System Performance Report

Long Range Transportation Plan



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System Performance Report

The US Department of Transportation – Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) requires that states measure the performance of the transportation system in several areas. These include safety, statewide and non-metropolitan planning, highway asset management, bridge and pavement condition, performance of the national highway system, freight systems, and congestion management and air quality measures.

The state long-range transportation plan must describe the performance measures and targets that states and Metropolitan Planning Organizations (MPOs) use to assess system performance and progress in achieving the performance targets.

Introduction Performance Assessment of 2037 Transportation Plan

This is the System Performance Report for Transportation 2037, the Long-Range Transportation Plan (LRTP) for the State of Rhode Island. Transportation 2037 was originally adopted in August 2008 as Transportation 2030. In 2012, the plan was updated and the planning horizon extended to 2035. The plan was updated again in 2017 and the planning horizon extended to 2037. Transportation 2037 will be replaced by Transportation 2040 (RI Moving Forward).

In preparation of Transportation 2040, this system performance evaluation is being undertaken with the purpose of (1) describing progress toward achieving performance goals and (2) determining which performance measures to carry forward in RI Moving Forward. When evaluating performance, an attempt was made to collect the best possible data. In certain cases, data was not available to provide an assessment of performance. Consultation with sister agencies, Rhode Island Department of Transportation and Rhode Island Public Transit Authority, were conducted as part of the analysis.

The following designations were used:

- Data not available
- Target met
- Target not met

Transportation 2037 Performance Measures and Targets

In total, 57 PMs were defined in Transportation 2037, of which three referred to other performance measures in a different subject area (e.g. economic development measure ED.4.b refers to Freight, and references highway performance measures relating to congestion and infrastructure condition). The performance measures as labelled below (e.g. B.4.a) correspond to the label referenced in Transportation 2037.

Transportation 2037 established performance measures for the following categories:

- > Bicycles
- Economic Development
- Emergency Response
- Environment
- Equity
- > Finance
- > Highway
- > Intermodal Transportation
- > Land Use & Travel Corridors
- > Pedestrians
- > Planning
- > Safety
- > Public Transit

In addition, Transportation 2037 included policies and strategies for Design, but did not set performance measures.

Bicycle

B.4.a: Increase mode share of bicycle commuters [included in "other" as defined by US Census] from 1.0% to 1.2% in 2010, 1.5% in 2020 and 1.7% in 2030.

This PM is intended to track bicycle commuting. Rather than reporting on "other means" to work as described by the performance measure, the share of bicycle commuting is reported since this is more precise. This was also done to align with the census reported data. *The baseline, targets, and milestone benchmarks have been adjusted accordingly.*

Source: American Community Survey, 5-Year Estimates. US Decennial Census

Baseline Methodology: 2000 Census Data reporting

Baseline:

2000 Census
0.3%

Targets:

2010	2020	2030
0.36%	0.45%	0.50%
[20% increase over 2000]	0] [25% increase over 2010] [13% increase o	

Benchmark Methodology: 2017 American Community Survey 5-Year Estimate data (2006-2010 and 2013-2017) for Rhode Island.

Benchmarks:

2010 ACS	2017 ACS
0.4%	0.4%

PM Status: *Target met (2010)*. Commute to work by bicycle means has increased in Rhode Island in the last few decades. Bike facilities have been expanded and now provide greater opportunity to commute to and from several urban areas within the state. Based on the latest data, the 2020 target could be achieved. Bicycle commuter mode share will be tracked as part of the Bicycle Mobility Plan. Percent of non-Single Occupancy Vehicle (non-SOV) will be measured as a component of Transportation 2040.

B.4.b: Complete the RI portion of the East Coast Greenway (25 Miles by 2015)

The East Coast Greenway is intended to be the nation's longest continuous biking and walking route, linking Maine to Florida. It is described as a 3,000-mile protected biking and walking route.

Source: RIDOA, Office of Statewide Planning

Baseline Methodology: GIS analysis of completed and remaining portions of the greenway.

Baseline:

2008	
NA	

Targets:

2015
25 miles (greenway
completion)

Benchmark Methodology: GIS analysis of completed and remaining portions of the greenway.

Benchmarks:

2018	
32.5	

PM Status: *Target met.* According to the East Coast Greenway website, 63% (32.5 miles) of the 51-mile designated greenway route in Rhode Island is developed ("miles of protected greenway"). Portions of the Greenway that are on-road are planned for improvement, including the Trestle Trail in Coventry, and on-road segments in Pawtucket, Providence, and Woonsocket. While the greenway is yet to be completed, 25 miles in Rhode Island have been completed as of 2015.

B.4.c: Complete the 200-mile integrated statewide bicycle system as recommended in the Greenspace and Greenways Element of the State Guide Plan by 2030.

Source: RIDOA, Division of Statewide Planning

Baseline Methodology: No value provided.

Baseline:

2008	
NA	

Targets:



Benchmark Methodology: Statewide Bicycle Mobility Plan, including shared use paths, separated/buffered bike lanes and standard bike lanes. This accounting does not include rideable road shoulders.

Benchmarks:



PM Status: *Target not met.* The Greenspace and Greenways plan was adopted in 1994. Large portions of the network shown in the 1994 plan have not yet been constructed; however, significant planning efforts have taken place since then. To date, approximately 100 miles have been built, 75 of which are shared-use paths.

Economic Development

ED.4.a: Recruit one new college or university per year for 5 years for RIPTA's University Pass Program

The University Pass Program allows students at participating schools to get free or reduced fare transit access. Students may use their student ID or purchase reduced fare products on campus, depending on the school.

Source: RIPTA

Baseline Methodology: RIPTA website

Baseline:

2012	
n/a	

Targets:



Benchmarks:

2018	
9 colleges/universities	

Status: *Target not met.* Nine colleges/universities currently participate in the U-Pass program according to RIPTA's website (Brown University, Bryant University, Community College of Rhode Island, Johnson & Wales University, Providence College, Rhode Island College, Rhode Island School of Design, Salve Regina University and University of Rhode Island). There are currently twelve higher education institutions that could participate. Non-participating institutions include the Naval War College, New England Institute of Technology and Roger Williams University.

Note: there is no Performance Measure ED.4.b.

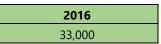
ED.4.c: Increase Providence-Newport ferry ridership by 3% per year.

Ferry service between Providence and Newport began in 2016. It primarily provides leisure trips between India Point Park and Newport Marina.

Source: RIDOT Office of Intermodal Planning

Baseline Methodology: RIDOT Quarterly Report, Q4 2016 indicated that the Providence-Newport ferry carried "more than 33,000 people in its opening summer season" of 2016.

Baseline:



Target Methodology: An annual 3% growth factor was calculated to determine what ridership would need to be in 2018 to be "on track" for 3% growth.

Targets:

2017	2018
33,990	35,010

Benchmarking Methodology: RIDOT Quarterly Report, Q4 2018.

Benchmarks:

2017	2018
43,068	43,100

PM Status: *Target met.* Ridership on the Providence to Newport ferry has continued to increase in subsequent years of operation. Ferry service has also expanded to serve the Town of Bristol.

ED.4.d: Increase summer ridership on RIPTA Route 67 (Newport mansions). Set baseline when new farebox system is installed.

Route 67 provides access from the Newport Gateway Transit Center and Newport's historic mansions – a heavy tourist draw. Using this service decreases private vehicle trips, congestion and parking issues.

