warwick	Providence-CCRI Warwick via T.F. Green	Transit Operations	Other		Study and Developme nt	Study and Development
Light Rail Transit/BRT.	7017	Central Falls to Warwick	Central Falls-CCRI Warwick	Transit Operations	Other		Study and Developme nt	Study and Development
Rapid Bus/BRT/LRT.		Providence	R-Line Broad St—N Main St	Transit Operations	Other		N/A	Awaiting RAISE 2022 outcome
Rapid Bus.		Providence/ Cranston/ Warwick	Elmwood Ave—T.F. Green Airport	Transit Operations	Other		N/A	Awaiting RAISE 2022 outcome
Rapid Bus.		Providence, North Providence, Johnston	Broadway—Manton	Transit Operations	Other		N/A	Awaiting RAISE 2022 outcome
Rapid Bus.		Providence	Chalkstone Avenue	Transit Operations	Other		N/A	Awaiting RAISE 2022 outcome

Transit Master Plan

Project Name	STIP ID	Municipality	Description/ Location	Intervention Type	Addresses Top Bottlenecks/ Corridors?	Notes	2021 Status Update	2022 Status Update
Rapid Bus.		Providence, East Providence, Pawtucket	Beverage Hill Ave—East Providence	Transit Operations	Other		N/A	Awaiting RAISE 2022 outcome
Rapid Bus.		Pawtucket, Providence, Cranston	Attleboro- Pocasset/Dyer Ave via KP	Transit Operations	Other		N/A	Awaiting RAISE 2022 outcome
Rapid Bus.		Providence to Cranston	Cranston Street	Transit Operations	Other		N/A	Awaiting RAISE 2022 outcome
Regional Rapid.		Providence to Newport (West)	West Bay	Transit Operations	Other		N/A	Has not started
Regional Rapid.		Providence to Woonsocket	Lincoln—Woonsocket	Transit Operations	Other		N/A	Has not started
Regional Rapid.		Providence to Newport (East)	Providence—Newpor t	Transit Operations	Other		N/A	Has not started
Regional Rapid.		Providence to Narragansett	URI—Galilee	Transit Operations	Other		N/A	Has not started
Transit Emphasis Corridor.		Providence to East Providence	East Side—Brown to Pawtucket Ave (EP)	Transit Operations	Other		N/A	Has not started
Transit Emphasis Corridor.		Providence	Olneyville to Downtown via Broadway	Transit Operations	Other		N/A	Has not started
Intercity Rail.	NA	Providence	Amtrak Service To T.F. Green Airport	Transit Operations	I-95 NB (R2/F2, R8/F8)		N/A	RIDOT Transit
Intercity Rail.	NA	Providence	Increase Rail Service Frequency Boston— Providence	Transit Operations	I-95 SB (R1/F1)		N/A	RIDOT Transit

