



# Rhode Island Congestion Management Process

Annual Report:  
October 2024



# Congestion Performance Monitoring Report 2024 Update

## Contents

Introduction.....	4
Congestion Management Process Review .....	5
Congestion Management Performance Measures.....	6
Congestion Management Performance Measures - Rolling 5 Year Average.....	11
2022 Bottleneck Analysis.....	13
Bottlenecks Outside Top 30 from 2020 and 2021.....	14
2022 Bottleneck Comparison .....	14
2022 Freight Bottlenecks.....	16
Corridor Case Studies .....	19
Pell Bridge Ramps Phase 1/Phase 2 .....	20
Phase 1 - JT Connell and Coddington Highways – Newport, RI .....	20
<i>Background and Intervention</i> .....	20
<i>Scan Results</i> .....	21
Pell Bridge Ramps - Phase 2 .....	22
<i>Background and Intervention</i> .....	22
<i>Scan Results</i> .....	23
Broad Street Regeneration.....	25
<i>Background and Intervention</i> .....	25
<i>Scan Results</i> .....	26
Kingston Road Bridge .....	27

<i>Background and Intervention</i> .....	27
<i>Scan Results</i> .....	28
<b>Bridge Group 97 – East Ave Corridor Rebuild</b> .....	29
<i>Background and Intervention</i> .....	29
<i>Scan Results</i> .....	30
<b>Washington Bridge – Demolition and Replacement Project</b> .....	31
<i>Background and Intervention</i> .....	31
<i>Scan Results</i> .....	32
<b>Congestion Management Trends and Strategies</b> .....	33
Performance Measures .....	33
Major Corridor Analysis.....	33
Congestion Mitigation Strategies: Research and Trends.....	36
<b>Appendix A: CMP Inventory Update</b> .....	38

## 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 (IIJA).

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 Moving Forward RI 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 fourth 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 2024 report, performance measure data is being collected from 2022. 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 2024.

## 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 most up-to-date INRIX roadway dataset is used to ensure that roadway updates are accounted for when reporting on performance in Rhode Island.
  - The 2021 Infrastructure Investment and Jobs Act (IIJA) doubled the mileage that Rhode Island can designate, to 300 miles for Critical Rural Freight Corridors (CRFCs) and 150 miles for Critical Urban Freight Corridors (CUFCs). For the 2022 update of the Rhode Island Freight and Goods Movement Plan, the freight network was expanded to include 187 miles of CRFCs and 150 miles of CUFCs, based on criteria including truck volumes, connectivity, potential freight conflicts, and stakeholder feedback. This freight network expansion is reflected in this annual report.
- **Develop Multimodal Performance Measures**
  - The performance measures from the CMP 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 data to update the congested corridors dashboard previously completed in the INRIX Signal Analytics tool. The MPO is also working with Streetlight data to further assess congestion, and using biking and pedestrian volumes to observe the extent multimodal transportation is being utilized in areas across the state. Monitoring is done on an ongoing basis, as well as through this annual report. 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. We will continue to update the pool of projects when the newest version of the STIP is 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. Plans such as the Carbon Reduction Strategy from RIDOT strive to reduce carbon emissions by reducing inefficient driving in low-speed and stop-and-go traffic. This improvement in traffic flow, will lead to a reduction in 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 and Streetlight data, which provides bike and pedestrian volumes as well as vehicle volumes. The CMP has been used as the basis for several grant applications and new STIP programs, including carbon reduction. The MPO is also writing a Complete Streets guide 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, more up-to-date data layers are now available and will be utilized in replacement of previous layers that were skewed from the pandemic.
  - This CMP update includes an analysis of the effectiveness of five completed congestion mitigation projects. This analysis can help us to understand the impact of congestion mitigation interventions in different contexts to inform their selection moving forward.

## 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 2022. 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 2020 CMP. For new measures, these procedures can be found in appendix A of this document. The color-coding **red** and **green** in the Congestion Management Performance Measure Tracking below indicates if a performance measure **improved** or **worsened** from previous year of record.

Table 1-1A, below, shows performance measure data on a year-by-year basis, from 2018 to 2022. In addition to this, table 1-1B will show the performance measures based on a 5-year average. The basis for this is to show if the current 5-year average for each measure reflects an improvement or worsening of conditions compared to baseline 2018 data. Future versions will display 5-year data on a rolling basis but will continue to compare to the 2018 baseline data.

Objective	Performance Measure	2018 (Baseline)	2019	2020	2021	2022
A. Improve Reliability of the Transportation System	<b>A.1 Interstate Reliability</b>	78.6%	80.6%	94.9%	87.2%	84.5%
	<b>A.2 Non-Interstate Reliability</b>	88.7%	88.4%	93.7%	92.4%	94.4%
	A.3 CMP Network Reliability	92.0%	92.3%	98.0%	95.1%	95.0%
	A.4 Reliability During Inclement Weather on CMP Network	91.9%	92.3%	98.2%	96.2%	95.0%
	A.5 Reliability Through Work Zones on CMP Network	91.1%	87.8%	97.3%	85.9%	92.0%
	A.6 RIPTA Bus Reliability (ratio of 80 <sup>th</sup> to 50 <sup>th</sup> percentile time)	1.16	1.21	N/A	1.22	1.25
	A.7 Average Incident Clearance Time (minutes)	29	30	28	28	29
	A.8 Average Incident Rate (incidents/million VMT)	1.75	1.59	2.48	2.20	2.16
B. Reduce Recurring Congestion	<b>B.1 Peak-Hour Excessive Delay (PHED) (millions of hours)</b>	14.71	15.45	7.12	12.22	11.75
	B.2 PHED on CMP Network on CMP Network (millions of hours)	9.34	10.91	5.81	12.71	15.32
	B.3 PHED During Inclement Weather on CMP Network (millions of hours)	3.72	4.93	1.97	4.14	5.59
	B.4 PHED Through Work Zones on CMP Network (millions of hours)	0.37	1.09	0.35	0.53	0.81
	B.5 Number of Bottlenecks	160	148	127	119	101
	B.6 Total Delay at Bottlenecks (millions of hours)	2,900	2,489	1,229	2,570	2,475
	B.7 Transit Vehicle Load Factor (% of passenger-hours at load factor >1)	2.9%	4.7%	N/A	0.8%	4.6%
	B.8 Passenger-Hours of Delay on RIPTA Buses	72,257	94,569	29,076	124,025	353,872

C. Improve Freight and Goods Movement	<b>C.1 Truck Reliability on Interstates</b>	1.79	1.79	1.40	1.53	1.57
	C.2 Travel Time Reliability on Freight Corridors	1.48	1.50	1.29	1.38	1.41
	C.3 Number of Freight Bottlenecks	27	30	15	47	45
	C.4 Truck Congestion Costs	\$82M	\$90M	\$29M	\$71M	\$72M
D. Increase Modal Choice and Competitiveness	D.1 Bike Path Mileage	75	77	105	110	114
	D.2 Bike Path Usage [Future Measure]	–	–	--	--	--
	D.3 HOV/Dedicated Bus-Lane Route Miles	0.8	0.8	N/A	2.72	2.72
	<b>D.4 Percent of Non-SOV Travel</b>	18.2%	20.4%	19.1%	22.5%	23.7%
	D.5 Commuter Rail Ridership (million trips)	1.21	1.28	0.47	0.37	0.72
	D.6 RIPTA Bus Ridership (million trips)	16.3	16.4	N/A	16.1	9.4
	D.7 Providence/Newport Ferry Ridership	42,778	46,405	15,412	31,679	37,532
E. Improve Intermodal Connectivity	E.1 Percent of Population with Transit Access	18.1%	18.1%	18.1%	18.1%	4.9%*
	E.2 Percent of Jobs with Transit Access	21.8%	21.8%	21.8%	21.8%	6.4%*
	E.3 Bike System Connectivity	0.3	0.3	0.21	0.21	N/A****
F. Promote and Invest in Innovative Congestion Management Technologies	F.1 Number of Intersections with Advanced Traffic Control	**720/1182	**728/1190	***989/1108	996/1055	1020/1079
	F.2 Number of Intersections with Remote Monitoring	**4/1182	**15/1190	***15/1108	34/1055	41/1079

	F.3 Number of Real-time Travel Time Signs Per Route Mile	0	0	0	0	0
	F.4 Number of RIPTA Bus Routes with Transit Priority Treatment	1	1	2	2	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	-	-	-	-	-
H. Reduce Emissions and Improve Air Quality	H.1 Total Vehicle-Miles of Travel Per Capita	7,577	7,159	5,274	6,867	6,884
	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 (MMTCO2e) [Future Measure]	-	-	--		-3.53
*Significant drop in 2021 data is due to change in service frequency <sup>1</sup>						
** 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.						
N/A - Data could not be found						

1

“Exit Renumbering Rhode Island Mile-Marker Exit Program”, RIDOT, 2023. <https://www.dot.ri.gov/projects/exitnumbers/index.php>

Contains data from a modified reporting date due to reporting inconsistencies between agencies	
Contains data from different source from previous years	

Table 1-1A: Congestion Metrics Table

## Congestion Management Performance Measures - Rolling 5 Year Average

Objective	Performance Measure	2018 (Baseline)	5-Year Average
A. Improve Reliability of the Transportation System	<b>A.1 Interstate Reliability</b>	78.6%	<b>85.2%</b>
	<b>A.2 Non-Interstate Reliability</b>	88.7%	<b>91.5%</b>
	A.3 CMP Network Reliability	92.0%	<b>94.5%</b>
	A.4 Reliability During Inclement Weather on CMP Network	91.9%	<b>94.7%</b>
	A.5 Reliability Through Work Zones on CMP Network	91.1%	<b>90.8%</b>
	A.6 RIPTA Bus Reliability (ratio of 80 <sup>th</sup> to 50 <sup>th</sup> percentile time)	1.16	<b>1.21**</b>
	A.7 Average Incident Clearance Time (minutes)	29	<b>29</b>
	A.8 Average Incident Rate (incidents/million VMT)	1.75	<b>2.04</b>
B. Reduce Recurring Congestion	B.1 Peak-Hour Excessive Delay (PHED) (millions of hours)	14.71	<b>12.25</b>
	B.2 PHED on CMP Network on CMP Network (millions of hours)	9.34	<b>10.82</b>
	B.3 PHED During Inclement Weather on CMP Network (millions of hours)	3.72	<b>4.07</b>
	B.4 PHED Through Work Zones on CMP Network (millions of hours)	0.37	<b>0.63</b>
	B.5 Number of Bottlenecks	160	<b>101</b>
	B.6 Total Delay at Bottlenecks (millions of hours)	2,900	<b>2,333</b>
	B.7 Transit Vehicle Load Factor (% of passenger-hours at load factor >1)	2.9%	<b>3.2%**</b>

	B.8 Passenger-Hours of Delay on RIPTA Buses	72,257	<b>134,760</b>
C. Improve Freight and Goods Movement	<b>C.1 Truck Reliability on Interstates</b>	1.79	<b>1.62</b>
	<b>C.2 Truck Reliability on Freight Corridors</b>	1.48	<b>1.41</b>
	C.3 Number of Freight Bottlenecks	27	<b>45</b>
	C.4 Truck Congestion Costs	\$82M	<b>\$68M</b>
D. Increase Modal Choice and Competitiveness	D.1 Bike Path Mileage	75	<b>114</b>
	D.2 Bike Path Usage [Future Measure]	–	<b>N/A</b>
	D.3 HOV/Dedicated Bus-Lane Route Miles	0.8	<b>2.72*</b>
	<b>D.4 Percent of Non-SOV Travel</b>	18.2%	<b>20.8%</b>
	D.5 Commuter Rail Ridership (million trips)	1.21	<b>0.81</b>
	D.6 RIPTA Bus Ridership (million trips)	16.3	<b>12.5</b>
	D.7 Providence/Newport Ferry Ridership	42,778	<b>34,761</b>
E. Improve Intermodal Connectivity	E.1 Percent of Population with Transit Access	18.1%	<b>15.5%</b>
	E.2 Percent of Jobs with Transit Access	21.8%	<b>18.7%</b>
	E.3 Bike System Connectivity	0.3	<b>0.25</b>
F. Promote and Invest in Innovative Congestion Management Technologies	F.1 Number of Intersections with Advanced Traffic Control	*720/1182	<b>891/1123</b>
	F.2 Number of Intersections with Remote Monitoring	*4/1182	<b>22/1123</b>
	F.3 Number of Real-time Travel Time Signs Per Route Mile	0	<b>0.00</b>
	F.4 Number of RIPTA Bus Routes with Transit Priority Treatment	1	<b>1.6</b>
G. Promote Land Development and Infill Development/ Redevelopment in Transportation-Efficient Locations	G.1 Percent of Permits in Transit Propensity Areas [Future Measure]	–	<b>N/A</b>
	G.2 Transportation Funds Invested in Transit Propensity Areas	TBD	<b>N/A</b>
H. Reduce Emissions and Improve Air Quality	H.1 Total Vehicle-Miles of Travel Per Capita	7,577	<b>6,752</b>
	H.2 Emission Reductions by CMAQ Projects [Future Measure]	–	<b>N/A</b>
	H.3 Counties in Air Quality Attainment [Future Measure]	5 of 5	<b>N/A</b>
	H.4 GHG Emissions (MMTCO2e) [Future Measure]	–	<b>N/A</b>

Table 1-1B: Congestion Metrics Table: Rolling 5-year average.

\* Baseline vs present day.

\*\* Metric consists of a rolling 4-year average due to the unavailability of data for 2020.

## Further Measures

The measures below on table 1-1C provide an extension of three of the performance metrics above (Table 1-1A). The reasoning behind these further measures is to provide a metric that can show these three measures at a clearer and more personal level when broken down to simpler data size.

Objective	Performance Measure	2018 (Baseline)	2019	2020	2021	2022
Reduce Recurring Congestion	Annual Hours of Peak hour Excessive Delay (PHED) per capita	13.92	14.61	6.49	11.2	10.7
	Average daily delay at bottlenecks per vehicle (minutes)	5.3	5.7	3.8	6.3	4.28
Reduce Emissions and Improve Air Quality	Total Vehicle-Miles of Travel Per Capita Per Day	20.76	19.61	14.45	18.81	18.86

Table 1-1C: Further Congestion Metrics Table

## 2022 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. It is important to note that in 2022, the exit numbers on I-95 NB/SB had been renumbered during the middle of the year<sup>2</sup>. For purposes of consistency, the original exit numbers during the start of 2022 will be used for this iteration of the report.