Source: RIPTA

Baseline Methodology: RIPTA Route 67 ridership data.

Baseline: UNAVAILABLE

Target: Year-over-year growth in ridership

Benchmarking Methodology: RIPTA Route 67 ridership data, June-August.

Benchmarks:

2014	2015	2016	2017	
45,337	51,569	52,863	43,167	

PM Status: *Data not available*. RIPTA data shows summer ridership growth from 2014 to 2016, but this was down significantly for 2017 to a level below the 2014 ridership. Additional data is required for the Transportation 2037 baseline year (2012) to determine whether a longer-term trend exists.

Emergency Response

ER.4.a: Improve incident clearance time on Interstate Highways from an average of 40 minutes in 2008 to 38 minutes in 2010, 35 minutes in 2020 and 30 minutes in 2030.

Incident clearance time refers to the total time from the report of an incident to the time the last vehicle clears the roadway. Incident response may include a highway incidence response team, state patrol officers, emergency services and towing services.

Source: RIDOT Office of Performance Management

Baseline Methodology: RIDOT Office of Performance Management data.

Baseline:

2008
40 minutes
40 111114(65

Targets:

2010	2020	2030
38 minutes	35 minutes	30 minutes

Benchmarking Methodology: RIDOT Office of Performance Management data.

Benchmarks:

2010	2018
29	29 minutes

PM Status: *Target met.* Incident clearance time has easily beaten the targets set in the original plan. Reporting of incidents has improved greatly over the intervening years, something that could well have greatly reduced apparent incident clearance time. Reducing incident clearance time is an important part of the proper functioning of the state transportation operational system and will be tracked independent of highway performance metrics in Transportation 2040.

ER.4.b: Primary routes to all hospitals with emergency care facilities should function at Level of Service C or better by 2015.

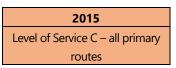
Level of Service (LOS) is measure used to relate the quality of motor vehicle traffic. It ranges from Level of Service A (free flowing traffic) to Level of Service F (forced or breakdown flow). LOS C refers to stable flow, at or near free flow.

Source: Historical traffic count data.

Baseline Methodology: LOS analysis of primary routes using baseline year traffic data.

Baseline: UNAVAILABLE

Targets:



Benchmarking Methodology: LOS analysis of primary routes using 2015 and more recent data.

Benchmarks: UNAVAILABLE

PM Status: *Data not available*. This metric dates back to the LRTP created in 2000, and has always been problematic. At a minimum, establishing this metric would require defining what specific road sections are involved, their legal speed limit, and tracking their average historic travel time from 2000 to the present. In addition, most FHWA recommended estimated of Level of Service require an understanding of peak period travel flows.

Environment

EN.4.a: Mode Split – Reduction in Drive Alone Trips, Growth in Carpool, Walk and Other Trips

The US Census tracks the journey to work trip. It does not include other types of travel, but the journey to work is the largest and most consistent trip purpose for the US population. Modal groupings represent choices made in drafting of original 2000 LRTP.

Source: American Community Survey, 5-Year Estimates. US Decennial Census.

Baseline Methodology: Census Data reporting

Baseline (2000):

Drive Alone	Carpool	Walk/Work from	Other (Bicycle, Taxi,
		Home	Motorcycle, Other)
80%	10.4%	6.1%	1%

Targets:

Year	Drive Alone	Carpool	Walk/Work from	Other (Bicycle, Taxi,
			Home	Motorcycle, Other)
2010	79%	10.6%	6.4%	1.2%
2020	78%	10.9%	6.6%	1.5%
2030	77.1%	11.1%	6.9%	1.7%

Benchmarking Methodology: American Community Survey, 5-Year Estimates

Benchmarks:

2010 American Community Survey

Drive Alone	Carpool	Walk/Work from Home	Other (Bicycle, Taxi, Motorcycle, Other)
80.4	8.7%	6.8%	1.4%

2017 American Community Survey

Drive Alone	Carpool	Walk/Work from Home	Other (Bicycle, Taxi, Motorcycle, Other)
79.8	8.6%	7.7%	1.3%

PM Status:

EN.4.a.1: Drive alone: Target not met.

EN.4.a.2: Carpool: Target not met.

EN.4.a.3: Walk/Work from Home: Target met.

EN.4.a.4: Other: Target met.

Data shows that drive alone trips were slightly higher in 2010 than targeted and carpooling was significantly less than what was targeted. 2017 data demonstrates that both measures continue to lag behind targets. Meanwhile, walk/work from home and other trips are ahead of 2010 targets (walk/work from home has exceeded 2030 targets, in fact). The other category shows some decrease between 2010 and 2017, though this is inside the margin of error for the American Community Survey.

EN.4.c: Meet reasonable further progress goals for VOC and NOx emissions; attain the 8-hour [ozone] standard of 0.075 parts per million; continue attainment of all other National Ambient Air Quality Standards (NAAQS).

Reasonable further progress toward goals for volatile organic chemicals (VOCs) and nitrogen oxides (NOx) are not defined.

NAAQS are set by the US Environmental Protection Agency. The NAAQS ozone rule was revised to 0.070 ppm in 2015. Ozone is known to reduce lung function and increase respiratory symptoms, thereby aggravating asthma or other respiratory conditions. NAAQS standards include an average monitoring time for each pollutant, as well as primary and secondary standards. Only fine particulate matter

In addition to ozone, NAAQS includes standards for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), particulate pollution (PM₁₀), fine particulate matter (PM_{2.5}) and sulfur dioxide (SO₂).

Source: RIDEM

Baseline: Year not specified

NAAQS Targets:

POLLUTANT (links to historical tables of NAAQS reviews)	AVERAGING TIME	PRIMARY STANDARD	SECONDARY STANDARD
<u>Sulfur Dioxide (SO₂)</u>	3-Hour ^A	None	0.5 ppm (1300 µg/m ³)
	1-Hour ⁸	0.075 ppm (75 ppb)	None
Carbon Monoxide (CO)	8-Hour ⁴	9 ppm	None
our bon monoxide (ob)	1-Hour ^A	35 ppm	None
<u>Ozone (O3)</u>	8-Hour ^c	0.070 ppm (70 ppb)	Same as Primary Standard
Nitrogen Dioxide (NO2)	Annual Arithmetic Mean	0.053 ppm (53 ppb)	Same as Primary Standard
	1-Hour ^D	100 ppb	None
Particulate Matter (PM10)	24-Hour ^E	150 µg/m³	Same as Primary Standard
Particulate Matter (PM23)	Annual Arithmetic Mean ^F	12.0 µg/m³	15.0 µg/m³
	24-Hour ^G	35 µg/m³	Same as Primary Standard
<u>Lead (Pb)</u>	Rolling 3-Month Average ^H	0.15 µg/m³	Same as Primary Standard

Primary standards protect against adverse health effects.

Secondary standards protect against welfare effects such as damage to crops, vegetation, and buildings.

A Not to be exceeded more than once a year.

B A rule revoking the annual and 24-hour SO2 NAAQS and promulgating a new 1-hour SO2 NAAQS was signed on June 2, 2010. To attain the 1-hour NAAQS, the 3-year average of the 99th percentile of the daily maximum 1hour average SO2 level at each monitor must not exceed 75 ppb.