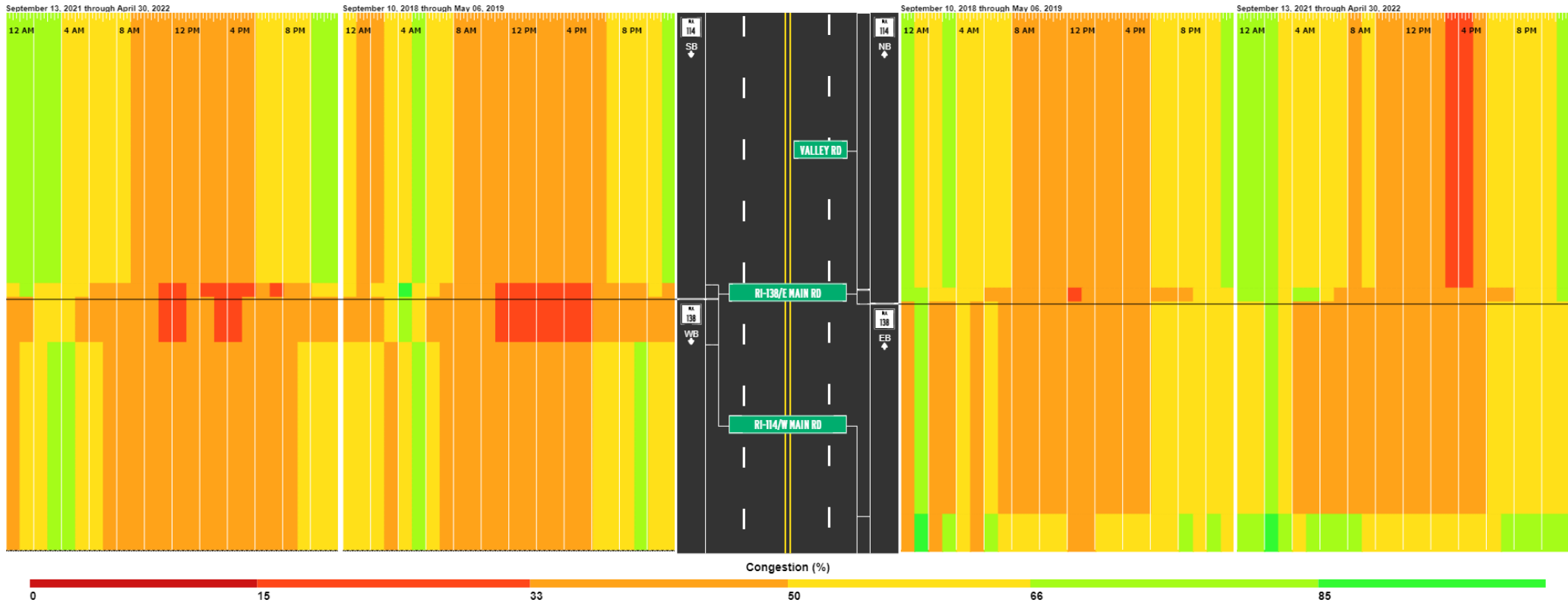
Bicycle Master Plan

Project Name	Municipality	Description/Location	Intervention Type	Addresses Top Bottlenecks/ Corridors?	Notes	2021 Status Update	2022 Status Update
Woonasquatucket Greenway	Providence	Connect existing bike facilities in Johnston and Providence into a continuous protected bike path from Johnston to Waterplace Park in downtown Providence. Would serve to connect vulnerable populations in Olneyville to jobs in downtown. Upgrade Broadway to protected bike lanes.	Bicycle and Pedestrian	Other	Also, Providence Great Streets Plan		Much of this segment has been completed but upgrades to protected lanes could still be made in some portions.
East Coast Greenway: Western Providence Segment	Providence	Create protected bike facilities from the current end of the Washington Secondary Bike Path in Cranston to an intersection with the Woonasquatucket Greenway in Olneyville via the new paths being constructed as part of the 6 and 10 interchange project.	Bicycle and Pedestrian	Other	Also, Providence Great Streets Plan		This portion remains unconnected.
East Coast Greenway: Eastern Providence Segment	Providence	Create protected bike facilities to connect Waterplace Park with the Pawtucket border. Fill gaps between Waterplace Park and new bike/ped bridge. Fill gaps between new East Side bike path and Blackstone Boulevard. Upgrade Blackstone Boulevard to create protected bike facilities. Create protected spur to connect to Allens Avenue.	Bicycle and Pedestrian	Other	Also, Providence Great Streets Plan		Gaps still exist in this section - discussions on how to best connect it are ongoing.
East Coast Greenway: Pawtucket/Central Falls Segment	Providence	Create protected bike route from Blackstone Boulevard in Providence to southern terminus of Blackstone Valley Greenway in Central Falls.	Bicycle and Pedestrian	Other	Also, Providence Great Streets Plan		This remains an on-road connection only formalized with bike route signage.
South Side/Broad St	Providence	Create protected bike corridor connecting Waterplace Park and Roger Williams Park via either Broad Street or Elmwood Avenue	Bicycle and Pedestrian	Other	Also, Providence Great Streets Plan		While some segments exist (primarily on-road striping) gaps in this section still remain unchanged.
North Providence Corridor	Providence	Create a protected bikeway from Waterplace Park to Mineral Spring Avenue Candidate Corridors include Admiral St, The West River Greenway, and Smith St.	Bicycle and Pedestrian	Other	Also, Providence Great Streets Plan		A segment of on-road striping along Douglas Avenue has been marked, but gaps between downtown and Douglas and the edge of PC campus to Mineral Spring still exist.

As more STIP projects are completed in future iterations of this report, we can use the Congestion Scan tool from RITIS to compare congestion metrics after construction has been finished. Below, you will find an example of this type of congestion comparison along the roadway segments associated with the Two-Mile Corner repaving project in Middletown (STIP ID 1356), analyzing two separate date ranges from September 2018 to May 2019 and from September 2021 to May 2022. This can help us to analyze if projects along congested areas are assisting in aiding traffic issues, and if not, can help us take a deeper look to what time periods and sections of the roadway may need further study.

Congestion for RI-114 between RI-138/E Main Rd and RI-126/Social St and RI-138 using NPMRDS from INRIX (Trucks and passenger vehicles)

Averaged by 1 hour for September 10, 2018 through May 06, 2019 and September 13, 2021 through April 30, 2022



Congestion Management Trends and Strategies

Performance tracking from 2020 shows stark changes to those observed in 2018 and 2019. Many commuter-based metrics such as commuter rail ridership, ferry ridership, and percent non-SOV travel decreased with more people either unemployed, working from home, or concerned about potential exposure to COVID-19 by riding in larger groups. Total vehicle miles traveled also decreased substantially, which did provide positive spikes for personal vehicle reliability metrics but caused a sharp increase in the rate of traffic incidents.