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<sup>2</sup> "Exit Renumbering Rhode Island Mile-Marker Exit Program", RIDOT, 2023. <https://www.dot.ri.gov/projects/exitnumbers/index.php>

## Bottlenecks Outside Top 30 from 2020 and 2021

Bottlenecks Outside Top 30 from 2020 & 2021		
2021 Rank	2020 Rank	Head Location
#N/A	2	I-95 N @ US-6/US-1/RI-10/EXIT 22
#N/A	6	CRANSTON ST S @ RI-10/HUNTINGTON AVE
#N/A	7	HARTFORD AVE E @ SERVICE RD 1
#N/A	11	US-1 N @ RI-117/CENTERVILLE RD/GREENWICH AVE
#N/A	12	US-44 W @ OAKLAND AVE
#N/A	13	RI-103 E @ RI-114/MAIN ST
#N/A	14	RI-114 N @ RI-103/CHILD ST/BAKER ST
#N/A	15	US-6A E @ PETTEYS AVE/GLENBRIDGE AVE
#N/A	16	US-6A W @ RI-128/KILLINGLY ST
#N/A	18	US-1 N @ RI-78/WESTERLY BYP/AIRPORT RD
#N/A	19	US-6 W @ HOPKINS AVE
#N/A	20	RI-12 W @ RI-2/RESERVOIR AVE
#N/A	21	RI-138 W @ RI-114/MAIN RD
#N/A	22	RI-5 N @ US-6A/HARTFORD AVE
#N/A	23	RI-2 S @ SOCKANOSSET CROSS RD
#N/A	25	RI-114 S @ RI-103/CHILD ST/BAKER ST
#N/A	26	RI-33 W @ RI-3/TIOGUE AVE
#N/A	27	US-6A E @ US-6 (PROVIDENCE)
9	28	RI-2 N @ RI-113/EAST AVE
#N/A	30	RI-138 W @ CLAIBORNE PELL BRG (WEST)
2	28	I-95 N @ RI-7/RI-146/CHARLES ST/EXIT 23
9	#N/A	RI-2 N @ RI-113/EAST AVE
10	#N/A	UNION AVE E @ RI-10/HUNTINGTON AVE
14	#N/A	RI-2 S @ RI-117/CENTERVILLE RD
15	#N/A	RI-138A N @ THAMES ST (SOUTH)
20	#N/A	RI-10 N @ US-6/WESTMINSTER ST
22	#N/A	US-6 W @ RHODE ISLAND/CONNECTICUT STATE LINE
24	#N/A	CRANSTON ST S @ MESSER ST
26	#N/A	US-6 E @ RI-10
27	#N/A	RI-15 E @ RI-146/LOUISQUISSET PIKE
28	#N/A	BRANCH AVE E @ RI-246/CHARLES ST
30	#N/A	US-44 E @ RI-128/GEORGE WATERMAN RD

Table 1-2 details bottlenecks that were ranked in the top 30 in either 2020 or 2021 but were not within that rank in 2022. Most of the other top ranked bottlenecks in 2022 have remained for all three time periods. 18 of the top 30 congested corridors for 2020 are no longer included in the top 30 for 2022 compared to 12 for 2021. This can be attributed to congestion shifting within the state due to changing driving patterns from COVID and the return to work from 2021 and 2022. Also, there were several projects that ended and began during this time period, which contributed the shift in congestion. The most notable change during this span is I-95 N @ US-6/US-1/RI-10/EXIT 22 where congestion was ranked number 2 in the state and by 2021 and 2022, this bottleneck was no longer in the top 30. Also, I-95 N @ RI-7/RI-146/CHARLES ST/EXIT 23 saw a huge jump from being ranked number 28 in 2020 to number 2 in 2021, then a marked drop-off out of the top 30 in 2022.

Table 1-2: Top 30 Bottlenecks from 2020 and 2021 that are no longer in the top 30 for 2022.

## 2022 Bottleneck Comparison

Table 1-3 shows the top 30 bottlenecks and where they ranked in 2019, 2020, 2021 and 2022 along with the associated congestion metrics.

## 2022 Bottleneck Comparison

2022 Rank	2021 Rank	2020 Rank	2019 Rank	Head Location	Average Max Length (1)	Average Daily Duration (2)	Total Duration (3)	Base Impact (4)	Speed Differential (4)	Congestion (5)	Total Delay (6)
1	1	1	#N/A	I-95 S @ RI-7/RI-146/CHARLES ST/EXIT 23	2.61	4 h 24 m	66 d 23 h 54 m	228634	8209884	426437	561105486
2	4	#N/A	#N/A	I-95 N @ US-6/RI-10/EXIT 22	1.89	2 h 23 m	36 d 9 h 55 m	83906	2538237	146261	258970137
3	5	3	2	RI-146 S @ I-95	0.95	5 h 11 m	78 d 23 h 22 m	131588	5376178	319210	238990479
4	3	#N/A	#N/A	I-195 W @ I-95	1.89	1 h 28 m	22 d 9 h 1 m	46609	1827685	112975	137566196
5	7	#N/A	#N/A	I-95 N @ RI-10/EXIT 16	2.26	56 m	14 d 7 h 27 m	42949	1582036	79384	119777193
6	6	5	4	US-6 E @ I-95	0.36	6 h 24 m	97 d 10 h 38 m	44588.53	1372081.78	86483.88	82767511.85
7	8	9	9	US-1 FRONTAGE N @ I-95	0.31	4 h 1 m	61 d 4 h 17 m	27490	414973	36859	77607121
8	#N/A	#N/A	#N/A	I-95 N @ US-1 ALT/THURBERS AVE/EXIT 18	1.88	1 h 7 m	16 d 23 h 57 m	36107	1203364	55599	70075391
9	#N/A	#N/A	#N/A	US-44 W @ I-195	0.28	5 h 36 m	85 d 5 h 23 m	61199	1000291	90120	53843124
10	17	#N/A	3	EDDY ST S @ I-95/THURBERS AVE	0.82	50 m	12 d 17 h 5 m	14097	132927	17513	38250413
11	13	#N/A	8	RI-146 N @ SAYLES HILL RD	0.29	8 h 12 m	124 d 18 h 18 m	56004	1771118	111450	37289750
12	11	8	10	RI-15 W @ RI-7/DOUGLAS AVE	1.53	2 h 7 m	32 d 7 h 8 m	65763	814847	82273	36845696
13	18	#N/A	#N/A	HARTFORD AVE E @ SERVICE RD	0.31	3 h 11 m	48 d 13 h 37 m	16505	179990	20764	29540154
14	#N/A	#N/A	#N/A	I-295 S @ RI-7/EXIT 8	2.11	55 m	14 d 1 h 15 m	35386	1495882	67679	28019225
15	#N/A	#N/A	#N/A	VETERANS MEMORIAL PKY N @ I-195/WARREN AVE	0.64	4 h 10 m	63 d 14 h 18 m	48342	1129225	100919	27874663
16	25	#N/A	#N/A	US-1 N @ RI-117/GREENWICH AVE/CENTERVILLE RD	1.09	1 h 16 m	19 d 10 h 49 m	30610	602303	49831	26409687
17	21	#N/A	#N/A	RI-114 N @ RI-103/BAKER ST/CHILD ST	0.61	6 h 9 m	93 d 16 h 7 m	80303	1104822	97848	25682474
18	19	#N/A	#N/A	RI-103 E @ RI-103/MAIN ST	1.63	2 h 22 m	36 d 1 h 55 m	68920	960170	84291	25010148
19	23	#N/A	#N/A	RI-114 S @ VERNON ST	1.13	3 h 14 m	49 d 8 h 39 m	70653	926866	82381	22795713
20	29	24	#N/A	RI-15 E @ RI-7/DOUGLAS AVE	0.74	3 h 2 m	46 d 8 h 22 m	41497.27	585342.97	57531.22	22496544.08
21	#N/A	#N/A	16	RI-146 S @ SAYLES HILL RD	0.88	1 h 19 m	20 d 40 m	24551	736065	43757	21943655
22	#N/A	29	#N/A	RI-5 S @ US-6	0.39	5 h 38 m	85 d 18 h 31 m	45429	657152	58672	20085713
23	#N/A	17	#N/A	RI-138A N @ THAMES ST (NORTH)	0.44	3 h 55 m	59 d 15 h 58 m	33540	317399	42380	17397515
24	#N/A	#N/A	#N/A	RI-5 N @ US-6/HARTFORD AVE	0.25	10 h 10 m	154 d 18 h 49 m	41737	513140	49370	17267362
25	#N/A	#N/A	#N/A	EAST SHORE EXPY N @ I-195/US-6/RI-1A/WARREN	0.44	56 m	14 d 7 h 20 m	9394	311986	22047	17057291
26	16	4	12	RI-15 E @ RI-126/SMITHFIELD AVE	1.83	52 m	13 d 4 h 31 m	31021.92	339994.44	37131.28	16688280.13
27	12	10	28	US-44 E @ RI-15/MINERAL SPRING AVE	0.72	1 h 50 m	28 d 51 m	28565	477961	47309	16036539
28	#N/A	#N/A	#N/A	RI-128 N @ GREENVILLE AVE	0.81	2 h 15 m	34 d 8 h 31 m	40951	506195	50158	15788428
29	#N/A	#N/A	#N/A	US-44 W @ RI-128/GEORGE WATERMAN RD	0.28	6 h 18 m	96 d 1 h 9 m	32732	390286	36944	15778283
30	#N/A	#N/A	#N/A	RI-114 S @ RUMSTICK RD	1.13	2 h 7 m	32 d 6 h 42 m	49598	787531	62530	15352317

(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).

Table 1-3: 2022 Bottleneck Comparisons

Upon observation, unsurprisingly, the vast majority of the top 30 bottlenecks are within the area inside the I-295 corridor (Providence metro). Also, one constant remains the same for the past 3 years of analyses; I-95 S @ RI-7/RI-146/CHARLES ST/EXIT 23 is the top congested bottleneck in the state. The top four bottleneck locations for 2022 are associated with the interchange for I-95, I-195, RI-146, and US-6/RI-10 near downtown Providence. These bottlenecks are likely due to construction of the Providence I-95 Viaduct Northbound project that started in 2020, and the Washington Bridge project (Bridge Group 57TB -- Washington Bridge North, STIP ID 3082) impacting I-195 westbound that started in 2021. Several more of the 2022 bottlenecks were not ranked in previous years as well. This suggests that congestion is shifting.

The total delay experienced at the bottlenecks for 2022 is 581,753 hours compared to 579,245 hours in 2021 and 233,893 hours in 2020. This indicates that congestion occurring at the most congested locations is on the increase from 2020 and 2021.

### 2022 Freight Bottlenecks

Freight bottlenecks are defined as meeting the criteria of a regular bottleneck and are contained within Rhode Island's Freight Network. Table 1-4 shows the top 20 freight bottlenecks from 2022.

### 2022 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	2.61	4 h 24 m	228,634.00	8,209,884.00	426,437.00	561,105,486.00
2	2	I-95 N @ US-6/RI-10/EXIT 22	1.89	2 h 23 m	83,906.00	2,538,237.00	146,261.00	258,970,137.00
3	3	RI-146 S @ I-95	0.95	5 h 11 m	131,588.00	5,376,178.00	319,210.00	238,990,479.00
4	4	I-195 W @ I-95	1.89	1 h 28 m	46,609.00	1,827,685.00	112,975.00	137,566,196.00
5	5	I-95 N @ RI-10/EXIT 16	2.26	56 m	42,949.00	1,582,036.00	79,384.00	119,777,193.00
6	6	US-6 E @ I-95	0.36	6 h 24 m	44,588.53	1,372,081.78	86,483.88	82,767,511.85
7	7	US-1 FRONTAGE N @ I-95	0.31	4 h 1 m	27,490.00	414,973.00	36,859.00	77,607,121.00
8	8	I-95 N @ US-1 ALT/THURBERS AVE/EXIT 18	1.88	1 h 7 m	36,107.00	1,203,364.00	55,599.00	70,075,391.00
9	9	US-44 W @ I-195	0.28	5 h 36 m	61,199.00	1,000,291.00	90,120.00	53,843,124.00
10	10	EDDY ST S @ I-95/THURBERS AVE	0.82	50 m	14,097.00	132,927.00	17,513.00	38,250,413.00
11	11	RI-146 N @ SAYLES HILL RD	0.29	8 h 12 m	56,004.00	1,771,118.00	111,450.00	37,289,750.00
12	14	I-295 S @ RI-7/EXIT 8	2.11	55 m	35,386.00	1,495,882.00	67,679.00	28,019,225.00
13	15	VETERANS MEMORIAL PKY N @ I-195/WARREN AVE	0.64	4 h 10 m	48,342.00	1,129,225.00	100,919.00	27,874,663.00
14	17	RI-114 N @ RI-103/BAKER ST/CHILD ST	0.61	6 h 9 m	80,303.00	1,104,822.00	97,848.00	25,682,474.00
15	18	RI-103 E @ RI-103/MAIN ST	1.63	2 h 22 m	68,920.00	960,170.00	84,291.00	25,010,148.00
16	21	RI-146 S @ SAYLES HILL RD	0.88	1 h 19 m	24,551.00	736,065.00	43,757.00	21,943,655.00
17	25	EAST SHORE EXPY N @ I-195/US-6/RI-1A/WARREN AVE	0.44	56 m	9,394.00	311,986.00	22,047.00	17,057,291.00
18	27	US-44 E @ RI-15/MINERAL SPRING AVE	0.72	1 h 50 m	28,565.00	477,961.00	47,309.00	16,036,539.00
19	29	US-44 W @ RI-128/GEORGE WATERMAN RD	0.28	6 h 18 m	32,732.00	390,286.00	36,944.00	15,778,283.00
20	30	RI-114 S @ RUMSTICK RD	1.13	2 h 7 m	49,598.00	787,531.00	62,530.00	15,352,317.00

(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).

Table 1-4: 2022 Freight Bottlenecks

In 2021, there were 47 bottlenecks on the freight corridor, while in 2022, there was a modest decrease to 45 freight bottlenecks. All 20 of the freight bottlenecks for 2022 were also in the top 30 overall bottlenecks.

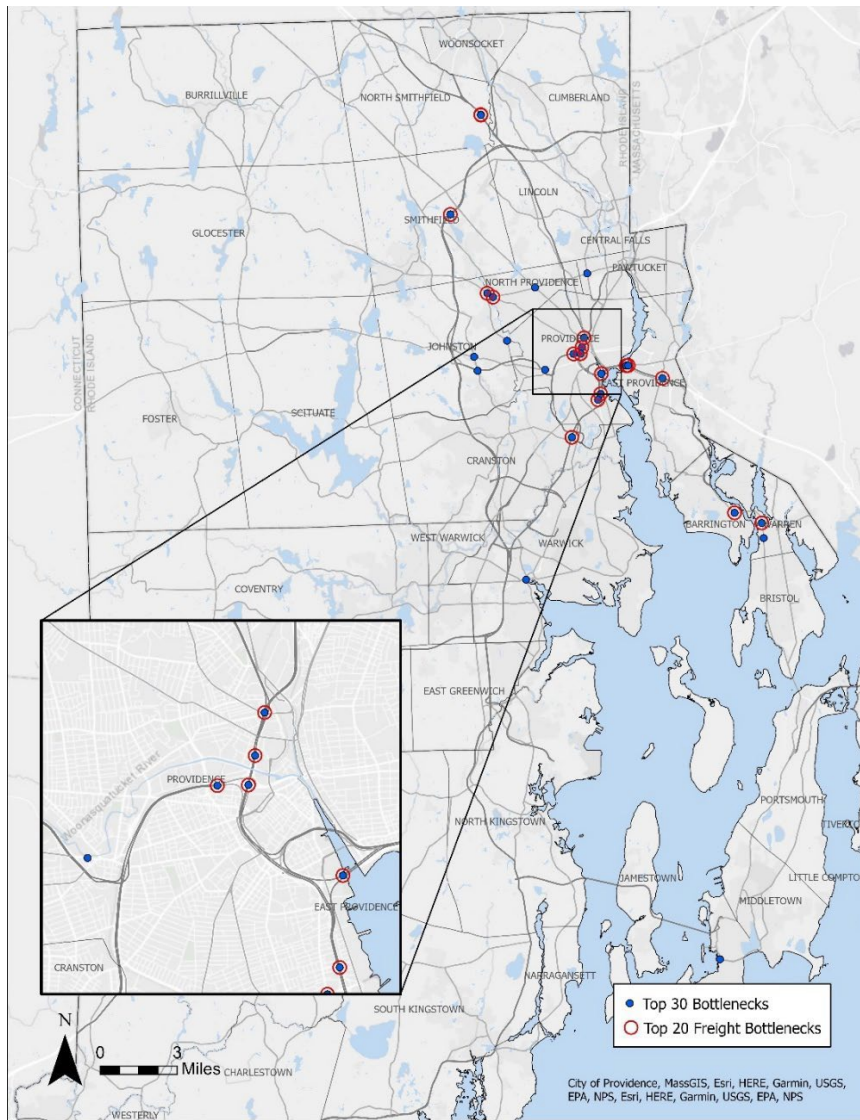


Figure 1-1 – Map of the top Bottlenecks and freight bottlenecks within Rhode Island

## Corridor Case Studies

For this update, five projects within the state of Rhode Island were analyzed using the Congestion Scan Tool to better understand the impact of the projects on congestion metrics on the surrounding/immediate road segments. The projects analyzed below are Pell Bridge Ramps – Phase 1 and 2, Broad Street Regeneration, Kingstown Road Bridge, Bridge Group 97 – East Ave Corridor Rebuild, and a look into the Washington Bridge westbound demolition/rebuild. The analysis observes congestion from these projects which all are in different stages of construction or may have already achieved substantial completion.