C The ozone NAAQS is violated when the average of the 4th highest daily eight-hour concentration measured in 3 consecutive years exceeds 0.070 ppm (70 ppb). The 0.070 ppm NAAQS became effective December 28, 2015.

- D To attain the 1-hour NO2 NAAOS, effective January 22, 2010, the 3-year average of the 98th percentile of the daily maximum 1-hour average NO2 concentration at each monitor must not exceed 100 ppb.
- E To attain the PM10 standard, the 24-hour concentration at each site must not exceed 150 μg/m³ more than once per year, on average over 3 years.

F The primary annual average PM2.5 NAAQS was revised on December 10, 2012. The secondary NAAQS was not changed. To attain the PM2.5 annual standard, the 3-year average of the weighted annual means of the 24-hour concentrations must not exceed the NAAQS value.

G To attain the PM2.5 24-hour standard, the 3-year average of the 98th percentile of 24-hour concentrations must not exceed 35 µg/m3.

- H On October 15, 2008, the Pb NAAQS was changed to 0.15 μg/m3 as a rolling 3-month average, not to be exceeded in a 3-year period.
- µg/m³ = micrograms per cubic meter mg/m³ = milligrams per cubic meter ppb = parts per billion ppm = parts per million

Benchmarking Methodology: RIDEM 2018 Annual Monitoring Network Plan

Benchmarks 2017

Ozone	SO ₂	со	NO ₂	PM ₁₀	PM _{2.5}	PB
0.071 ppm	6 ppb (1-	1.6 ppm	58 ppm	38 µg/m³	21 µg/m3	See below
	hr)	(8-hr)	(1-hr)	(24-hr)	(24-hr)	
		2.6 ppm			8.3 µg/m3	
		(1-hr)			(1-hr)	

PM Status:

EN.4.c.1 Ozone – *Target met* (based on NAAQS in effect when Transportation 2037 was written).

The most recent data for 2015-2017 show an average for three monitoring stations of 0.071 ppm O_3 for the period from 2015-2017. This is above the current NAAQS standard of 0.070. However, the most recent communication from EPA referenced in the 2018 monitoring report shows that all counties in Rhode Island were designated as in attainment/unclassifiable based on 2014-2016 data (average 0.069 ppm). Values for 2015-2017 show an increase from a previous year-over-year decline since the 2011-2013 reporting period. Note that the most recent reported ozone levels for all three monitoring sites meet the goal from Transportation 2037 of 0.075 ppm, the NAAQS standard when that original performance measure was written.

EN.4.c.2 Carbon Monoxide (CO) – Target met.

The benchmark value above is for a near-road monitoring site adjacent to I-95, the higher of two sites. CO levels meet NAAQS. The CO NAAQS has not been exceeded in Rhode Island since 1984. Since 2001, all CO levels recorded in Rhode Island have been in EPA's *Good* category of the air quality index.

EN.4.c.3 Sulfur Dioxide (SO₂) – Target met.

Benchmark values meet NAAQS. The SO₂ NAAQS has never been exceeded in the state. The benchmark value above is from a Brown University monitoring site, the higher of two sites.

EN.4.c.4 Nitrogen Dioxide (NO₂) – Target met.

The benchmark value above is for a near-road monitoring site adjacent to I-95, the highest of four sites. The benchmark meets NAAQS. The NO₂ NAAQS has never been exceeded in the state.

EN.4.c.5 Particulate Matter (PM₁₀) – Target met.

The benchmark shows the highest recorded value for PM_{10} for a Rhode Island site in 2017. It meets NAAQS. The PM_{10} NAAQS has never been exceeded in the state.

EN.4.c.6 Fine Particulate Matter (PM_{2.5}) – Target met.

The benchmarks meet NAAQS.

EN.4.c.7 Lead (PB) – Target met.

EPA rules allow monitoring agencies to discontinue non-source monitoring following collection of at least 3 years of data at urban sites. Since ambient lead monitoring was conducted in Rhode Island for more than 3 years and lead levels were consistently lower than the NAAQS since inception of monitoring, RIDEM was granted permission to discontinue monitoring in June 2016.

EN.4.c.8 Nitrogen Oxides (NOx) and Volatile Organic Chemicals (VOCs) – Data not yet available.

RIDEM developed an implementation plan to comply with a new EPA monitoring rule from October 2015 for Photochemical Assessment Monitoring Stations (PAMS). These stations monitor ozone, NOx, VOCs, carbonyls and meteorological parameters in serious and above nonattainment areas. The 2018 Monitoring Network Plan includes a list of the targeted compounds to be monitored in 2018. Data is not yet available for this monitoring effort.

These metrics will continue forward into the next LRTP as required by FHWA and EPA regulations.

EN.4.d: Reduce Greenhouse Gas emissions to 1990 levels by 2010 and 90% of 1990 levels by 2020 consistent with the New England Governors and Eastern Canadian Premiers pact.

The Climate Change Action Plan was adopted in 2001 by the Conference of New England Governors and Eastern Canadian Premiers. It recognizes the need to work regionally to provide leadership on climate change issues and greenhouse gas emissions.

Additional targets (2035, 2050) below come from the Rhode Island Greenhouse Gas Emissions Reduction Plan (2016).

Source: RIDEM Office of Energy Resources

Baseline Methodology: Rhode Island Greenhouse Gas Emissions Reduction Plan, December 2016

Baseline:

1990		
12.48 M metric tons		

Targets:

2020	2035	2050
90% of 1990 levels (11.23 M	55% of 1990 levels (6.86 M	20% of 1990 levels (2.50 M
metric tons)	metric tons)	metric tons)

Benchmarking Methodology: Rhode Island Greenhouse Gas Emissions Reduction Plan (December 2016), 2010 LEAP Model

Benchmarks:

2010	2016	
11.86 M Metric Tons	11.02 M Metric Tons	

PM Status: *Target met.* The 2020 target has been met. This performance measure will be included in LRTP 2040 consistent with regional air quality commitments.

EN.4.e: Attainment of goals established for water bodies in RIDEM's 303(d) report.

Section 303(d) of the Clean Water Act requires the identification of water bodies that do not meet, or are not expected to meet, water quality standards (i.e. impaired water bodies). The affected water body, and associated pollutant or stressor, is then prioritized in the 303(d) List.

This performance measure from Transportation 2037 does not specify the report year for the 303(d) list, but it is assumed that the base year would be 2012, as Transportation 2037 was an extension of the previous LRTP published in that year.

Source: RIDEM Office of Water Resources

Baseline Methodology: State of Rhode Island 2012 303(d) List of Impaired Waters.

Baseline:

A 303(d) report does not list any *goals*. Each water body is given a designated use or uses, which can be considered the goals or intended use for a surface waterbody, whether those uses are being attained or not. These uses include fish & wildlife habitat, fish/shellfish consumption, drinking water supply, and primary/secondary contact recreation.

A 303(d) report is a list of impaired waters required to be reported to the Environmental Protection Agency under the Clean Water Act.

The general goal of most states would be to reduce the overall number of impaired waters eventually to zero.

2012		
120 Impaired Water Bodies		

Targets:

N/A Attain goals of 303(d) report.

Benchmarking Methodology: State of Rhode Island 2016 303(d) List of Impaired Waters.

Benchmarks:

2016	
190 Impaired Water Bodies	

PM Status: Target not met.

Elimination of impaired water bodies could be considered the ultimate goal of impaired water body monitoring (mitigation action being tied to this reporting). The 2016 303(d) report shows more water bodies identified as polluted versus 2012.