Regarding freight, truck reliability on interstates and on freight corridors improved. This is another product of lower VMT, especially along the freight network that consists heavily of interstate roadways. Rhode Island's Primary Freight Network did observe less freight bottlenecks than years passed, halving the amount of bottleneck locations from 30 in 2019 to 15 in 2020.

Despite the 2020 performance measures being the latest data available, since March of 2020 Rhode Island has experienced substantial changes on the roadway systems. Through the COVID-19 tracking tool hosted by the University of Maryland's CATT Lab, we can observe those changes up until April 2021 when the tool was last updated. This analysis was completed for the 2021 annual congestion report but remains important in analyzing the trends of the 2020 data.

Prior to the pandemic, the percentage of people staying home on weekdays was around 17%. This number spiked to around 35% in April 2020, which resulted in a substantial shift in cars on the road. Similarly, trips per person decreased from 3.5 trips per day to around 2.5 trips per day in April 2020. That number moved back to a normal range by July of 2020, however, and as of April 2021, had increased to over 4.0 trips per day. A similar trend can be seen in miles/person per day in Rhode Island, as dictated in the graphic below. These trends caused more irregular congestion on roadways, and while peak hour traffic still exists in 2021, it had become less predictable throughout off-peak hours.



Miles per person from 1/1/2020 to 4/20/2021

Rhode Island was seeing a peak of 0.75 work trips per day in February 2020. That number dropped with the onset of the pandemic but had not returned to the prior peak as of April 2021. That number dipped to 0.43 trips per day in April 2020, but a year later in April 2021, remained around 0.53 trips per day. A combination of people unemployed and working from home was likely responsible for this shift, which can be seen in the graphic below. This also contributed to irregular congestion, as peak work traffic had shifted to other trips throughout the day. People were still on the roadways, but were traveling for different purposes, causing daily traffic that can be less predictable than pre-pandemic congestion.



Work and non-work trips per person from 1/1/2020 to 4/20/2021

As it pertains to traffic patterns from April 2021 when this tool was last updated up until Spring of 2022, we can utilize the congestion scan tool to show changes in congestion for select roadways over select time frames. For the purpose of this report, two time periods were compared (May 8, 2020 to May 6, 2021 and May 7, 2021 to May 6, 2022) along two roadways (I-95 North and Southbound and RI-146 North and Southbound) using NPMRDS personal vehicle and truck data and showing Congestion percentage compared to free flow speeds. This analysis was performed to give an idea of the changes observed along two one-year periods regarding roadway use since the COVID-19 impact tool was last updated.

As we see in the graphic below, the congestion percentage has increased in the last year from the previous year, specifically around Exit 24 on I-95 and near Branch Avenue along RI-146 in Providence. Some key trends are heavier peak PM travel along both RI-146 and I-95 in select locations in Providence as well as a longer range in the congestion timing. Along I-95 and RI-146 SB, moderate congestion is occurring from 7:00 – 9:00 AM and picks back up from 12:00 – 6:00 PM, with the heaviest congestion observed from 3:00 – 6:00 PM. In comparison, the 2020 – 2021 range analysis shows only some moderate congestion, occurring mainly from 3:00 – 6:00 PM. We can observe similar delays northbound, again mainly during the PM peak hours, heaviest from 2:00 – 6:00 PM.

While this is only a snapshot of the CMP road network, it generally falls in line with observed congestion trends, showing that our road system is experiencing similar volumes to pre-pandemic levels. When we have access to more performance data metrics in 2021 and 2022, we will be able to better analyze exactly how significant the observed levels were in 2020, and if traffic and volume numbers will change permanently if at all due to shifts in travel patterns.

Additionally, as more data is compiled for congestion management in the future and trends are more clearly observed, setting realistic, performance-based targets for both short (5 year) and longer (10+ year) term trends will help the State to track, adapt, and mitigate these congestion factors in the future.

Conclusion

Rhode Island's congestion landscape continues to shift as we learn more about congestion patterns resulting from both the pandemic and roadway improvement projects. We have observed substantial changes, as predicted, in the 2020 performance measures. When we can observe performance measures from subsequent and post-pandemic years, we will be able to better implement projects to mitigate causes of congestion. When the CMP was adopted in 2020, the outlook was clear in observing data and making necessary changes to help alleviate bottlenecks and improve the road system. Pandemic changes to congestion patterns on the roadway network have altered a lot of what we knew about the road system, but the State, led by the Congestion Management Task Force, along with RIDSP, RIDOT, and RIPTA will continue to work together to help analyze these trends in an effort to improve reliability within the transportation system in Rhode Island.