It is important to note some of the limitations of this analyses. We cannot draw a direct causation between the project and congestion alleviation. Many unrelated factors before and after implementing a project may impact congestion on the studied corridors. For example, there may have been other projects under construction close to the studied area that have worsened congestion in the study area. There could be new developments or activities in the area drawing more people to the area than before the project's construction. Conversely there could be fewer drivers on a particular corridor with changes in driving patterns. Some projects are difficult to analyze using this tool because they may impact many different corridors and intersections, each only a small amount – such as the new Central Falls / Pawtucket commuter rail station, which likely has drawn people away from driving on many different corridors without having a large impact on any one corridor at this point. Lastly, any analysis that includes time periods after 2020 may have altered traffic patterns and volumes due to the COVID-19 pandemic.

Regardless of the limitations of the analysis, it is important to evaluate projects to determine if they had the intended impact on congestion. If the project's main focal point was safety for all road users, there is still value in observing if congestion alleviation may have been a potential unintended benefit. As more projects are completed, we can look at these analyses in aggregate to identify patterns for how congestion mitigation projects appear to be working. From this we can learn if we need to alter some interventions to be more effective, utilize some interventions more frequently, or even retire interventions from our congestion mitigation toolbox if they seem to not be working.

## Pell Bridge Ramps Phase 1/Phase 2

### Phase 1 - JT Connell and Coddington Highways – Newport, RI Background and Intervention

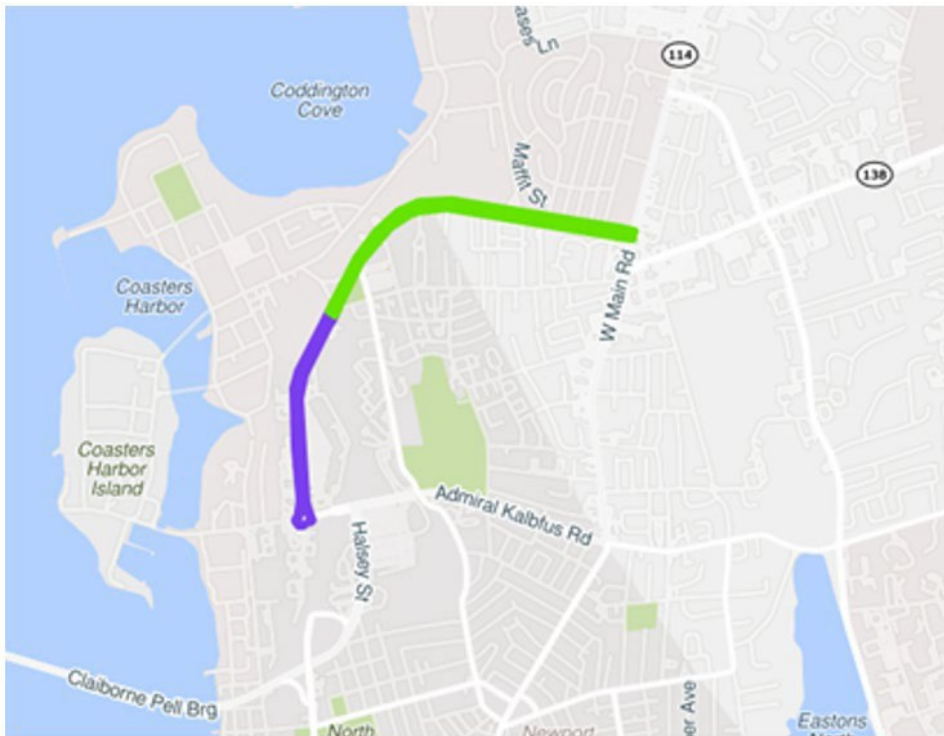


Figure 1-2: JT Connell (Purple) and Coddington Highways (Green)

This \$10.9M project (STIP ID 1364) is the first phase of a two-phased approach at reducing vehicular congestion and queuing on the Pell Bridge and effectively reducing downtown Newport's congestion, improving connectivity between Newport's North End and Downtown area while also adding bike lanes, and spurring economic development. This phase was focused on the reconstruction of the JT Connell and Coddington Highways. A shared-use bike and pedestrian path was added for nearly the entire stretch of the project, stopping just short of Main Road at Lake Erie Street. New sidewalks were also installed for the project length. Additionally, the ramps to the closed bridge over the railroad from the intersection with Girard Avenue and Maple Avenue were removed, and those intersections were reconstructed. Maple Avenue changed from slip lanes into a T-intersection to the highway, and Girard Avenue was narrowed significantly and made into a T intersection, with a left turn lane from the highway. A center turn lane was removed from just past the intersection with John H Chafee Boulevard up to the driveway for the RIPTA Newport Division facility. From that facility driveway up to Lawrence Street, the lanes were narrowed to

make space for the shared use path. It should be noted that many of these interventions were focused on making it safer and more attractive for bikes and pedestrians to use this road, as well as making driving safer. Phase 1 finished construction at the end of 2021.

### Scan Results

Below, Figure 1-3 shows what congestion was like before and after the Phase 1 project. Construction started in 2020 and ended in late 2021. This congestion scan analyses show 2019, 2021, and 2023. 2021 will show the results as the project was first completed, while 2023 helps illustrate the short-term impact this project had on congestion. It's important to note that Phase 2 of the Pell Bridge Ramps project, which started with a reconstruction of the roundabout at Admiral Kalbfus Road, began in 2021 and is set to reach completion by the end of calendar year 2024 and could impact this congestion scan analysis.

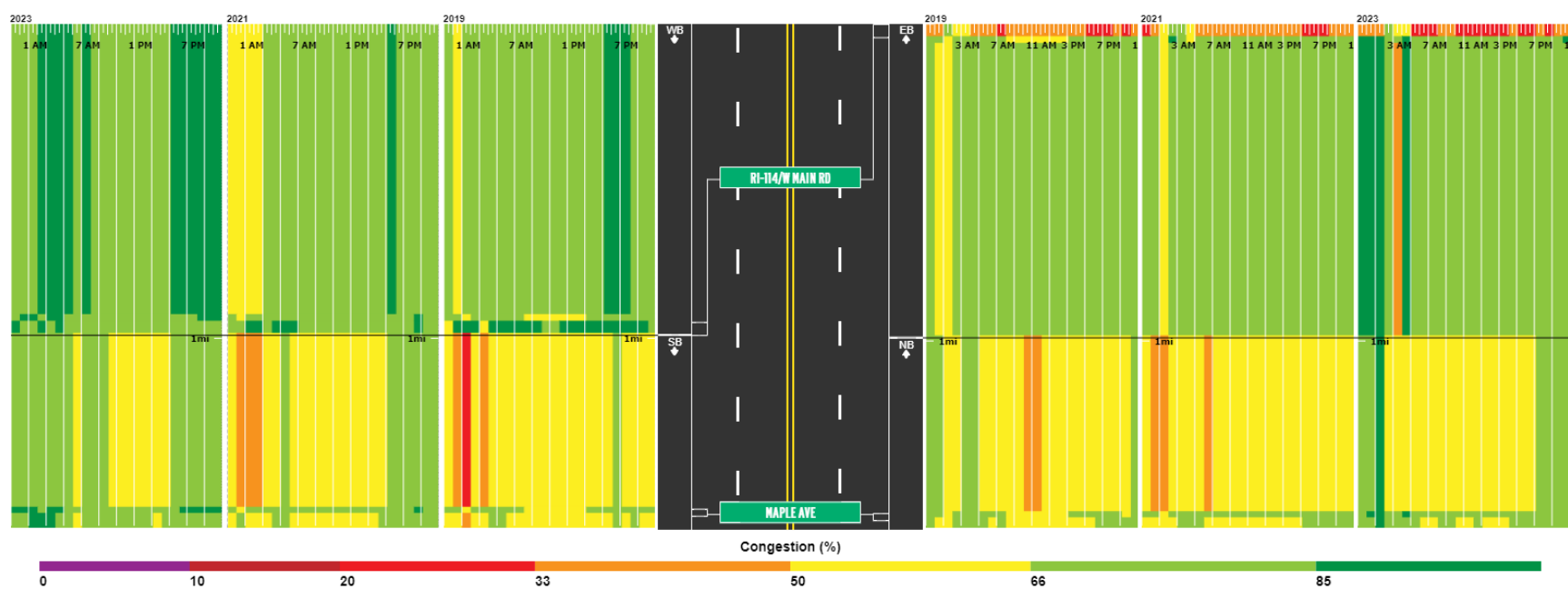


Figure 1-3 – Coddington (EB/WB) and JT Connell Highways (NB/SB)

As displayed on figure 1-3, generally all directions of Coddington and JT Connell have seen congestion decrease, despite phase 2 construction at the southern portion of JT Connell Highway. The exception is the easternmost portion of Coddington Highway where it intersects with RI-114. In 2023, congestion significantly increased during the hours of 5AM to 9PM. It is unclear what is causing the congestion at the easternmost terminus of Coddington highway, although it may be attributed to possible nearby construction and traffic diverting to this area or a gradual rebound in traffic in this area from previous years when COVID19 kept volumes lower.

## Pell Bridge Ramps - Phase 2

### Background and Intervention

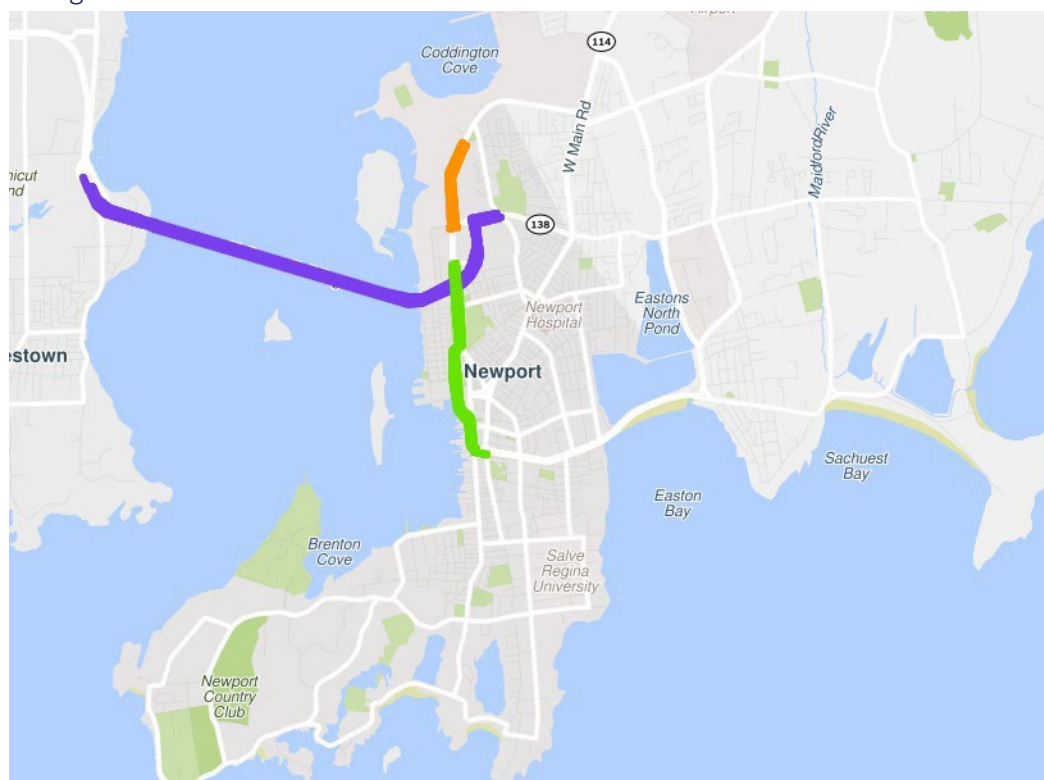


Figure 1-4: Pell Bridge Ramps Phase II corridor study area

This \$74.6 million second phase of the Pell Bridge Ramps project began construction in 2021, shortly after the completion of phase 1 and will be complete by end of calendar year 2024. This project has three goals: Improve traffic circulation/reduce congestion, increase safety, and add multimodal options for all roadway users.

**Improve traffic circulation/reduce congestion –** Implementations include constructing a dedicated on-ramp from JT Connell Highway to Route 138 westbound toward Pell Bridge. This change eliminates the “highway to nowhere” by adding a permanent connection to the ramps. This change is intended to ease congestion for drivers coming from Downtown Newport to merge onto Route 138. Traffic traveling on Route 138 West toward the bridge will no longer need to stop or yield. Interventions also include realigning the intersection of Farewell Street and Americas Cup Avenue by eliminating the sharp curve at the start of Americas Cup Avenue. There will also be new traffic

signals and pedestrian crossing features in this area to enhance safety.

**Safety** - Interventions include eliminating the first right exit off the Pell Bridge and directing drivers to make two left turns to intersect with the new portion of JT Connell highway (RI-138). There will also be a conversion from a rotary to a roundabout, which deploys a 25-mph circulating speed design and will provide pedestrian crossings on all approaches. There will also be a new traffic signal and left turn lane at Malbone/Girard Avenue, which will also come equipped with pedestrian crossings on all approaches.

**Multimodal Options** - A shared-use path will be implemented along Farewell Street that will provide a connection from the park-and-ride near the new ramps to downtown Newport. This will provide much needed multimodal connectivity to this area of Newport.