While an important land use measurement, it is not clear that this metric is appropriate for a transportation plan, and it is recommended that it be discontinued.

EN.4.f: Reduce gallons of gasoline purchased from 400,000,000 gallons in 2002 to 379,000,000 gallons (1990 level) in 2010, 341,000,000 (10% below 1990 level) in 2020, and 320,000,000 in 2030.

Source: RIDEM Office of Energy Resources

Baseline Methodology: Transportation 2037

Baseline:

2002		
	400 M gallons	

Targets:

2010	2020	2030
379 M gallons	341 M gallons	320 M gallons

Benchmarking Methodology: Federal Highway Administration, Motor Fuel & Highway Trust Fund. Monthly Motor Fuel Reports, 2010 and 2017.

Benchmarks:

2010	2017	2018
384 M gallons	391 M gallons	409 M gallons

PM Status: *Target not met.* FHWA data shows growth in motor fuel use since 2010. This is despite a relatively flat population growth for Rhode Island. According to 2018 data, the 2020 target has been exceeded. Despite advances in vehicle fuel economy since 2002, it would be highly unlikely that the 2020 or 2030 goals to reduce fuel consumption could be met.

Equity

EQ.4.a: Increase percentage of Family Independence Program (FIP) recipients residing within ¹/₄ mile of fixed transit route from 91% in 2000 to 92% in 2010, 93% in 2020, and 94% in 2030.

The FIP program – now called RI Works – offers cash assistance on a temporary basis to Rhode Islanders and their families who are having a difficult time meeting financial obligations. It is offered on a temporary basis to families meeting certain guidelines.

Source: RI Department of Human Services (RI Works recipient data) and Division of Statewide Planning (RIPTA stops).

Baseline Methodology: Transportation 2037

Baseline:

2000
91%

Targets:

2010	2020	2030
92%	93%	94%

Benchmarking Methodology: GIS analysis RI Works recipient households overlaid with transit route ¹/₄ mile distance buffers.

Benchmarks: UNAVAILABLE

PM Status: *Data not available*. The RI Department of Human Services provided aggregated municipal data detailing RI Works recipients (family and individual cases) per RI municipality. The table below illustrates RI municipalities with the greatest % Totals for RI Works recipients (family and individual cases) in comparison to the number of RIPTA stops within the municipality. More than 2/3's of RI Works recipients (family and individual cases) reside in transit-supported areas. This performance measure will no longer be tracked.

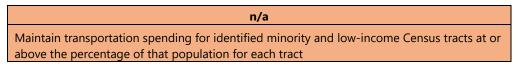
City/Town	Family Cases/3,899	% Total	Individual Cases/9,195	% Total	# of RIPTA Stops (Ranking)
Providence	1,665	42.7%	4,121	44.8%	Rank 1
Pawtucket/Central Falls	597	15.3%	1,424	15.5%	Rank 3
Woonsocket	357	9.1%	804	8.7%	
Cranston	210	5.3%	462	5.0%	Rank 4

EQ.4.b: Maintain transportation spending levels and number of projects in minority and low-income census tracts at or above the percentage of that minority. [For example, in 2000, 8.9% of RI's population was Hispanic. Fifty-five census tracts contained greater than the state average of Hispanics. Transportation spending and number of projects in those 55 tracts should equal or exceed 8.9% in TIP categories of Enhancements, Highway, Pavement Management, and Bicycle/Pedestrian.]

Source: RIDOA, Division of Statewide Planning

Baseline: n/a

Targets:



Benchmarking Methodology: Transportation Equity Benefits Analysis, FFY 2018-2021.

Benchmarks:

	2018
1009	% of SPG census tracts with transportation spending exceeding population group
repr	resentation

PM Status: *Target met.* The majority of STIP funding is allocated to SPG populations (See *Table A-9*: *Summary Table of SPG Tracts and Allocated Investments*).

The Transportation Equity Benefits Analysis (TEBA) for fiscal years 2018-2021 identifies select population groups (SPGs) protected under RI state law and that may face transportation challenges. Of 241 Census tracts considered for the TEBA analysis, 96% are designated as SPG tracts. The TEBA analysis shows that the

percentage of State Transportation Improvement Program (STIP) funding allocated to SPG tracts exceeds the percentage of tracts identified as SPG tracts.

Due to other federal reporting requirements, this performance measure will be discontinued.

Table A-9: Summary Table of SPG Tracts and Allocated Investments

Group Code	Select Population Groups (SPG)	Percentage of Total Census Tracts with a Significant SPG Presence	Percentage of all STIP Project Funds Allocated to SPG Tracts*
1	Minority Individuals	32.8%	57.5%
2	Individuals in Poverty/Low-Income (200% of Poverty Level)	39.4%	63.7%
3	School-Age Children (Ages 5-19)	38.2%	64.0%
4	Aging Individuals (≥65)	48.1%	28.1%
5	Individuals with Disability	50.6%	71.0%
6	Individuals with Limited English Proficiency (All Languages)	27.8%	52.4%

Finance

F.4.a: The transportation program should increase at least with inflation rate through 2030 to provide for a responsibly maintained system that is in a state of good repair and does not rely upon debt financing.

Source: RIDOA, Office of Statewide Planning

Baseline Methodology: Rhode Island Office of Management & Budget, Adopted Budgets (Final Revised).

Baseline:

2012	
\$442 M	

Targets: Budget to increase with inflation rate year-over-year. This is based on Consumer Price Index data 2012-2018.

2012-13	2013-2014	2014-15	2015-16	2016-17	2017-18
2%	1%	1%	2%	2%	2%
\$451 M	\$455 M	\$460 M	\$469 M	\$479 M	\$488 M

Benchmarking Methodology: Rhode Island Office of Management & Budget, Adopted Budgets, Expenditures from all funds. These values exclude any capital budgeting.

Benchmarks:

2013	2014	2015	2016	2017	2018
\$466 M	\$484 M	\$372 M	\$486 M	\$536 M	\$618 M
5.4%	3.9%	-23.1%	30.6%	10.3%	15.3%

PM Status: *Target met.* Over the course of the transportation budget from 2012 through 2018, growth totaled almost 40%. This exceeds inflation significantly through 2018, apart from the 2015 budget year, which was notably lower. This was also a year of changing gubernatorial administrations, so budget reporting may have been different.

Due to other federal reporting requirements, this performance measure will be discontinued.

F.4.b: Phase out the use of general obligation bonds to match federal funds by 2010.

General obligation bonds are funds raised by state government backed by legally available resources (such as tax revenues) to repay bondholders.

Source: RIDOA, Office of Statewide Planning

Baseline Methodology: Adopted State Transportation Improvement Programs.

Baseline:

2009	
40 M	

Targets:

2010	
0% Federal match with General Obligation Bonds	

Benchmarking Methodology: Adopted State Transportation Improvement Programs.

Benchmarks:

2010	2018
40 M	0 M

PM Status: *Target met.* While the debt service on general obligation bonds still comprises a significant portion of annual spending, the use of general obligation bonds to match federal highway funds has been discontinued. While the use of GO bonds is still in use to fund infrastructure projects, i.e., in November 2014, Rhode Island voters approved \$35M to fund transit improvements, GO bonds are no longer used to match recurring federal annual proceeds.

This performance measure is considered a best practice for transportation funding and will not be incorporated into Transportation 2040.