### Scan Results

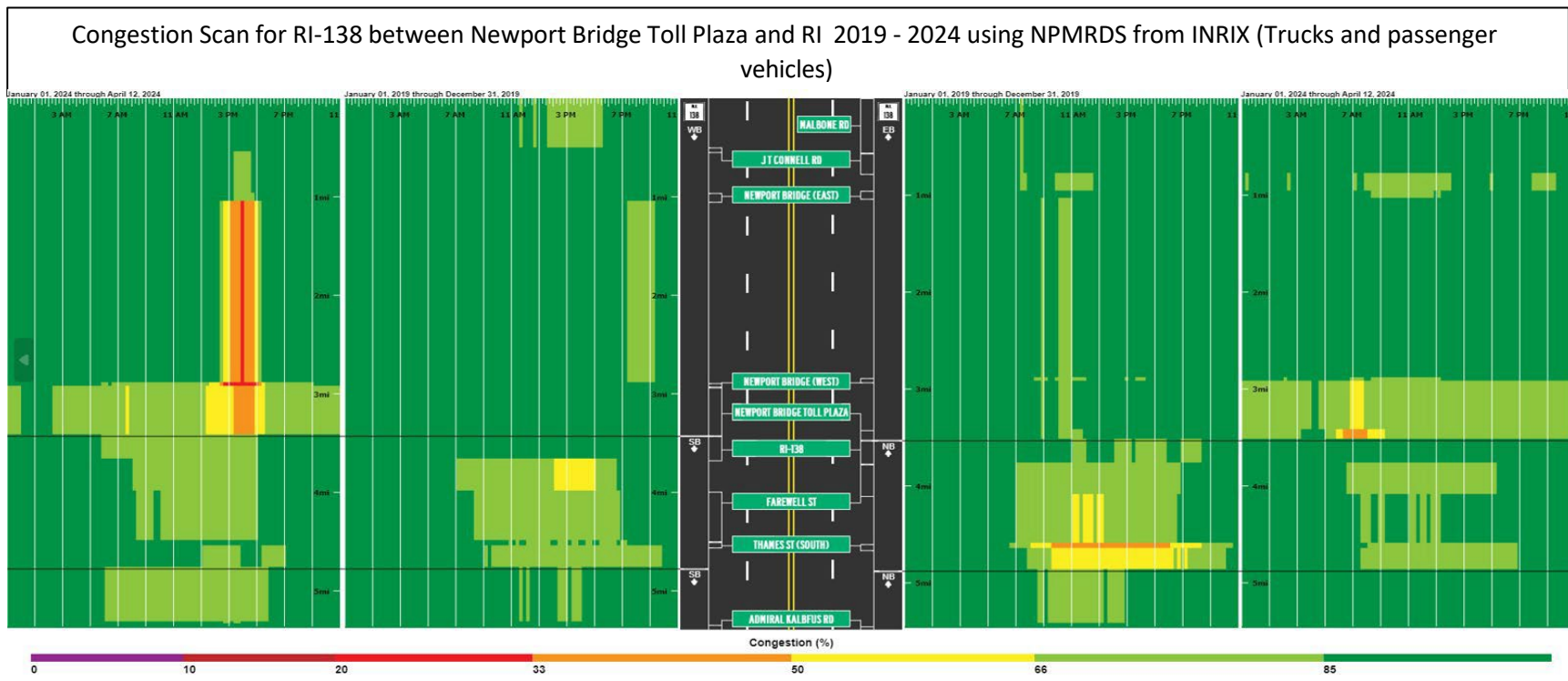


Figure 1-5: Pell Bridge Ramps Congestion Scan

As shown on figure 1-5, 138 westbound seems to have had a significant increase in congestion during the afternoon rush hour in early 2024 compared to 2019. The 2019 snapshot is what congestion was like before the start of phase 1 construction and the 2024 snapshot is the current state of congestion with Phase 2 still in the construction phase. This seems to indicate that part of the construction efforts for phase 2 may be impacting congestion on the bridge. This is most likely due to lane closures on the bridge that are making way for a toll gantry, bridge rehabilitation, realignment/reconstruction, and demolition of the old toll gantry. Also, some traffic that normally flows through the westbound side of the Washington Bridge in East Providence and Providence may be impacting traffic westbound as some commuters are seeking an alternate way to cross Narragansett Bay with the closure of westbound lanes of the Washington Bridge.

There does seem to be some alleviation of congestion along Farewell and Thames Street as improvements enhancing greater connectivity on those arterials and most surrounding arterials have achieved completion by early 2024. It also appears that Admiral Kalbfus Road is seeing slightly less congestion from 2019 on the northbound side, while the southbound side appears to have a slight increase in light congestion.

# Broad Street Regeneration

## Background and Intervention

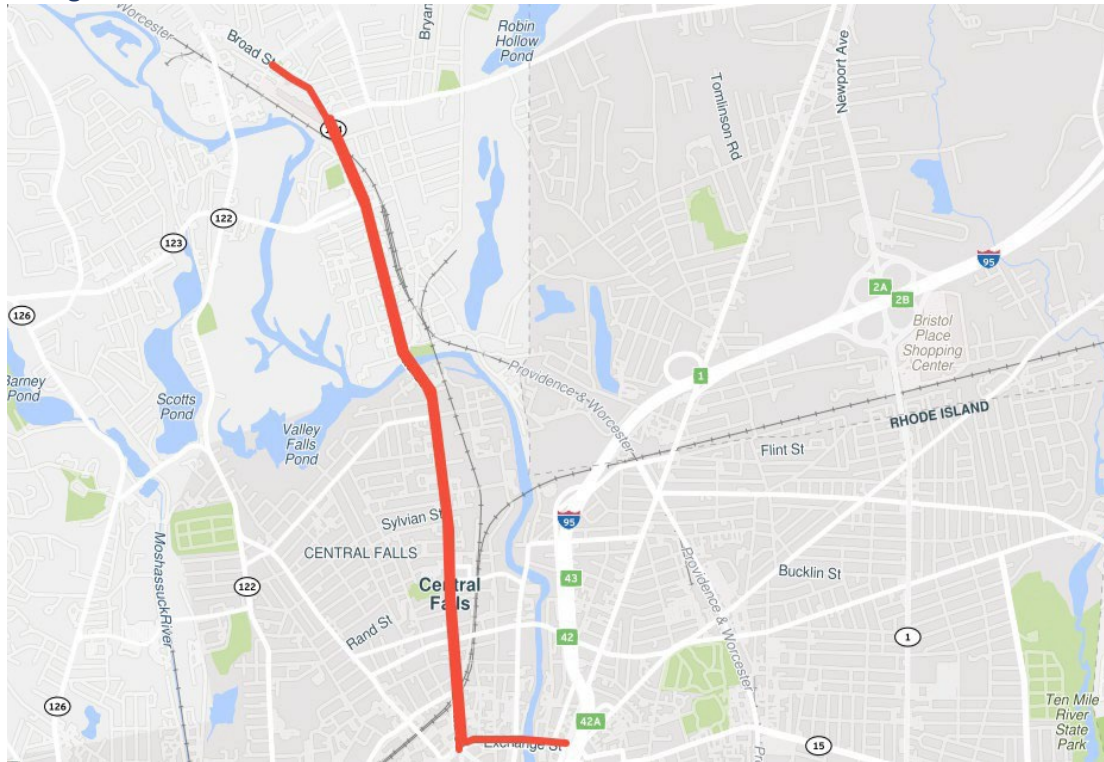


Figure 1-6: Broad Street Regeneration Corridor Study Area

This \$18.2 million project covered a three-mile stretch of Broad Street that spans from the Exchange Street intersection in Pawtucket and continues through Central Falls and ends at the intersection with Mendon Road in Cumberland. Construction began in 2020 and finished in 2023. The goal of the analyses for this project is to look at the impacts before construction and the most recent data after completion of this project. Over time, this project can be revisited to analyze what congestion will look like some years after completion as well.

The work detailed in this project includes new road surfacing, curbs, and sidewalks, several ADA improvements, implementation of bike lanes, upgraded drainage systems, traffic signals, and other pedestrian improvements to the streetscape which prioritizes safety and multimodal options for all users. While the aim of this project was to increase safety, it is worthwhile to look at what potential impacts on congestion there may have been with this project.

Some interventions also include:

- Sidewalk replacement from Meeting St to Elizabeth Street,
- Brick pattern crosswalks near Cumberland Town Hall
- Roughly one-mile stretch of paving and striping from Central Falls/Cumberland Line to Forest Avenue in Cumberland
- Tree Plantings along streets to enhance streetscape
- Conventional Bike lanes from the intersection of Mendon Road in Cumberland to the intersection of Exchange Street.

### Scan Results

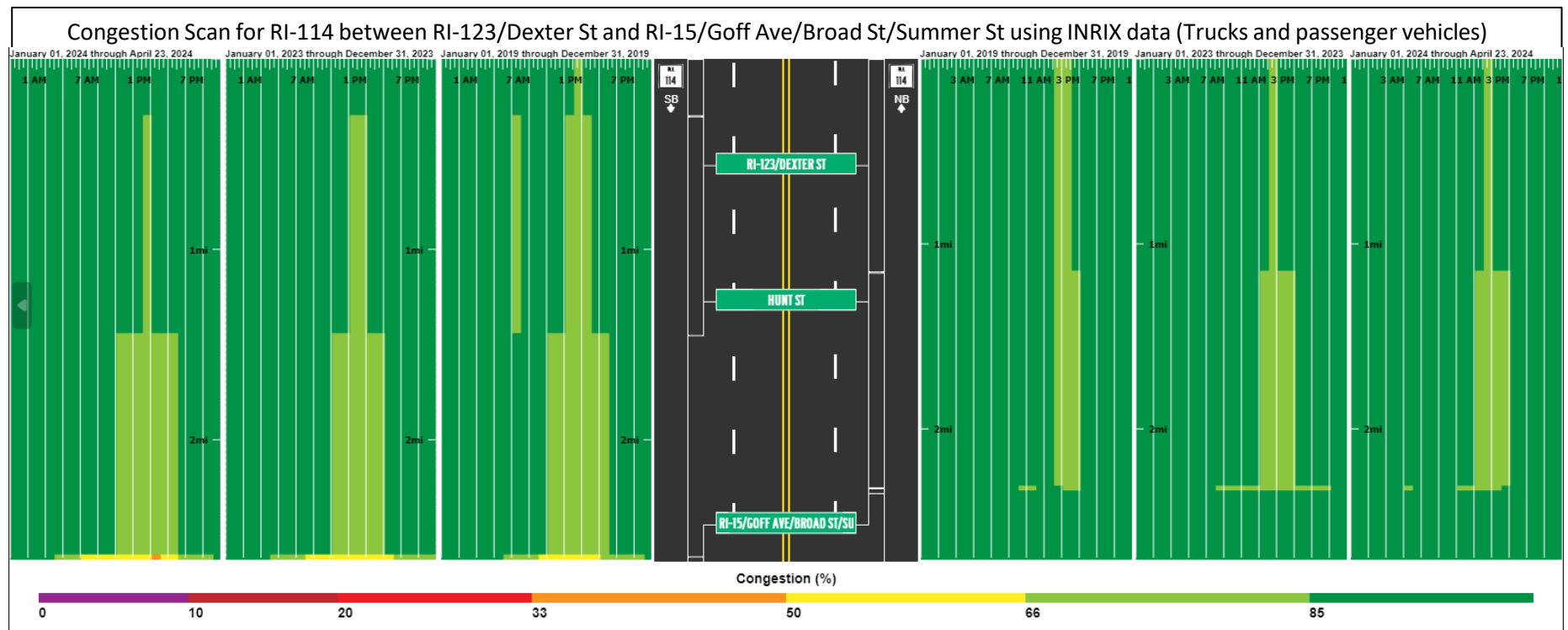


Figure 1-7: Broad Street Regeneration Congestion Scan

As shown on figure 1-7, there looks to be a slight change in afternoon rush congestion from before project construction began and immediately after substantial completion was reached. This analysis is showing moderate reduction in congestion overtime from the intersection of RI-123 down to Hunt St. From the intersection with Hunt Street down to the southern end of Broad Street shows no change in congestion with light congestion throughout the years. Looking at the Northbound lanes, it seems that congestion has slightly improved from RI-123 down to the intersection with Hunt Street. There does appear to be a slight increase in the length of congestion time from Hunt Street down to the southern

portion of Broad Street as the congestion has now extended down to the 2PM hour when previously the uptick for the afternoon rush started at 3PM.

## Kingston Road Bridge

### Background and Intervention

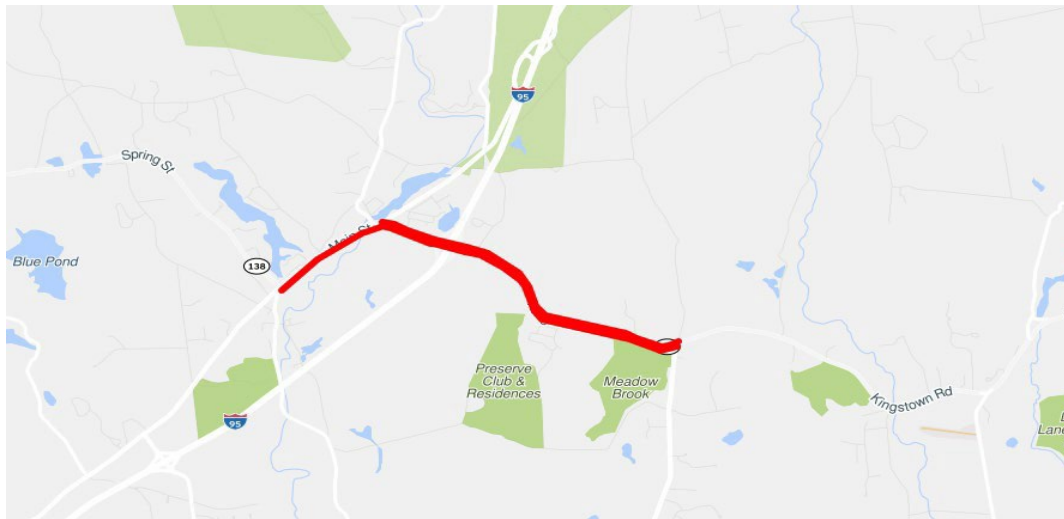


Figure 1-8: Kingston Road Bridge Corridor Study Area

This \$21 million project's first initiative was to replace the 70-year-old structure which was one rating point away from being structurally deficient. In addition to the replacement, several safety improvements were made to this project. From a congestion and connectivity standpoint, this bridge carries 51,300 vehicles per day and provides an important link to the University to Rhode Island and much of southern Rhode Island. Interventions included replacing the two exits (3A and 3B, now exit 7) in each direction of the 95 off ramps, and consolidating them to one on each side, intended to reduce the frequency and severity of accidents.

RIDOT removed the off ramps that were sharply curved and created a tight weave for traffic.

Interventions also include 1,500 feet of new sidewalk and new pedestrian crossing features with new traffic signals, intended to make this area safer and to make it easier to access the transit stop just east of the bridge. Construction started in 2019 and reached substantial completion in 2022. This analysis covers the year before the start of construction to the last two years after construction was complete.

## Scan Results

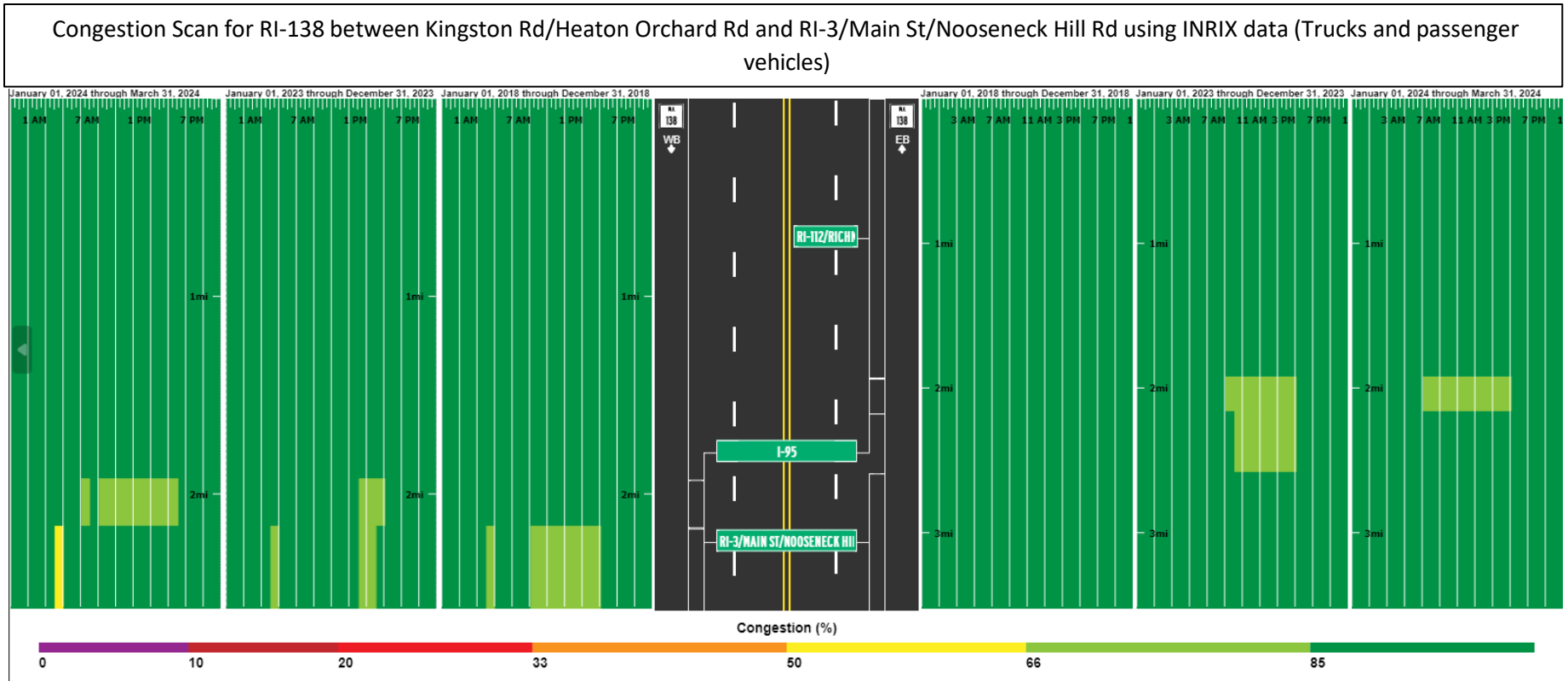


Figure 1-9: Kingston Road Bridge Congestion Scan

As shown in Figure 1-9, the congestion through all years has been relatively light. Westbound on RI-138 shows minimal differences during the afternoon rush from before the construction started to immediately after completion was reached. There is an uptick in congestion during the 4 – 5 AM hour in 2024. This congestion may be tied to the construction of a roundabout that is ongoing at the intersection of Carolina Nooseneck Road/Richmond Townhouse Road/Kingstown Road. Eastbound, the congestion is showing minimal changes to congestion with only a slight increase for 2023 and 2024 during the mid-day, which also may be attributed to nearby roundabout construction.

## Bridge Group 97 – East Ave Corridor Rebuild

### Background and Intervention

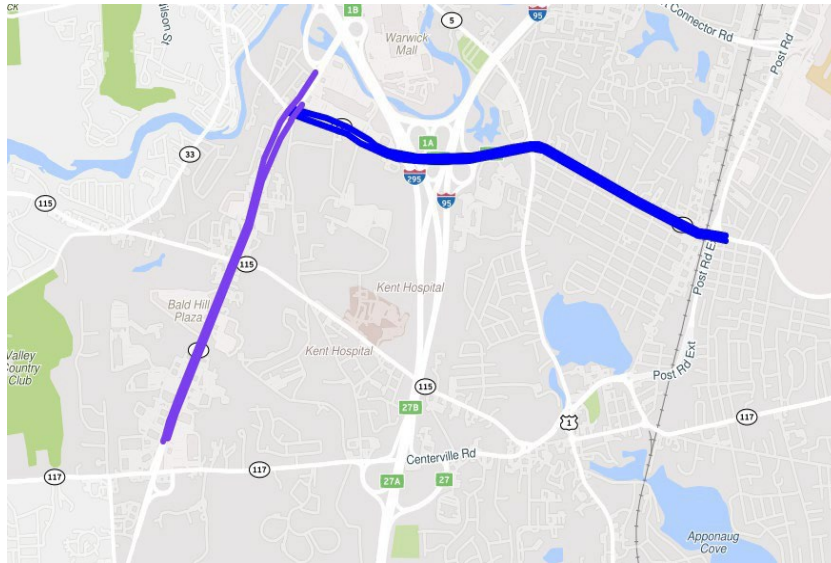


Figure 2: East Ave Corridor Rebuild Study Area

This \$75 million project is a culmination of several projects that aim to create a complete street and state of good repair. This project aims to provide safety, congestion relief, and multimodal options. This analysis strives to observe the congestion before the start of construction and will be observed for the next coming years after substantial completion is reached.

Construction on this project was greenlighted to begin March of 2024 and covers two corridors that are just south and east of the Warwick Mall. Stretched of the corridors of East Avenue (route 113) and Bald Hill (route 2) road will see the bulk of interventions from this project. This project has 7 components: Route 2 traffic safety improvements, Route 2 transit enhancements, Route 113 corridor improvements, Washington secondary connectivity, I-95 and I-295 interchange improvements, Main Avenue road diet, and implementation of electric vehicle charging stations. The details of these components are found below:

1. **Route 2 Traffic Safety Improvements** – Interventions include signal timing upgrade to relieve congestion, upgrading pedestrian crossing equipment, resurfacing between Route 113 and I-295 ramps, and restriping to repurpose lane use.
2. **Route 2 Transit Enhancements** – Changes include transit signal priorities at signals and improvements to bus stops by implementing ADA compliant access, shelters with seating, lighting, trash receptacles, and signage.
3. **Route 113 Corridor Improvements** – pavement resurfacing between Route 2 and I-95, adaptive signals for congestion relief, add/upgrade pedestrian crossing equipment, increase CCRI entrance capacity, implement high friction surface to reduce severity of high-speed crash impacts, and install red light running mitigation measures.
4. **Washington Secondary Connectivity** – interventions include providing a separated shared-use path on north side of Route 113 between bike path and CCRI, providing a separated shared-use path in the median of Route 113 between CCRI and Route 5, and providing signalized shared-use path crossings at all intersections.
5. **I-95 and I-295 Interchange Improvements** – Improvements include the reconstruction of bridges 682 and 720, repurposing of bridge

widths to provide shared use path in median, providing additional height clearance and installing overweight vehicle warning system to mitigate bridge strikes, and installing horizontal curve safety treatments at all ramps.

- 6. **Main Avenue Road Diet** – Interventions include resurfacing the pavement between Route 5 and Jefferson Blvd. and restriping Main Avenue to provide one travel lane in each direction with two-way left turn lanes and bike lanes.

### Scan Results

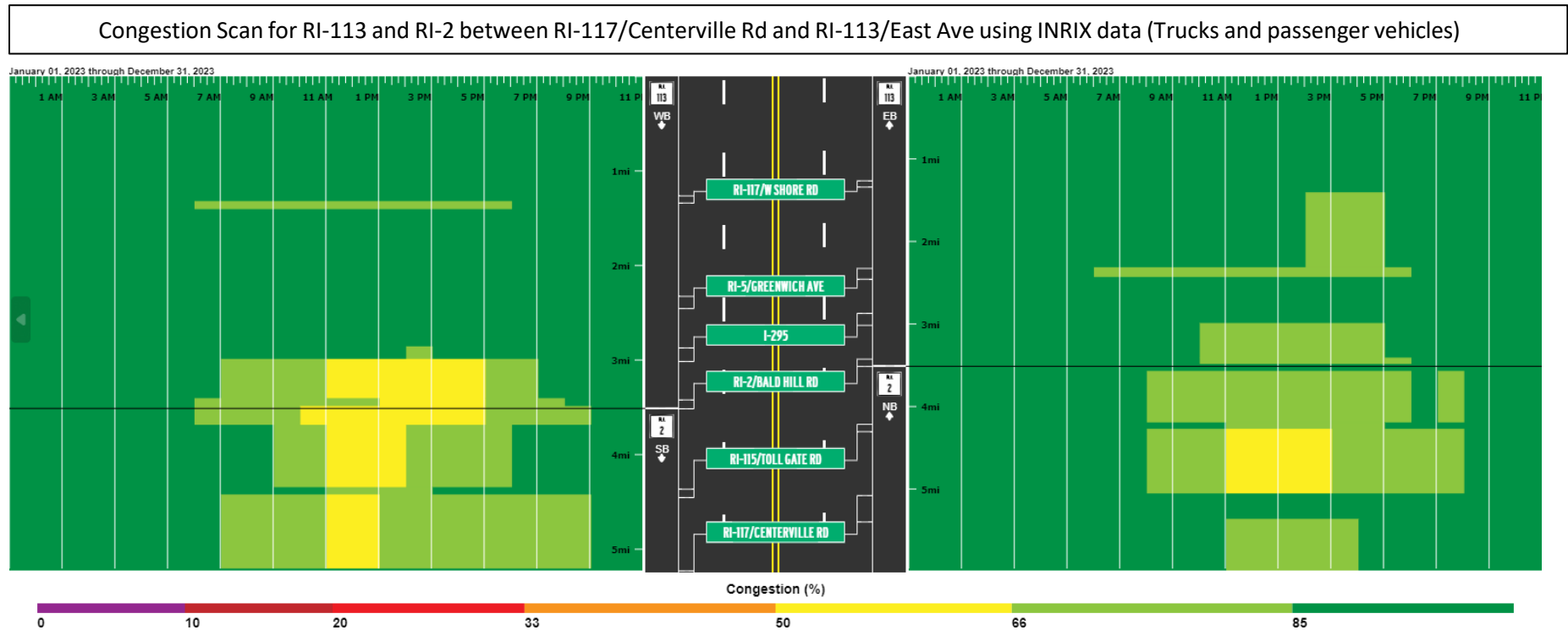


Figure 2-1: East Ave Corridor Rebuild Congestion Scan

As shown on figure 2-1, there is a moderate level of congestion, typically from the hours of 8AM to 8PM through all directions of traffic. The heaviest and longest sustained traffic appears to be near the intersection of RI-2/Bald Hill Road and RI-113 westbound which carries from mid-day until the end of the afternoon rush. There is also some moderate congestion throughout the entire stretch of RI-2 southbound. RI-113 eastbound appears to have light to moderate congestion, while RI-2 northbound between the intersection of RI-115/Toll Gate Road seems to have moderate congestion during the mid-day hours. It is important to note that this is a pre congestion scan from all of 2023 since construction is set to begin in April of 2024.

# Washington Bridge – Demolition and Replacement Project

## Background and Intervention

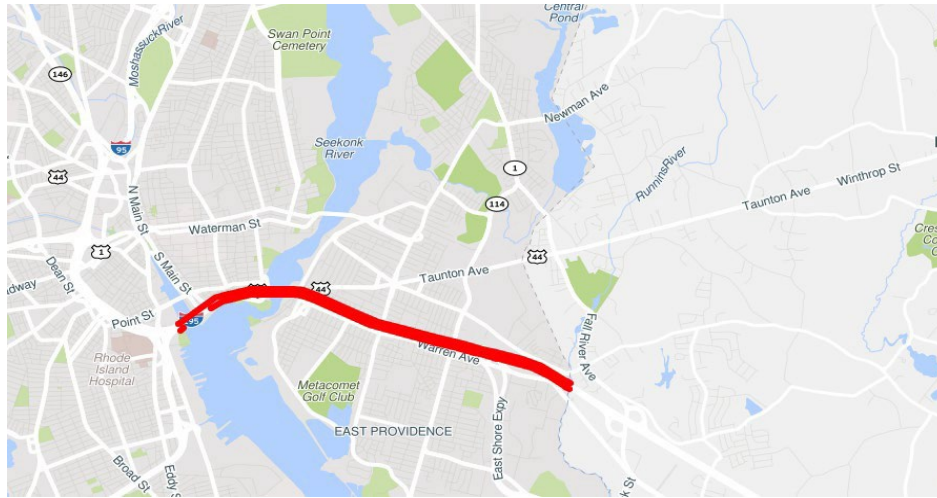


Figure 2-2: Washington Bridge Demolition and Replacement Project Study Area

In December of 2023, the finding of a critical failure of some bridge components lead to the closure of the Westbound portion of the I-195 bridge (Washington Bridge) that provides transportation for vehicles traveling from the east bay of Rhode Island and southeastern Massachusetts. This bridge is considered a critical corridor for commuters and travelers throughout the state and part of Massachusetts. Currently, the plan is to do a full demolition of the westbound bridge, which is set to be completed by April of 2025 and the full replacement is set to be completed by May of 2027<sup>3</sup>. As of May 2024, funds for the bridge (demolition, support and repairs, and replacement) have an estimated total of \$454.3 million dollars programmed for the entire project. Total funds for this project are subject to change.

Since roughly 96,000 cars travel on this bridge per day, the impact on congestion on the surrounding arteries will be significant, as the eastbound side of the bridge will carry both directions of travelers until the completion of the project. The eastbound and westbound bridges originally had 5 lanes each with right auxiliary lanes on both sides, but as of April 2024, since the westbound bridge is closed, the eastbound side is comprised of three westbound lanes and three eastbound lanes with trucks restricted to the far-right lane<sup>4</sup>. The center and left lanes are now 10 feet wide, with speed restricted to 40 mph, while the third lane will be 11 feet for trucks<sup>5</sup>. The purpose of this analysis is to observe what traffic was prior to the bridge closure and to observe what congestion will look like through all phases of the construction of the new bridge, then finally observe the impacts on surrounding areas some years after the rebuild is complete. In addition to displaying a snapshot of congestion for 2023 leading up to the closure of the westbound side in December of 2023, there is also a snapshot of congestion from the point right after the closure, up until June 4<sup>th</sup>, 2024. Displaying both timeframes will show the disparity between pre closer and post closure.