F.4.c: Project cost overruns should not exceed 10%

Source: RIDOT

Baseline Methodology: Transportation 2037

Baseline: N/A. Transportation 2037 states that at the time of writing, RIDOT's financial system was not yet capable of tracking project cost overruns.

Targets:

Ongoing Cost overruns not to exceed 10%

Benchmarking Methodology: RIDOT Quarterly Report, October-December 2018.

Benchmarks:

	2016	2017	2018
Percent on Budget (by Project)	86%	100%	100%

PM Status: *Target met.* Available data does not allow an easy glimpse at the nature of cost overruns, however, RIDOT is tracking on-time and on-budget performance of all projects. Projects are reported to be 100% on-budget during the last two fiscal years.

Due to other federal reporting requirements and related system controls in place, this performance measure will be discontinued.

F.4.d: Increase RIPTA's fixed-route farebox recovery ratio until it reaches 35%. (Set baseline when one year of new farebox data is available.)

Farebox recovery ratio is the fraction of operating expenses which are met by the fares of paid passengers. It is computed by dividing the system's total fare revenue by the total operating expense.

Source: RIPTA

Baseline Methodology: RIPTA data

Baseline: 2013

Targets:



Benchmarking Methodology: RIPTA adopted annual budgets.

Benchmarks:

2013 approved	2015 approved	2017 approved	2019 approved
budget	budget	budget	budget
21.9%	23.9%	21.4%	10.8%

PM Status: *Target not met*. Although data for adopted RIPTA budgets showed some growth in farebox recovery from 2013 to 2014, this declined slightly by 2017 and precipitously by 2019. This coincides with a marked decline in ridership, a trend that has been occurring with many public transit providers nationally.

Highway

H.4.a: Maintain the Interstate and National Highway Systems at "good" or better pavement condition. Maintain other systems at "fair" or better condition.

RIDOT measures the condition of pavements in the state using a Pavement Structure Health Index – a rating system from 0 to 100. Good or better pavements rate a score of 80 or more, while fair pavements are 70-79. Everything less than 70 is considered poor or failing.

Source: RIDOT

Baseline Methodology: N/A

Baseline: Not provided

Targets:

Ongoing
"Good" or better pavement condition for NHS
"Fair" or better pavement condition for other systems

Benchmarking Methodology: RIDOT Transportation Asset Management Plan.

Benchmarks:

2018 Interstate NHS	2018 Non-Interstate NHS	2018 Other State Roads	
Condition Good+	Good+	Fair+	
93.3%	80.8%	NA	

PM Status: *Target not met.* Interstate highways are being maintained and all reported in fair to good condition, although the original Transportation 2037 target appears to aim for 100%. Non-Interstate NHS roads did not meet this threshold, with 80.8 percent reported good or better. Other state roads are not available as this metric is reported in HPMS rather than PSHI.

Due to other federal reporting requirements, this performance measure will be discontinued.

H.4.b: Decrease percentage of NHS Bridge structural deficiencies from 21% to 15% in 2010, 10% in 2020 and 5% in 2030.

As of 2018, Rhode Island had the highest percentage of deficient bridges in the U.S., according to the Federal Highway Administration. The state created the Rhode Works program in part to fund the reconstruction/rehabilitation of the bridge system.

Structural deficiency refers to if a bridge deck, superstructure, substructure, or culvert is rated in poor condition on the National Bridge Inventory scale. RIDOT has indicated in their 2019 Transit Asset Management Plan that they strive to reduce NHS bridges in poor condition to 10% by 2025.

Source: RIDOT Office of System Performance

Baseline Methodology: Transportation 2037

Baseline: N/A

Targets:

2010	2020	2030
15% (structurally deficient)	10%	5%

Benchmarking Methodology: RIDOT Transportation Asset Management Plan

Benchmarks:

2010	2017	2018
20.14%	20.81%	24%

PM Status: *Target not met.* 2018 Federal Highway Administration data rates 23.1 percent of Rhode Island's overall bridge system as structurally deficient and 24 percent of NHS bridges. This is well above the 15 percent target for 2010 and is not on track to meet 2020 or 2030 goals as construed when the LRTP was developed. As noted, the state is on-track to meet federal bridge sufficiency targets by 2025.

Due to other federal reporting requirements, this performance measure will be discontinued.

H.4.c: Mode split: Reduce percentage of "Drive Alone" to work from 80% in 2000 to 79% in 2010, 78% in 2020, and 77.1% in 2030.

This is the same as measure EN.4.a.

H.4.d: Reduce incident clearance time on the interstate highways from an average of 40 minutes in 2008 to 38 minutes in 2010, 35 minutes in 2020, and 30 minutes in 2030.

This is the same as measure ER.4.a.

H.4.e: Interstate highway system should operate at posted speed limits 80% of each 24-hour period.

This measure has never been tracked.

Source: RIDOT Office of System Performance

Baseline Methodology: Transportation 2037

Baseline: N/A

Targets:

Ongoing Interstate operations at posted speeds for 80% out of every 24 hours

Benchmarking Methodology: RIDOT Office of System Performance

Benchmarks: UNAVAILABLE

PM Status: *Data not available*. Current U.S. Federal Highway Administration guidance is moving away from speed measures toward travel time reliability measures. While speed measures are a component of travel time reliability, and while speed will probably always have a functional place in transportation planning and engineering, this kind of metric is no longer utilized.

Due to other federal reporting requirements, this performance measure will be discontinued.

H.4.f: Limit increase in travel time to work to 12% (25.2 minutes) between 2000 and 2010, 10% (27.7 minutes) between 2010 and 2020 and 8% (29.9 minutes) in 2030.

Source: US Census

Baseline Methodology: US Census, Aggregate Travel Time to Work, Total Workers

Baseline:

2000-2010	
12% travel time growth (to 25.2 minutes	

Targets:

2010-2020	2020-2030
10% travel time growth	8% travel time growth
27.7 minutes	29.9 minutes

Benchmarking Methodology: US Census American Community Survey 5-Year Estimates, Aggregate Travel Time to Work, Total Workers

Benchmarks:

	2010	2011	2012	2013	2014	2015	2016	2017
Mean Travel	22.9	22.1	22.4	22.6	22.0	24.2	24.4	24.6
Time	22.9	23.1	23.4	23.6	23.8	24.2	24.4	24.6

PM Status: *Target met (2010)*. The growth percentage to date from 2010-2017 is 7.6 percent. This puts this measure on track to stay beneath the 10 percent threshold of the 2010-2020 target and may even be less than the 8 percent threshold established for 2020-2030.

Travel to work now represents only around 1/3 of travel taking place in the United States. Rhode Island data is not available but is expected to be similar.

Due to other federal reporting requirements, this performance measure will be discontinued.

H.4.g: Reduce delay from 21 hours annually per person (in 2001) by 10% in 2015 and 20% in 2030.

Source: US Bureau of Labor Statistics

Baseline Methodology: Transportation 2037

Baseline:

2001	
21 hours delay/person	

Targets:

2015	2020-2030
18.9 hours	16.8 hours
(10% reduction from 2001)	(20% reduction from 2001)

Benchmarking Methodology: U.S. Bureau of Transportation Statistics. National Transportation Statistics, 2018. Table 1-69: Annual Person-Hours of Highway Traffic Delay per Auto Commuter,

Benchmarks:

2010	2014				
41 hours	43 hours				

PM Status: *Target not met.* Bureau of Transportation Statistics data is for the Providence metropolitan area, so is likely reflective of greater delay than a Rhode Island statewide measure. Statewide data on person-hour delay was not available. For the Providence metropolitan area, delay has grown by 19 percent since 2000 and has shown steady increase for all reported years since 1982, with the exception of the 2009-2010 economic downturn, when delay slightly decreased before resuming upward trajectory in 2011.