## Scan Results

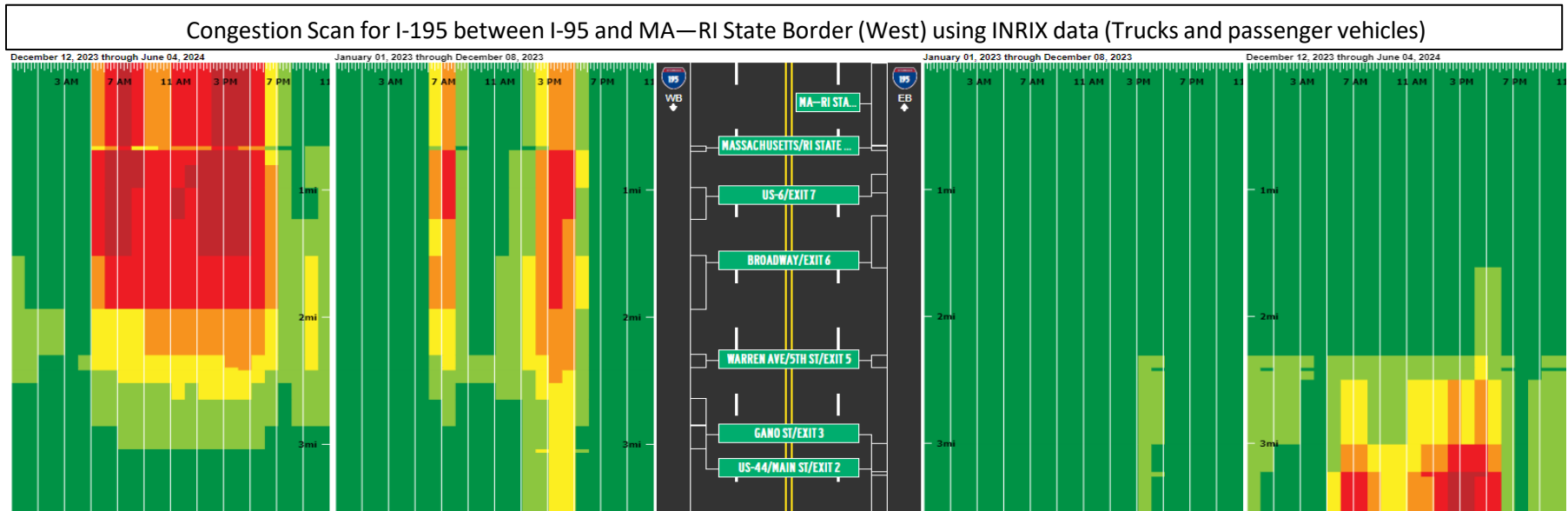


Figure 2-3: Washington Bridge Demolition and Replacement Congestion Scan

<sup>3</sup> RIDOT Quarterly Report. [https://www.dot.ri.gov/accountability/docs/2024/QR\\_Jan-Mar\\_2024\\_Insert\\_A.pdf](https://www.dot.ri.gov/accountability/docs/2024/QR_Jan-Mar_2024_Insert_A.pdf)

<sup>4</sup> <https://turnto10.com/news/washington-bridge-closure/washington-bridge-three-lane-configuration-on-eastbound-traffic-to-begin-wednesday-restripe-westbound-additional-lane-engineering-april-8-2204>

<sup>5</sup> <https://www.wpri.com/traffic/i-195-washington-bridge-closure/ridot-shifting-crossover-point-on-i-195-over-the-washington-bridge/>

As displayed on figure 2-3, I-195 westbound (2023) shows heavy congestion during the morning and afternoon rush between the RI/MA state line and exit 3. Eastbound is showing low levels of congestion throughout the entire stretch of highway, with the exception of some light congestion between exit 5 and exit 3 during the afternoon rush. For 2024, there is marked increase in congestion from 5AM to 7PM westbound from the MA – RI state border to exit 5 and also a notable increase on the eastbound side from Exit 2 to exit 5.

## Congestion Management Trends and Strategies

### Performance Measures

Given the small size of the state of Rhode Island and its geographic location, the Providence area has a large impact on the state metrics. This is due to most of the state’s population living in the Providence area, but also the relative proximity to Boston (50 miles) and Worcester (40 miles) certainly has additional impacts on congestion. When comparing Providence to other U.S. cities, Providence ranks number 22 (up from 23 in 2022) in the U.S. based on the metric of average travel time per 10 km. This represents a modest 9 second increase from the previous year<sup>6</sup>.

Performance tracking from 2022 shows moderate changes to those observed in 2021, which reflects a leveling out of congestion levels as 2022 shows a continued rebounding of congestion from the abnormally low levels in 2020 due to COVID. The metrics shown (Table 1-1A) reflect a slight improvement of conditions for most metrics from 2021, with a few metrics reflecting slightly worse conditions. Reliability of the transportation system is showing a slight worsening of conditions for interstate, network, and inclement weather reliability, while freight movement has also decreased slightly. The metrics also show a slight decrease in bottlenecks and freight bottlenecks while the total delay at these bottlenecks has shown a modest decrease from 2021 and 2019, pre-pandemic levels. Some commuter-based metrics such as commuter rail and bus ridership has shown a significant increase from 2021 levels, breaking a previous trend from 2020 where ridership levels showed a steep decline, most likely due to the large unemployment numbers and hesitancy to use public transit, both stemming from COVID. While the commuter rail and bus ridership numbers show improvement, the metrics suggest that the levels are still significantly lower than pre-COVID. Percent non-SOV travel and ferry ridership have also continued to increase from 2021. Total vehicle miles traveled are showing a modest increase. These metrics show that the trend toward “normalcy” is in full effect with many of the metrics showing smaller gains/losses from 2021 to 2022 and numbers reflecting closer to pre-pandemic conditions.

One factor that may impact the persistence of congestion in the state is the relative inaccessibility of destinations using non-car modes. There are 84% fewer jobs accessible within a 45-minute commute by transit as compared to by car.<sup>7</sup> Because of this inaccessibility, people do not feel they can feasibly switch to using transit instead of a car to get around. Even high levels of congestion will not deter drivers if they don’t have a viable alternative to turn to when driving is inconvenient. Accessibility is based on both land use and transportation options. Improving the RIPTA system through increased frequency, spread, and speeds of public transit could help to reduce driving and congestion. Additionally, congestion could be improved by state agencies and cities shaping development and growth so that destinations concentrate in denser areas that are easy to serve with public transit

### Major Corridor Analysis

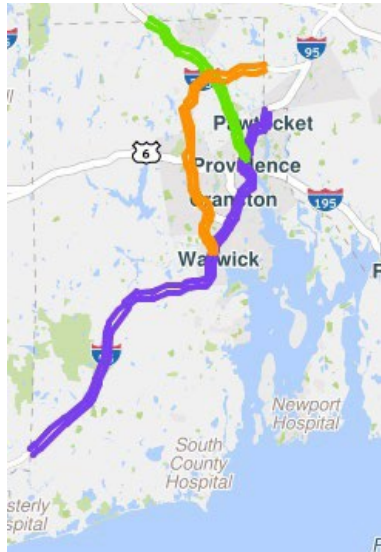


Figure 2-4: I-95, I-295, and RI-146 Corridor Study Area

Figure 2-5 provides a picture of how the major interstates in State of Rhode Island are trending. In the 2023 CMP update, three time periods were compared (May 8, 2020 to May 6, 2021, May 7, 2021 to May 6, 2022, and May 1, 2022 to May 1, 2023) along two roadways (I-95 North and Southbound and RI-146 North and Southbound) using NPMRDS personal vehicle and truck data showing Congestion percentage compared to free flow speeds. For this year's update, the periods of May 8, 2020 to May 6, 2021, May 1, 2022 to May 1, 2023 and May 1, 2023 – May 1, 2024 were analyzed to show where we are trending from 2020, when the COVID-19 pandemic had a significant impact on congestion. Also, as an addition to previous iterations of this report, I-295 is now included in this analysis, since it is one of the busiest corridors in the state.

<sup>6</sup> TomTom Traffic Index – Ranking 2023. <https://www.tomtom.com/traffic-index/ranking/?country=US>

<sup>7</sup> Ran query for “Destination accessibility by transit” and for “Destination accessibility by car” averaged for the state of Rhode Island using the Environmental Protection Agency (EPA) Smart Location Database. URL: <https://www.epa.gov/smartgrowth/smart-location-mapping#Trans45>. Accessed August 2023.

Figure 2-5 shows that the congestion percentage has increased from 20-21 to 22-23, specifically around Exit 24 on I-95 and near the RI-MA border in Woonsocket on 146 southbound. For both areas, the time period of 23-24 is showing nearly the same amounts of congestion as the previous year with a small decrease around Woonsocket. On the northbound side of I-95, there appears to be an increase in afternoon rush hour congestion from the first time period (20 -21) and the second time period (22-23) between Jefferson Blvd and Branch Ave exits. In the third time period (23-24), there seems to be a modest drop-off in congestion during the afternoon rush. There is a slight uptick in congestion in this same area for 2022 – 2023 with the exception being I-95 NB decreased slightly in the most recent time period. I-295 appears to show light levels of congestion throughout all time periods with a small exception northbound in 23-24 during the afternoon rush around exit 2 with a modest uptick in congestion from previous years.

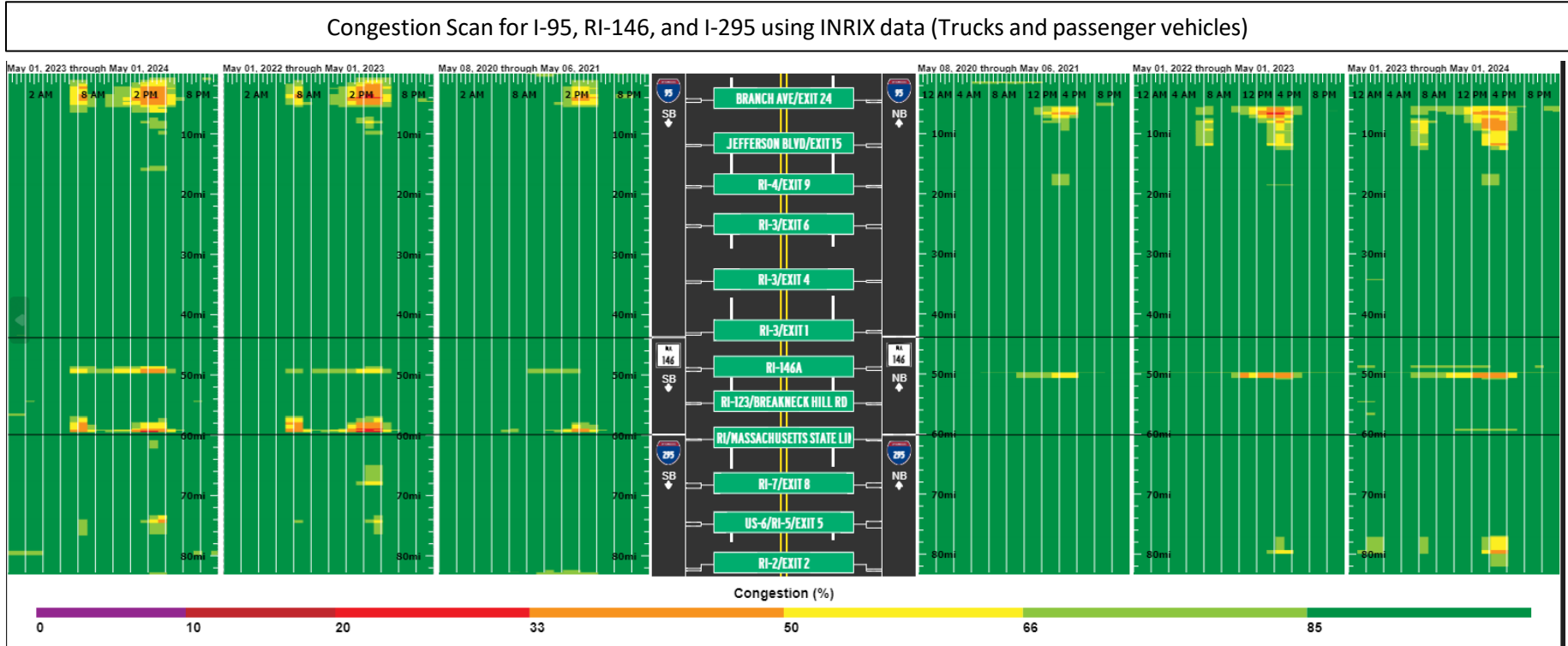


Figure 2-5: Congestion Scan of I-95, I-295, and RI-146 Corridors

## Congestion Mitigation Strategies: Research and Trends

The strategies utilized in the CMP projects are:

- New Capacity
- ITS and Operations
- Bicycle and Pedestrian
- Transit Operations
- Roadway / Mobility (Non-ITS)
- Demand Management

Research continues to evolve on the effectiveness of various congestion mitigating strategies, and few strategies have fully conclusive evidence on their effectiveness. Notably, the body of research showing that expanding road capacity is not generally effective at reducing congestion in the long run and tends to have detrimental effects on greenhouse gas emissions and air pollution, is growing every year.<sup>8,9,10,11,12</sup> One meta-analysis by Planetizen found several common congestion mitigation interventions to be either ineffective or inconclusive when examining the body of research, including road widening, self-driving cars, tunnels, public transit, higher gas prices, and improved traffic flows.<sup>13</sup> Instead, they argue that the only definitive way to reduce congestion is to reduce driving.<sup>14</sup>

Additionally, while congestion is in and of itself a cost on people's time and quality of life, there are many studies that find that some congestion mitigation interventions do not necessarily reduce carbon emissions or air pollution. The impact on the environment depends on if the project induces demand and increases VMT and depends on the makeup of the vehicle fleet. As more vehicles become more fuel efficient and even

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<sup>8</sup> Anupriya, et al. "Congestion in Cities: Can Road Capacity Expansions Provide a Solution?" *Transportation Research Part A: Policy and Practice*, vol. 174, Aug. 2023, p. 103726, <https://doi.org/10.1016/j.tra.2023.103726>.

<sup>9</sup> Kuss, Paula, and Kimberly A. Nicholas. "A Dozen Effective Interventions to Reduce Car Use in European Cities: Lessons Learned from a Meta-Analysis and Transition Management." *Case Studies on Transport Policy*, vol. 10, no. 3, 2022, pp. 1494–1513, <https://doi.org/10.1016/j.cstp.2022.02.001>.

<sup>10</sup> Sorensen, Paul, et al. "Reducing Traffic Congestion in Los Angeles." *RAND Corporation Research Brief*, 2008, <https://doi.org/10.7249/rb9385>.

<sup>11</sup> Graham, Daniel J., et al. "Quantifying Causal Effects of Road Network Capacity Expansions on Traffic Volume and Density via a Mixed Model Propensity Score Estimator." *Journal of the American Statistical Association*, vol. 109, no. 508, 2014, pp. 1440–1449, <https://doi.org/10.1080/01621459.2014.956871>.

<sup>12</sup> Hymel, Kent. "If You Build It, They Will Drive: Measuring Induced Demand for Vehicle Travel in Urban Areas." *Transport Policy*, vol. 76, 2019, pp. 57–66, <https://doi.org/10.1016/j.tranpol.2018.12.006>.

<sup>13</sup> Brasuell, James. "How Planning Fails to Solve Congestion." *Planetizen*, 20 Apr. 2022, [www.planetizen.com/features/116914-how-planning-fails-solve-congestion](http://www.planetizen.com/features/116914-how-planning-fails-solve-congestion).

<sup>14</sup> Brasuell, James. "Planning for Congestion Relief." *Planetizen*. 12 May 2022, <https://www.planetizen.com/features/117153-planning-congestion-relief>

electric, idling in congestion becomes less and less damaging to air pollution and emissions.<sup>1516</sup> This is further highlighted by the fact that FHWA's Congestion Mitigation and Air Quality program does not consider the construction of new road capacity available to single occupant vehicles as an eligible project for program funding.<sup>17</sup>

Technological tools for congestion mitigation are continuing to evolve, including intelligent transportation systems (ITS) and autonomous vehicles (AVs). ITS is "an integrated system of advanced communications technologies embedded in the transportation infrastructure and in vehicles to improve transportation safety and mobility."<sup>18</sup> USDOT has created an Intelligent Transportation Systems Joint Program Office to continue to track progress in the field as it relates to safety, congestion, sustainability, connected vehicles, and more. There is some evidence that ITS can be effective at reducing congestion.<sup>1920</sup> Autonomous vehicles are still far from full implementation, and the impacts of the technology are still unknown. Several planned features of AVs could reduce traffic congestion, such as platooning and automated re-routing. Yet other simulation studies indicate AVs could worsen congestion.<sup>2122</sup> Much of the impact of AVs depend on technological and policy decisions yet to be made. Additionally, the impact of AVs on greenhouse gas emissions is still unknown, considering the potential for induced demand as using a car becomes even easier.<sup>23</sup>

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<sup>15</sup> Handy, Susan. "Increasing Highway Capacity Unlikely

To Relieve Traffic Congestion." *National Center for Sustainable Transportation Policy Brief*. October 2015.

<sup>16</sup> Bigazzi, Alexander Y., and Miguel A. Figliozzi. "Congestion and Emissions Mitigation: A Comparison of Capacity, Demand, and Vehicle Based Strategies." *Transportation Research Part D: Transport and Environment*, vol. 17, no. 7, 2012, pp. 538–547, <https://doi.org/10.1016/j.trd.2012.06.008>.

<sup>17</sup> 23 USC 149 - Congestion Mitigation and Air Quality Improvement Program: <https://www.govinfo.gov/content/pkg/USCODE-2012-title23/html/USCODE-2012-title23-chap1-sec149.htm>

<sup>18</sup> FHWA. Improving Safety and Operations Using Low-Cost ITS Applications on Local and Rural Roads. [https://safety.fhwa.dot.gov/local\\_rural/training/fhwasa14086/its\\_apps.pdf](https://safety.fhwa.dot.gov/local_rural/training/fhwasa14086/its_apps.pdf)

<sup>19</sup> Cheng, Zhi (Aaron), et al. "Mitigating Traffic Congestion: The Role of Intelligent Transportation Systems." *Information Systems Research*, vol. 31, no. 3, 2020, pp. 653–674, <https://doi.org/10.1287/isre.2019.0894>.

<sup>20</sup> Guo, Yuhui, et al. "Could a Smart City Ameliorate Urban Traffic Congestion? A Quasi-Natural Experiment Based on a Smart City Pilot Program in China." *Sustainability*, vol. 12, no. 6, 2020, p. 2291, <https://doi.org/10.3390/su12062291>.

<sup>21</sup> Cummins, Liam, et al. "Simulating the Effectiveness of Wave Dissipation by Followerstopper Autonomous Vehicles." *Transportation Research Part C: Emerging Technologies*, vol. 123, 2021, p. 102954, <https://doi.org/10.1016/j.trc.2020.102954>. )

<sup>22</sup> Kellett, Jon, et al. "How Might Autonomous Vehicles Impact the City? The Case of Commuting to Central Adelaide." *Urban Policy and Research*, vol. 37, no. 4, 2019, pp. 442–457, <https://doi.org/10.1080/08111146.2019.1674646>.

<sup>23</sup> Massar, Moneim, et al. "Impacts of Autonomous Vehicles on Greenhouse Gas Emissions—Positive or Negative?" *International Journal of Environmental Research and Public Health*, vol. 18, no. 11, 2021, p. 5567, <https://doi.org/10.3390/ijerph18115567>.

Congestion pricing has long been found to be effective at reducing traffic congestion, particularly in urban centers.<sup>24</sup> Various forms of congestion pricing have been utilized in cities internationally for many years, but not in the United States. In June 2023, New York City cleared its final milestone with FHWA to implement congestion pricing.<sup>25</sup> This gives the rest of the nation a chance to see if the congestion mitigation intervention that has been so effective in international cities can also work in the American context.

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<sup>24</sup> Kuss, Paula, and Kimberly A. Nicholas. "A Dozen Effective Interventions to Reduce Car Use in European Cities: Lessons Learned from a Meta-Analysis and Transition Management." *Case Studies on Transport Policy*, vol. 10, no. 3, 2022, pp. 1494–1513, <https://doi.org/10.1016/j.cstp.2022.02.001>.

<sup>25</sup> Meyersohn, Nathaniel. "Congestion pricing is coming to New York City, officials announce". CNN. June 26, 2023. <https://www.cnn.com/2023/06/26/business/new-york-city-congestion-pricing/index.html#:~:text=In%20practice%2C%20it%20works%20like,to%20%2423%20during%20peak%20hours>.

## Appendix A: CMP Inventory Update

In the CMP, an inventory of over 70 projects were 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 updates to the statuses of those projects that have been made since last year in 2022. A new STIP for Federal Fiscal Years 2022 – 2031 was approved in September 2021. With the approval of the 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 over 150 projects that address congestion from the FFY 2018-2027 STIP, FFY 2022-2031 STIP, LRTP, BMP, and TMP. This updated list is provided in the following pages.

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	2023 Status Update	2024 Status Update
Bridge Group 51A	6638; 6639; 6770	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.	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	quare to Downtown Provid	Active construction, anticipated completion May 2023.	Moved to STIP ID 3132, see STIP 22-31	Moved to STIP ID 3132, see STIP 22-31
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).	Ongoing	Ongoing
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.	Included under TIPID 3350 for the Missing Move. Subject of potential grant awards, in design at this time.	Achieved substantial completion August 31st, 2021.
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		TBD	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		TBD	TBD	
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.	See STIP 22-31	See STIP 22-31
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.	Planning & Design.	Planning & Design.
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		Planning underway		
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		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.	Construction. Funding runs from FY22 to FY26 with gaps.	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		Ongoing	See STIP 22-31: STIP ID 7003	
Mobility Technology	7017	Statewide	2018	\$6.67	These funds will support planning for emerging projects such as Mobility Hubs, Frequent Transit Network, Crosstown Service, Rapid Bus, Regional Rapid Bus and facility and sustainability improvements associated with TMP implementation.	Study and Development	Other; statewide	Other	Ongoing	Ongoing; Funding available in 2023.	
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		Ongoing	See STIP 22-31: STIP ID 7003	
Passenger Facilities	7012	Statewide	2019	\$21.85	This program funds improvements to bus stops, hubs, and intermodal facilities.	Transit Operations	Other; statewide	Construction	Ongoing	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	2023 Status Update	2024 Status Update
Vanpool	7023	Statewide	2019	\$2.79	This program supports expansion of vanpooling in the State of Rhode Island.	Demand Management	Other; statewide	Other	Ongoing	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)		Active construction. Anticipated completion in September 2025.	See STIP 22-31	See STIP 22-31

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	2023 Status Update	2024 Status Update
US-6 (RI-10 to I-95)	1281	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.	2026	3.00	This line item involves resurfacing of the roadway.	Pavement - Resurfacing	BN 5		Portions constructed. Connection from Eagle Square to Down	This project will begin scoping in Fiscal Year 2026.	This project will begin scoping in Fiscal Year 2026.
RI-103, Willett Ave. (Bullocks Point Ave. to Wampanoag Trail)	1298	Barrington/East Providence	2022	10.05	This line item involves resurfacing 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			This project is currently being scoped and designed.	This project is scheduled to advertise in August 2023.	This project is now scheduled to advertise in 2024. Funding was increased in Revision 13 to the FY22-31 STIP.
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			This project is currently being scoped and designed.	This project is currently in design. This project is being coordinated with the resurfacing of US-44 under TIPIDs 9547 and 9549, sharing a PTSID of 2605N. Scheduled to advertise in August 2023.	This project is currently in construction and expected to be completed in May 2025.
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; Roadway / Mobility (non-ITS)	BN 21		This project achieved substantial completion August 31st, 2021.	Included under TIPID 3350 for the Missing Move. Subject of potential grant awards, in design at this time.	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		This project will begin scoping in Fiscal Year 2023. RIDOT's Planning Division recently evaluated conditions in the area with field reviews.	This project is currently being scoped and designed. Funding was increased in Amendment 6 to the FY22-31 STIP.	This project is expected to achieve substantial completion in September 2024.
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			This project remains in the STIP and is funded annually.	This project remains in the STIP and is funded annually. Funding was increased in Amendment 6 to the FY22-31 STIP.	This project remains in the STIP and is funded annually. Funding was increased in Amendment 6 to the FY22-31 STIP.
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			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.	This project is currently being scoped and designed. Additional funding in Amendment 5 was added through Community Project Funding.	This project is currently being scoped and designed.

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	2023 Status Update	2024 Status Update
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			This project is in Active Construction as of September 1st, 2021.	This project is in Active Construction as of September 1st, 2021. Completion is expected in August 2026.	This project's status is currently being reviewed due to bridge structure failures identified in December of 2023.
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			This project is in active construction as of December 21st, 2017. Completion is expected in November 2023.	This project is in active construction as of December 21st, 2017. Completion is expected in November 2023. Funding was increased in Amendment 6 to the FY22-31 STIP.	This project is expected to achieve substantial completion in September 2024.
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			This project is in active construction as of January 27th, 2020. Completion is expected May 2023.	This project is in active construction as of January 27th, 2020. Completion is expected August 2023. Funding was increased in Amendment 6 to the FY22-31 STIP.	This project is expected to achieve substantial completion in August 2024.
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		This project is in active construction as of July 27th, 2020. Completion is expected September 2025.	This project is in active construction as of July 27th, 2020. Completion is expected September 2025.	This project is expected to achieve substantial completion in 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			Scoping for this project will commence in 2023.	The Schedule for this project was adjusted in Amendment 6 to shift the first year of funding for this project to 2023. Scoping for this project is expected to be completed in December of 2023.	This project is currently in design with construction expected to start in 2025.

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	2023 Status Update	2024 Status Update
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			This project is in active construction as of March 24th, 2022. Completion is expected August 2026.	This project remains in active construction. Funding for this project was increased in Amendment 3 from \$147.50M to \$196.86M. Completion is expected in August 2026.	This project remains in construction with substantial completion expected in 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			This project advertised August 11th, 2021. Substantial completion is expected November 2026.	This project advertised August 11th, 2021. Substantial completion is expected November 2026.	This project is expected to be substantially complete in June 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. Pavement will be addressed on Great Road from East Butterfly Way to Mineral Spring Avenue. This line item bundles work previously programmed under TIPIDs 1346, 1348, and 9541.	Bridge and Pavement	BN 4		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.	This project will begin scoping in Fiscal Year 2025. TIP ID 9563 was consolidated into this project in Amendment 6.	This project will begin scoping in Fiscal Year 2025.
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			RIDOT is in the process of scoping this project in preparation for submission for an INFRA grant for 2022.	RIDOT is in the process of scoping this project in preparation for submission for an INFRA grant for 2023. RIDOT applied for the same grant in 2022 but was not selected. The budget for this project was increased in Amendment 6, from \$103.85M to \$115.35M.	This project is currently in design, and is expected to advertise in 2024.
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		This project will begin scoping in Fiscal Year 2027.	This project will begin scoping in Fiscal Year 2027.	This project will begin scoping in Fiscal Year 2027.
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		This project will begin scoping in Fiscal Year 2027.	This project will begin scoping in Fiscal Year 2027.	This project will begin construction 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	2023 Status Update	2024 Status Update
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		This project will begin scoping in Fiscal Year 2025.	The Department is working through and an agreement with the City of Providence on this project. Funding was increased in Amendment 6 to the FY22-31 STIP via a federal earmark.	This project is expected to start design in 2024.
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			This project will begin scoping in Fiscal Year 2022.	This project will begin active construction in 2023.	This project is in active construction with substantial completion expected in May 2025.
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			In Project Management for subrecipient oversight	No update	
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			CCRI is in design, delays with URI	No update	
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			Ongoing	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			Ongoing	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			Ongoing	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			Ongoing	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			In scoping/procurement	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			Administrative line item.	Administrative line item.	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			Administrative line item.	Administrative line item.	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			Administrative line item.	Administrative line item.	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	2023 Status Update	2024 Status Update
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			Administrative line item.	Administrative line item.	Administrative line item.
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			This project had its funding increased in Amendment 2 to the FY22-31 STIP.	This project had its funding increased in Amendment 5 to the FY22-31 STIP to account for the allocation of \$2.5M of Consolidated Rail Infrastructure and Safety Improvement (CRISI) funds via Community Project Funding and Congressionally-Directed Spending to expand intermodal and parking access at Kingston Train Station.	No updates
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 TIPID 7151, Transit Master Plan Investments, at a later date.	RIDOT Transit Program			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 TIPID 7151.	Ongoing	This funding will be allocated in accordance to the Carbon Reduction Plan issued by RIDOT.
TMC Equipment Asset Management	7508	Statewide	2022	7.15	This line item supports the regular maintainance, 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			The resources allocated to this line item were increased under Minor Amendment 2.	Ongoing	Ongoing
Mainenance Faciilites 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 and rental costs associated with park and ride facilities.	RIDOT Maintenance			Administrative line item.	Administrative line item.	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			This project received notice to proceed on December 2nd, 2019. Substantial completion is anticipated in June 2023.	This project received notice to proceed on December 2nd, 2019. Substantial completion in June 2023.	This project was substantially complete as of August 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		Notice to proceed was provided for this project on June 1st, 2021. Substantial completion is anticipated in December 2024.	Notice to proceed was provided for this project on June 1st, 2021. Substantial completion is anticipated in December 2024.	This project received additional funding in Amendment 13. This project is expected to be substantially complete in December 2024.

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	2023 Status Update	2024 Status Update
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 TIPID 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		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.	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.	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		NTP was provided for this project on December 29th, 2021. Completion is expected May 2023.	NTP was provided for this project on December 29th, 2021. Completion is expected May 2023.	This project is in active construction and is expected to be substantially complete in July 2025.
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		This project is currently being scoped and evaluated, and may be part of a future grant application under the RAISE program.	This project is currently being scoped and evaluated. In Amendment 6 to the FY22-31 STIP additional paving was bundled into this project from other projects, including TIPID 1410 (RI-117, West Shore Road from Long Street to Oakland Beach Avenue) and TIPID 1413 (RI-113, Main Avenue from RI-5 to RI-117). In addition, paving from US-1 from RI-113 Main Avenue to Coronado Road is being incorporated with local matching funds from the City of Warwick. This project will require careful timing of signals along RI-113 and RI-2 to minimize congestion during construction.	This project received the notice to proceed in March 2024 and will be entering active construction.
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		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.	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.	This project is currently in design with an expected advertising date in 2026. Additional funding was added in Revision 10 to the FY22-31 STIP.
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			This project is new to the STIP as of Minor Amendment 2.	Project is ongoing, The 2024-2025 portion of this project has been reallocated to a new TIPID 13115, Statewide Congested Corridor Upgrades (2024-2025), for execution as a separate contract in Amendment 6 to the FY22-31 STIP.	This project is complete, see TIPID 13115 for the 2024-2025 contract.
ITS Additions to Capital Projects	12117	Statewide	2022	8.50	This line item provides funding to incorporate ITS assets into capital projects. Annual additions 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			This project is new to the STIP under Amendment 2.	Ongoing	Ongoing

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	2023 Status Update	2024 Status Update
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			This project is new to the STIP under Amendment 2.	Ongoing	Ongoing
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			This project is new to the STIP under Amendment 2.	Ongoing	Ongoing
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			This project is new to the STIP under Amendment 2.	Ongoing	Ongoing
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			This project is new to the STIP under Amendment 2.	Ongoing	Ongoing
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			This project is new to the STIP under Amendment 2.	Ongoing	Ongoing
Statewide Congested Corridor Upgrades (2024-2025)	13113	Statewide	2024	4.5	This project will upgrade signal controller and detection equipment to mitigate congestion and improve air quality through signal coordination. This line item represents funding for the 2024 and 2025 contract.	Traffic Safety				This project was split from 12113 as part of Amendment 6 to the FY22-31 STIP in order to execute it as a separate contract for years 2024 through 2025.	This project is expected to be advertising in June 2024.