Due to other federal reporting requirements, this performance measure will be discontinued.

H.4.h: Vehicle Miles Travelled: Annual growth limited to 1.5%

Source: RIDOA, Office of Statewide Planning

Baseline Methodology: FHWA Highway Statistics Series, Highway Statistics 2010, Functional System Travel

Baseline:

2010
8,280 Million VMT

Targets:



Benchmarking Methodology: FHWA Highway Statistics Series, Highway Statistics 2011-2017, Functional System Travel

Benchmarks (Million VMT):

Year	2011	2012	2013	2014	2015	2016	2017
VMT	7,901	7,807	7,775	7,677	7,833	7,927	8,001
Pct. Growth	-4.6%	-1.2%	-0.4%	-1.3%	2.0%	1.2%	0.9%

PM Status: *Target met.* Data shows that VMT declined from 2010 through 2014 but has since been rising. From 2010 through 2017, VMT is down 3.4% overall.

Only one year of data (2014-2015) shows growth above 1.5%. The trend since 2015 is VMT growth.

VMT is a pivotal concern for modern transportation planning, which contributes to air quality impacts, congestion, and numerous other goal areas. VMT is also central to how other metrics are calculated. This metric will continue to be tracked.

Intermodal

I.4.a: Increase use of Park and Ride lots from a system-wide average of 62% in 2007 by 3% per year.

Source: RIPTA, RIDOT

Baseline Methodology: Transportation 2037

Baseline:



Targets:

Ongoing 3% utilization growth/year

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Utilization	65	68	71	74	77	80	83	86	89	92	95
(%)											

Benchmarking Methodology: RIPTA, RIDOT

Benchmarks:

Year	2018	2019
Utilization (%)	45	47

PM Status: *Target not met.* Presently, the average space utilization of 23 park and ride lots hovers below 50%. The 23 lots counted include those lots owned by RIDOT or lots for which a parking agreement is in place. The average includes one municipally owned lot (Pawtucket).

I.4.b: Maintain 100% of bus fleet with bike racks.

Source: RIPTA

Baseline Methodology: Transportation 2037

Baseline: None specified.

Targets:

Ongoing Maintain 100%

Benchmarking Methodology: RIPTA website

Benchmarks:

2019	
100%	

PM Status: Target met.

Land Use

LU.4.a: Urbanized area (as defined by US Census) to increase no more than the rate of population growth

Source: RIPTA

Baseline Methodology: US Census, Urbanized Area

Baseline (Urbanized area):

2010
38.4% Urbanized (467 sq. mi.)

Targets:

Year	2010	2011	2012	2013	2014	2015	2016	2017
Population	1056389	1053959	1052471	1051695	1053252	1053661	1054491	1056138
Pct. Growth	n/a	23%	14%	07%	.15%	.04%	.08%	.16%

Benchmarking Methodology: US Census Bureau, Urbanized Area, Percent Growth

Benchmarks:

Year	2017	
Urbanized Area	NA	

PM Status: *Data not available*. The US Census updates its Urbanized Area data every ten years, following the US Census. Overall population according to the Census Bureau's American Community Survey population estimates show a very slight decline (-0.02%) in total state population from 2010 to 2017. The performance measure as stated would hold that no urbanized area growth should have occurred over this period. Despite the lack of Census Bureau urbanized area data, it can be stated that some urbanized growth at the urban fringe has occurred in Rhode Island since 2010, meaning that the urbanized land area growth rate has surpassed population growth rate over that period.

LU.4.b: Complete one corridor study per year

Source: RIDOA, Office of Statewide Planning

Baseline Methodology: Transportation 2037.

Baseline: N/A

Targets:

Ongoing 1 corridor study/year

Benchmarking Methodology: RIDOA, Office of Statewide Planning

Benchmarks:

Year	2012	2013	2014	2015	2016	2017
Completed	Route 7 and Route					
corridor studies	116 Access					
	Management					
	Studies. Metacom	0	0	0	0	0
	Avenue Corridor					
	Study. Completed					
	and Implementing.					

PM Status: *Target not met.* Data derived from RI MPO approved Unified Planning Work Program's for FY 2012 – 2017. The target of one corridor study per year was not met. This performance measure is being discontinued.

Pedestrian

PE.4.a: Construct 2 miles of sidewalk per year; rehabilitate 20 miles of sidewalk per year; install 500 wheelchair ramps per year.

Source: RIDOT

Baseline Methodology: Transportation 2037

Baseline: N/A

Targets:

Construct 2 miles of sidewalk/year Rehab 20 miles of sidewalk/year Install 500 curb ramps/year

Benchmarking Methodology: RIDOT

Benchmarks: UNAVAILABLE

PM Status: *Data not available*. Data for these measures must be pulled from numerous projects of various types. It would be the case that sidewalk construction/rehab and curb ramp construction would all have occurred every year since Transportation 2037 was published.

RIDOT has never had a full inventory of sidewalk facilities in the state. An attempt was made to capture such data as part of the MIRE project in 2018, but ongoing quality control issues have prevented the data from being useful.

PE.4.b: Mode split: Increase "Walk or Work from Home" from 6.1% in 2000 to 6.4% in 2010 6.6% in 2020 and 6.9% in 2030.

This is the same as performance measure EN.4.a.

PE.4.c: Increase number of children walking to school in SRTS funded communities.

Source: RIDOA, Office of Statewide Planning

Baseline Methodology: Safe Routes to School Reporting Data

Baseline: None specified

Targets:

Increase number of children walking to school

Benchmarking Methodology: Safe Routes to School Reporting Data

Benchmarks: UNAVAILABLE

PM Status: Data not available. This metric will be discontinued.

Planning

PL.4.a: Pass certification review by federal fiscal funding agencies in 2009.

Source: RIDOA, Office of Statewide Planning

Baseline: N/A

Targets:

Pass certification

Benchmarks:

Certification passed: 4/26/2018

PM Status: *Target met.* The Rhode Island MPO received its most recent TMA certification approval by the FHWA and FTA on April 26, 2018. The 2018, TMA Certification was subject to 4 Corrective Actions, all of which have been addressed as of June 2019. Since certification is a federal requirement, the performance measure is not needed and will be discontinued.

PL.4.b: All cities and towns have state approved comprehensive plans by 2009.

Source: RIDOA, Office of Statewide Planning

Baseline Methodology: RIDOA Data

Baseline: N/A

Targets:

All cities/towns have approved comp plans by 2009.

Benchmarking Methodology: RIDOA, Office of Statewide Planning Website

Benchmarks:

Year	2019
Comp Plans Current and Approved	19/39
Comp Plans Lapsed	20/39

PM Status: Target not met.

Although many cities and towns have completed comprehensive plans in the past, many plans have expired. Three comp plans have been denied state approval. This target should be revised as the state has never had all 39 cities and towns with adopted and state approved comprehensive plans at one time. A more realistic goal would be to have 2/3 or 26 of RI towns with adopted and state approved Comprehensive Plans as this is likely to occur during the next 5 years.