2040 LRTP												
Project Name	STIP ID	LRTP PoP#	Location	Description	Intervention Type	Addresses Top Bottlenecks/Corridors?	Project Status/Design Status	Notes	2021 Status Update	2022 Status Update	2023 Status Update	2024 Status Update
Route 4 and I-95 Interchange Connectivity	3350			Connect I-95N to Rt 4 S, Rt 4N to I-95S	Roadway	Other	Planning	Portions constructed. Connection from Eagle Square to Downtown Providence will commence construction in late 2023.	Design	Design, candidate for the next round of INFRA grants. Includes improvements to freight connectivity for Port of Quonset.	Design	Secured \$81 million INFRA Grant
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			West-bound I-195 Washington bridge is under construction (TIP ID 3082), includes repairs to Washington Bridge, restriping, and repaving from Providence line to Broadway in East Providence. No projects for eastbound at that interchange?	Planning
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.	Construction to begin in late summer early fall 2023	Construction
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.	Design	Secured \$81 million INFRA Grant
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			Unfunded.	Planning
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			Unfunded.	Planning
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			Unfunded.	Planning
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			Under construction	Construction
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		Under construction	Construction
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		Under construction	Construction
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			(TIP ID 3132)Widening of the Route 37 West off-ramp onto Pontiac Avenue (Bridge #126401), and signal improvements to improve traffic flow. Under construction in 2023	Construction

2040 LRTP												
Project Name	STIP ID	LRTP PoP#	Location	Description	Intervention Type	Addresses Top Bottlenecks/Corridors?	Project Status/ Design Status	Notes	2021 Status Update	2022 Status Update	2023 Status Update	2024 Status 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			Unfunded.	Planning
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			Unfunded.	Planning
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			Unfunded.	Planning
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			Unfunded.	Planning
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			Unfunded.	Planning
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				unknown
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				unknown
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			Pell Bridge: Shared use path from Stop & Shop Plaza to Bridge Street along America's Cup Avenue is under construction, scheduled for completion in 2024. the new JT Connell and JT Connell Connector Road intersection was opened creating a straight roadway connection from Farewell Street to Admiral Kalbfus. Bridge demolition and rehabilitation work continued for the three overpasses along Route 138 (Third Street, Newport Secondary and JT Connell). The rest is unfunded?	Pell Bridge Phase 1 is now complete and Phase 2 is under contrctiion. Phase 1 consisted up implementing mulimodal access along JT Connell and Coddington highways. Phase 2 set to be complete by end of 2024.
Traffic Signal Optimization in Aquidneck Island				Coordinate Island traffic signals along major corridors.	Technology	Other		Aquidneck Island Transportation Study (2011) Page ES-8			Not sure - under TIP 9601 there was signal work programmed in 2022 on aquidneck. Not sure if it got done or if it covers this project	Work on the pell bridge ramps includes traffic signal which occurred on 1/3/23. These changes were mae on Admiral Kalbfus Rd Eastbound and Westbound. There were also new signals implemented on the intersection of the JT Connellconecotr where it meets with Halsey boulevard.

2040 LRTP												
Project Name	STIP ID	LRTP PoP#	Location	Description	Intervention Type	Addresses Top Bottlenecks/Corridors?	Project Status/Design Status	Notes	2021 Status Update	2022 Status Update	2023 Status Update	2024 Status 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			Unfunded	unknown
Burma Road Improvements				Construct new Burma Road connections to the north and south.	Roadway	Other		Aquidneck Island Transportation Study (2011) Page ES-9			Unfunded	unknown
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			In design as of 2022	in November of 2023, final design was approved and construction was set to be initiated in spring of 2024. As of April, 2024, the process is being paused. No indication as to when the project will start up again at this time.
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				Planning
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				Planning
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				Planning
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				Planning
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				Planning
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				Planning
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				Planning
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				Planning
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				Planning
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			Feasibility study completed in March 2023, terminus reduced to Westerly rather than Providence.	No changes
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.	Under construction	Under construction. Set to be finished in 2026.
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		Programmed under 2024 Intersection & Crosswalk improvements in the STIP under TIPID 5378.		Under construction
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 changes

2040 LRTP												
Project Name	STIP ID	LRTP PoP#	Location	Description	Intervention Type	Addresses Top Bottlenecks/Corridors?	Project Status/Design Status	Notes	2021 Status Update	2022 Status Update	2023 Status Update	2024 Status 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		Not programmed in the STIP.	Not programmed in the STIP.	unknown
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		UNK		No changes

**Bicycle Master Plan**

Project Name	Municipality	Description/Location	Intervention Type	Notes	2021 Status Update	2022 Status Update	2023 Status Update	2024 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	Also, Providence Great Streets Plan			Portions constructed. Connection from Eagle Square to Downtown Providence will commence construction in late 2023.	Under Construction, set to be completed fall of 2024.
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	Also, Providence Great Streets Plan			Under Construction (in part)	Under Construction (in part)
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	Also, Providence Great Streets Plan			Unfunded.	No changes
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	Also, Providence Great Streets Plan			Unfunded.	No changes
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	Also, Providence Great Streets Plan			Unfunded.	No changes

Transit Master Plan									
Project Name	STIP ID	Municipality	Description/ Location	Intervention Type	Notes	2021 Status Update	2022 Status Update	2023 Status Update	2024 Status Update
Transit priority.		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.	Smith	Transit Operations	Portions constructed. Connection from Eagle Square to Downtown Providence			In discussions with RIDOT	No Changes
Transit priority.		Providence	Chalkstone	Transit Operations			Cancelled	Cancelled	Cancelled
TMP Bus on shoulder at Rt. 37 and Thurbers.		Providence/ Cranston/ Warwick	I-95	Transit Operations	Potential impacts to other Rt. 37 bottlenecks		RIDOT Task Order	To be determined	To be determined
TMP Bus on shoulder at I-295 and Rt. 4.		Warwick	I-95	Transit Operations			RIDOT Task Order	To be determined	To be determined
TMP Bus on shoulder at 401 and Merge.		Warwick	I-95_Rt. 4	Transit Operations			RIDOT Task Order	To be determined	To be determined
TMP Bus on shoulder Lafayette and W. Allenton		North Kingstown	Rt. 4	Transit Operations			RIDOT Task Order	To be determined	To be determined
TMP Bus on shoulder Broadway and S. Main.		Providence/ East Providence	I-195	Transit Operations			RIDOT Task Order	To be determined	To be determined
TMP Bus on shoulder at Broadway and E. Bridge End.		Providence/ East Providence	Henderson	Transit Operations			RIDOT Task Order	To be determined	To be determined
TMP Bus on shoulder at N Broadway and Pawtucket.		Providence/ East Providence	Henderson ROW	Transit Operations			RIDOT Task Order	To be determined	To be determined
TMP Bus on shoulder at Mineral Spring and I-95.		Providence/ North Providence	Rt. 146	Transit Operations			RIDOT Task Order	Bus on shoulder being installed on Route 146 reconstruction project (southbound)	Bus on shoulder being installed on Route 146 reconstruction project (southbound)
TMP Bus on shoulder at Rt. 99 and Sayles Hill.		Lincoln/North Smithfield	Rt. 146	Transit Operations			RIDOT Task Order		
TMP Bus on shoulder at Rt. 146A and Sayles Hill.		Lincoln/North Smithfield	Rt. 146	Transit Operations			RIDOT Task Order		
TMP Bus on shoulder Rt. 6 and I-95.		Providence	Routes 6 to 10	Transit Operations			RIDOT Task Order	Unknown	Unknown
Transit priority at Bev. Hill and Main.		Pawtucket	Prospect	Transit Operations			RIDOT Task Order	To be determined	To be determined
Transit priority at Prospect and Prospect.		Pawtucket	School-Bev. Hill	Transit Operations			RIDOT Task Order	To be determined	To be determined
Transit priority at Rt. 113 and Division.		Warwick	Bald Hill	Transit Operations			RIDOT Task Order	To be determined	To be determined

Transit Master Plan									
Project Name	STIP ID	Municipality	Description/ Location	Intervention Type	Notes	2021 Status Update	2022 Status Update	2023 Status Update	2024 Status Update
Transit priority at Sandy and Broad.		Cranston/Warwick	Warwick	Transit Operations			RIDOT Task Order	To be determined	To be determined
Transit priority at Warwick and Airport.		Warwick	Post	Transit Operations			RIDOT Task Order	To be determined	To be determined
Transit priority N. Main and Thayer.		Providence	Bus Tunnel	Transit Operations	Already in service.		Planning underway for the tunnel	Substantial Planning completed	Paused
Transit priority at Main and Cumberland.		Woonsocket	Social-Clinton	Transit Operations			Has not started	Has not started	Has not started
Transit priority at Rt. 6 and Killingly.		Providence	Hartford	Transit Operations			Cancelled	Cancelled	Cancelled
Transit priority at 6-10 and Dave Gavitt.		Providence	Westminster	Transit Operations			To be determined	To be determined	To be determined
Transit priority at KP and Pawtucket.		Providence/Pawtucket	N Main	Transit Operations			In service	In service	In service
Transit priority at 6-10 and Empire.		Providence	Broadway	Transit Operations			Cancelled	Cancelled	Cancelled
Transit priority at CCRI and Dave Gavitt.		Providence/Cranston/Warwick	Elmwood-Reservoir	Transit Operations			To be determined	To be determined	To be determined
Transit priority at CCRI and CCRI.		Providence/Cranston/Warwick	113	Transit Operations			To be determined	To be determined	To be determined
Transit priority at CCRI and CCRI.	TBD	Providence/Cranston/Warwick	113	Transit Operations			To be determined	To be determined	To be determined
Transit priority at CCRI and Greenwich and adding crosstown service.		Cranston	Park	Transit Operations			Has not started	Has not started	Has not started
TMP Park and Rides at Warwick and Cranston.		Johnston	I-295 and U.S. 6	Transit Operations			Has not started	Has not started	Has not started
TMP Park and Rides at RI-146 and Smithfield Road.		North Smithfield	RI-146A and Smithfield Rd	Transit Operations			Has not started	Has not started	Has not started
TMP Park and Rides.		Lincoln	CCRI	Transit Operations			Has not started	Has not started	Has not started
TMP Park and Rides.		Burrillville	Pascoag	Transit Operations			Has not started	Has not started	Has not started
TMP Park and Rides.		Portsmouth	Mount Hope Bridge	Transit Operations			Has not started	Has not started	Has not started
BRT.	7020	Providence/Cranston/Warwick	Providence-CCRI Warwick via T.F. Green	Transit Operations		Study and Development	Study and Development	Procurement of Professional Services	HCT Feasibility Study
Light Rail Transit/BRT.	7017	Central Falls to Warwick	Central Falls-CCRI Warwick	Transit Operations		Study and Development	Study and Development	Procurement of Professional Services	HCT Feasibility Study
Rapid Bus/BRT/LRT.		Providence	R-Line Broad St—N Main St	Transit Operations			Awaiting RAISE 2022 outcome	Awaiting RAISE 2023 Outcome	FY 2023 RAISE award going through PGA process
Rapid Bus.		Providence/Cranston/Warwick	Elmwood Ave—T.F. Green Airport	Transit Operations			Awaiting RAISE 2022 outcome	Awaiting RAISE 2023 Outcome	FY 2023 RAISE award going through PGA process
Rapid Bus.		Providence, North Providence, Johnston	Broadway—Manton	Transit Operations			Awaiting RAISE 2022 outcome	Awaiting RAISE 2023 Outcome	FY 2023 RAISE award going through PGA process
Rapid Bus.		Providence	Chalkstone Avenue	Transit Operations			Awaiting RAISE 2022 outcome	Awaiting RAISE 2023 Outcome	FY 2023 RAISE award going through PGA process
Rapid Bus.		Providence, East Providence, Pawtucket	Beverage Hill Ave—East Providence	Transit Operations			Awaiting RAISE 2022 outcome	Awaiting RAISE 2023 Outcome	FY 2023 RAISE award going through PGA process

Transit Master Plan

Project Name	STIP ID	Municipality	Description/ Location	Intervention Type	Notes	2021 Status Update	2022 Status Update	2023 Status Update	2024 Status Update
Rapid Bus.		Pawtucket, Providence, Cranston	Attleboro-Pocasset/Dyer Ave via KP	Transit Operations			Awaiting RAISE 2022 outcome	Awaiting RAISE 2023 Outcome	FY 2023 RAISE award going through PGA process
Rapid Bus.		Providence to Cranston	Cranston Street	Transit Operations			Awaiting RAISE 2022 outcome	Awaiting RAISE 2023 Outcome	FY 2023 RAISE award going through PGA process
Regional Rapid.		Providence to Newport (West)	West Bay	Transit Operations			Has not started	Has not started	Has not started
Regional Rapid.		Providence to Woonsocket	Lincoln—Woonsocket	Transit Operations			Has not started	Has not started	Has not started
Regional Rapid.		Providence to Newport (East)	Providence—Newport	Transit Operations			Has not started	Has not started	Has not started
Regional Rapid.		Providence to Narragansett	URI—Galilee	Transit Operations			Has not started	Has not started	Has not started
Transit Emphasis Corridor.		Providence to East Providence	East Side—Brown to Pawtucket Ave (EP)	Transit Operations			Has not started	Has not started	Has not started
Transit Emphasis Corridor.		Providence	Olneyville to Downtown via Broadway	Transit Operations			Has not started	Has not started	Has not started
Intercity Rail.	NA	Providence	Amtrak Service To T.F. Green Airport	Transit Operations			RIDOT Transit	RIDOT Transit	RIDOT Transit
Intercity Rail.	NA	Providence	Increase Rail Service Frequency Boston—Providence	Transit Operations			RIDOT Transit	RIDOT Transit	RIDOT Transit

Completed Projects											
Project Name	STIP ID	Location	Year Funded	Amount (\$M)	Description	Intervention Type	Addresses Top Bottlenecks/Corridors?	2021 Status Update	2022 Status Update	2023 Status Update	2024 Status Update
Two Mile Corner	1356	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.	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	Eagle Square to Downtown Providence w	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		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		Completed December 11th, 2018.		
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		Completed.		
Pell Bridge Ramps, Phase 1	1364	Middletown/Newport	2022	3.5	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		This project achieved substantial completion August 31st, 2021.		
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		Completed		
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.	Substantial Completion achieved January 2023.	
Transit priority Goff and Roosevelt.		Pawtucket	Exchange	Transit Operations	Other	Under development.		Under construction	Completed		
Transit priority at Providence Station and Point.		Providence	Downtown Transit Connector	Transit Operations	Other	Under development.	DTC in service	DTC in service	Completed		
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			Substantially completed. Construction completed on Broad Street 2-way protected cycle track in 2021. Unprotected bike lanes on Pine/Friendship, and a two-way protected cycle track on Clifford Street (completed in 2019) connect to Downtown. Empire Street Bike lane connects to Fountain Street (completed in 2021).			
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		Construction continues with a completion date expected in 2022. Combined construction project with 5011.	Substantial Completion achieved January 2023.	