This metric will be discontinued in Transportation 2040.

Safety

S.4.a: Reduce crash rate per 100 million VMT from 588 in 2001 to 470 in 2015, 400 in 2025 and 375 in 2030.

Source: RIDOT, Office of Highway Safety (OHS)

Baseline Methodology: Transportation 2037

Baseline:

20	01
588 ci	rashes

Targets:

2015	2025	2030
470 crashes	400 crashes	375 crashes

Benchmarking Methodology: Rhode Island Highway Safety Plan, FFY 2019

FFY 2017 Performance Report

Benchmarks: UNAVAILABLE

PM Status: *Data not available*. Performance measure S.4.a is no longer being tracked.

S.4.b: Reduce crash rate per 10,000 licensed drivers aged 75 and over from 60 in 2001 to 54 in 2015, 49 in 2025, and 47 in 2030.

Source: RIDOT, Office of Highway Safety

Baseline Methodology: Transportation 2037

Baseline:

2001
60 crashes per 10K licensed drivers aged 75 and over

Targets:

2015	2025	2030
54 crashes	49 crashes	47 crashes

Benchmarking Methodology: Rhode Island Highway Safety Plan, FFY 2019

Benchmarks: UNAVAILABLE

PM Status: *Data not available*. This performance measure is no longer being tracked.

S.4.c: Reduce number of fatalities (based on a 3-year average) from 81 in 2001 to 72 in 2015, 66 in 2025 and 63 in 2030.

Source: RIDOT, Office of Highway Safety

Baseline Methodology: Transportation 2037

Baseline:

2001
81 fatalities
orialanties

Targets:

2015	2025	2030
72 fatalities	66 fatalities	63 fatalities

Benchmarking Methodology: Rhode Island Highway Safety Plan, FFY 2019

Benchmarks:

2011-2015 5-Year Avg	2013-2017 5-Year Avg
58	59

PM Status: Target met.

Available data shows that average numbers of traffic fatalities are well below the targets from Transportation 2037 for 2015, and current records indicate fatalities below the 2030 performance measure.

S.4.d: Reduce fatality rate per 100 million Vehicle Miles Traveled (VMT) from 0.90 in 2001 to 0.79 in 2015, 0.65 in 2025 and 0.60 in 2030.

Source: RIDOT, Office of Highway Safety

Baseline Methodology: Transportation 2037

Baseline:

2001 0.90 fatalities per 100 M VMT

Targets:

2015	2025	2030
0.79 fatalities	0.65 fatalities	0.60 fatalities

Benchmarking Methodology: Rhode Island Highway Safety Plan, FFY 2019

Benchmarks:

2010-2014 5-Yr Avg	2011-2015 5-Yr Avg	2012-2016 5-Yr Avg	2013-2017 5-Yr Avg
0.79 fatalities	0.75 fatalities	0.71 fatalities	0.75 fatalities

PM Status: Target not met.

Available data shows that the average 5-year rate of fatalities per 100 million VMT is below the 2015 target from Transportation 2037. However, data also shows that this rate is unchanged for the 2013-2017 rolling average, and that the 2017 rate alone was 1.04 fatalities per 100 million VMT – well above the target and off the trend of declining fatalities.

S.4.e: Reduce number of alcohol related fatalities from 48 in 2001 to 35 in 2015, 26 in 2025 and 21 in 2030.

Source: RIDOT, Office of Highway Safety

Baseline Methodology: Transportation 2037

Baseline:

2001	
48 fatalities	

Targets:

2015	2025	2030
35 fatalities	26 fatalities	21 fatalities

Benchmarking Methodology: Rhode Island Highway Safety Plan, FFY 2019

Benchmarks:

2011-2015 5-Year Avg	2012-2016 5-Year Avg
23 fatalities	21 fatalities

PM Status: Target met.

Data shows that the 2030 Transportation 2037 target for this performance measure was met as of the 5-year average from 2012-2016, and that the average is trending downward.

S.4.f: Reduce alcohol related fatality rate per 100 million VMT from 0.60 in 2001 to 0.48 in 2015, 0.40 in 2025 and 0.38 in 2030.

Source: RIDOT, Office of Highway Safety

Baseline Methodology: Transportation 2037

Baseline:

2001
0.60 fatalities per 100 M VMT

Targets:

2015	2025	2030
0.48 fatalities	0.40 fatalities	0.38 fatalities

Benchmarking Methodology: Rhode Island Highway Safety Plan, FFY 2019

Benchmarks: UNAVAILABLE

PM Status: Data not available. See Performance Measure S.4.e above.

S.4.g: Reduce number of crashes involving commercial vehicles from 328 in 2003 to 297 in 2015, 266 in 2025 and 250 in 2030.

Source: RIDOT, Office of Highway Safety

Baseline Methodology: Transportation 2037

Baseline:

2003	
328 crashes	

Targets:

2015	2025	2030
297 crashes	266 crashes	250 crashes

Benchmarking Methodology: Rhode Island Highway Safety Plan, FFY 2019

Benchmarks: UNAVAILABLE

PM Status: *Data not available*. This performance measure is no longer being tracked.

S.4.h: Reduce the number of serious pedestrian injuries from 94 in 2001 to 88 in 2015, 83 in 2025 and 80 in 2030.

Source: RIDOT, Office of Highway Safety

Baseline Methodology: Transportation 2037

Baseline:

2001	
94 injuries	

Targets:

2015	2025	2030
88 injuries	83 injuries	80 injuries

Benchmarking Methodology: Rhode Island Highway Safety Plan, FFY 2019

Benchmarks:

2010	2011	2012	2013	2014	2015	2016	2017
56	63	66	57	50	47	59	49

PM Status: Target met.

Data from the 2019 Rhode Island Highway Safety Plan indicates that serious injuries among pedestrians are significantly below the targets set in Transportation 2037 for 2015, 2025 and 2030.

S.4.i: Reduce the number of serious bicycle injuries from 80 in 2001 to 75 in 2015, 71 in 2025 and 69 in 2030.

Source: RIDOT, Office of Highway Safety

Baseline Methodology: Transportation 2037

Baseline:

2001	
80 injuries	

Targets:

2015	2025	2030
75 injuries	71 injuries	69 injuries

Benchmarking Methodology: Rhode Island Highway Safety Plan, FFY 2019

Benchmarks:

2010	2011	2012	2013	2014	2015	2016	2017
17	33	23	18	17	23	12	8

PM Status: Target met.

Data from the 2019 Rhode Island Highway Safety Plan indicates that serious injuries among bicyclists are significantly below the targets set in Transportation 2037 for 2015, 2025 and 2030.

S.4.j: Increase seatbelt use from 74% in 2003 to 85% in 2015, 92% in 2025 and 94% in 2030.

Source: RIDOT, Office of Highway Safety

Baseline Methodology: Transportation 2037

Baseline:

2003	
74% seatbelt use	

Targets:

2015	2025	2030
85% seatbelt use	92% seatbelt use	94% seatbelt use

Benchmarking Methodology: Rhode Island Highway Safety Annual Report, FFY 2016, State Attitudes Survey Report

Benchmarks:

2016	
94.2%	

PM Status: Target met.

Data from the State Attitudes Survey Report for the 2016 Rhode Island Click It or Ticket Campaign show that more than 94 percent of 454 survey pre-campaign respondents reported using a seatbelt always or nearly always. This value was slightly lower post-campaign (92.2%). This survey result exceeds the performance measures set for 2015, 2025 and 2030.

S.4.k: Increase motorcycle helmet use to 98% in 2015 and beyond. [Note: Based on passage of RI Motorcycle Helmet Law.]

Source: RIDOT, Office of Highway Safety

Baseline Methodology: Transportation 2037

Baseline: Not specified

Targets:



Benchmarking Methodology: Rhode Island Highway Safety Plan, FFY 2019

Benchmarks: UNAVAILABLE

PM Status: *Data Not Available*. Helmet use is not reported in the Rhode Island Highway Safety Plan, though it does report on motorcyclist fatalities and unhelmeted motorcyclist fatalities. Rhode Island does not have a universal motorcycle helmet law, so the original performance measure may not be entirely applicable.

Transit

T.4.a: Increase transit mode share of work trips from 2.5% in 2000 to 2.8% in 2010, 3.0% in 2020 and 3.2% in 2030.

Source: RIDOA, Office of Statewide Planning

Baseline Methodology: U.S. Census Data

Baseline:

2000	
2.5% mode share	

Targets:

2010	2020	2030
2.8% mode share	3.0% mode share	3.2% mode share

Benchmarking Methodology: US Census Data, American Community Survey 5-Year Averages, Means of Commute to Work.

Benchmarks:

2010	2011	2012	2013	2014	2015	2016	2017
2.7%	2.8%	2.9%	2.9%	2.9%	2.9%	2.8%	2.7%

PM Status: Target not met (2010).

Census data shows that the transit mode share was just below the 2010 target. This analysis considers that adequate progress is not being made toward the 2020 goal because there is a downward trend since 2015 that will need to be halted and turned around from 2018-2020 to meet the 3.0% mode share goal for 2020.

Journey to work data remains the most easily accessible metric for mode share percentages. It is hoped that the availability of new data, such as cell phone probe data or a household survey, will allow the adoption of a more general mode share metric in the future.

T.4.b: Increase carpool mode share of work trips from 10.4% in 2000 to 10.6% in 2010, 10.9% in 2020 and 11.1% in 2030.

Source: RIDOA, Office of Statewide Planning

Baseline Methodology: U.S. Census Data

Baseline:

2000
10.4% mode share

Targets:

2010	2020	2030
10.6% mode share	10.9% mode share	11.1% mode share

Benchmarking Methodology: US Census Data, American Community Survey 5-Year Averages, Means of Commute to Work.

Benchmarks:

2010	2011	2012	2013	2014	2015	2016	2017
8.7%	8.5%	8.5%	8.5%	8.2%	8.5%	8.5%	8.6%

PM Status: *Target not met.* Census data shows a very steady level of carpooling from 2010 to 2017, with no growth. The value is well below the target set for 2010 and the data trend shows no sign that carpool mode share can be increased enough to meet the 2020 target.

T.4.c: Increase bus ridership from 25.9 million in 2007 to 27 million in 2010, 29 million in 2020, and 31 million in 2030.

Source: RIPTA

Baseline Methodology: RIPTA data

Baseline:

2007				
25.9 million riders				

Targets:

2010	2020	2030
27 million riders	29 million riders	31 million riders

Benchmarking Methodology: RIPTA Comprehensive Annual Financial Report for the Fiscal Year Ending June 30, 2017.

Benchmarks:

2010	2011	2012	2013	2014	2015	2016	2017
20,160,863	20,105,354	20,469,227	20,483,300	20,448,492	18,476,888	18,186,734	16,571,821

PM Status: Target not met.

RIPTA's data shows that ridership was far lower than the 2010 target is in a declining trend. Ridership is down 19% from 2014 to 2017 and a massive 36% since the 2007 baseline reported in Transportation 2037.

T.4.d: Increase RIPTA's number of passengers per hour of fixed route service from 39.01 in 2007 to 40.5 in 2010.

Increase number of passengers per hour of Ride service from 2.2 to 2.8.

Source: RIPTA

Baseline Methodology: RIPTA data

Baseline:

	2007
Bus	39.01 passengers/hour of revenue service
RIDE	2.2 passengers/hour of revenue service

Targets:

	2010		
Bus	40.5 passengers/hour of revenue service		
RIDE	2.8 passengers/hour of revenue service		

Benchmarking Methodology: RIPTA Comprehensive Annual Financial Report for the Fiscal Year Ending June 30, 2017.

Benchmarks:

	2010	2011	2012	2013	2014	2015	2016	2017
Bus	31.08	30.97	31.23	32.77	31.23	27.43	26.45	24.14
RIDE	1.93	1.93	2.21	2.26	2.25	1.83	2.08	1.99

PM Status: Target not met (2010, both Bus and RIDE services)

Passengers per revenue hour fell short for the 2010 target year for both bus and ride services. Both measures are below the baseline value. Bus passengers/revenue hour is down 38 percent from 2007 to 2017; RIDE passengers/revenue hour is down 9.5 percent from 2007 to 2017.

T.4.e: Increase the Mean Distance Between Failure (MDBF) of RIPTA's fleet from 3,539 miles in 2003 to 3,800 in 2010.

Source: RIPTA

Baseline Methodology: RIPTA data

Baseline:

2003				
3,539 miles				

Targets:

2010		
3,800 miles		

Benchmarking Methodology: RIPTA Quarterly Financial Statements, 2014-2019.

Benchmarks:

Nov - 2013	Aug - 2014	Aug - 2015	Aug - 2016	Aug - 2017	Aug-2018
4,538	4,316	5,862	5,225	5,228	4,848

PM Status: Target met.

The benchmark data is not calendar year average. Some months are greater than the value shown, some less. Nevertheless, we can infer from RIPTA's reporting that mean distance between failures is generally above 4,000 miles and sometimes greater – this exceeds the 2010 MDBF target in Transportation 2037. Data for 2010 was not available.

This metric is not appropriate for a long-range plan and will be discontinued.

T.4.f: Maintain 100% ADA compliance for transit system.

This performance measure may be narrowly defined as ADA compliance for transit vehicles, or it may be more broadly construed to include stations, platforms and transit stops. Given the presence of the word "maintenance" in the metric, the unfortunate reality of ADA compliance on the state's sidewalks, and the fact that the majority of RIPTA stops are now and have always been on sidewalks, staff will operate under the assumption that this metric was intended to discuss the ADA compliance of vehicles in the transit system. **Source**: RIPTA

Baseline Methodology: Transportation 2037

Baseline:



Targets:

Ongoing 100% compliance

Benchmarking Methodology: RIPTA data

Benchmarks:

	2019
100%	compliance

PM Status: *Target met*.

Given the assumptions listed above, it is true that all vehicles in the RIPTA fleet comply with ADA regulations. This is also true of MBTA trains operating in Rhode Island, and the boats servicing the RIDOT ferry system. As such this metric has technically been achieved.

T.4.g: Begin commuter rail service in Warwick by 2012 and Wickford by 2012.

Source: RIDOT, Office of Multimodal Planning

Baseline Methodology: N/A

Baseline: N/A

Targets:

Begin Service Warwick by 2012 and Wickford by 2012

Benchmarking Methodology: N/A

Benchmarks:

2010	2012		
T.F. Green Station MBTA service begins	Wickford Junction Station MBTA service begins		

PM Status: Target met. This metric is being discontinued.