

# Section 2: Analysis of the STIP

## **Program Analysis**

The STIP presents a 10-year program of over \$6 billion in funding for transportation projects from federal fiscal year 2022 to 2031. Between FFY 2022 and FFY 2025, the state anticipates over \$1.8 billion in federal funding with its required state funds to support operations and capital match for transportation initiatives. Rhode Island uses this funding to invest in several modes of surface transportation. The following analyses will focus on projects and investments outlined in required fiscally constrained four years of FFY 2022-2025.

### Spending by Investment Type

The vast majority of the STIP is dedicated to asset management—keeping and maintaining the state's existing infrastructure in a state of good repair. System Preservation activities comprise 53 percent of the planned spending in the STIP between FFY 2022-2025, reflecting the state's focus of an asset management-based system of transportation planning, focusing the state's limited resources on bringing the existing infrastructure assets into a state of good repair and maintaining them in that condition. There are also several projects that add capacity to the system through the addition or expansion of new facilities. These system expansion projects total approximately \$168 million, or about 5 percent of the STIP's total funding between FFY 2022-2025. Of the projects that would expand the network, 87 percent are classified as bicycle and pedestrian projects.

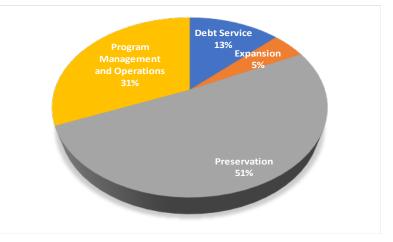
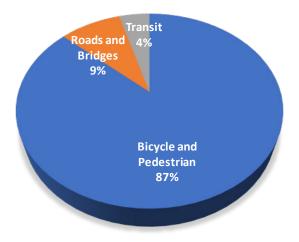


Figure 2-1: Spending by Investment Type

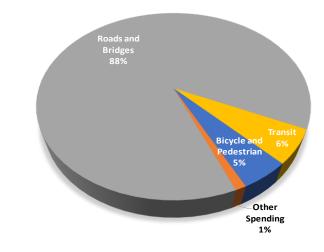
Figure 2-2: System Expansion Projects



Capital spending primarily on bicycle and pedestrian projects accounts for nearly 5 percent of all capital spending in the STIP.

The remaining funding in the STIP are directed towards items that address Program Management and Operations, and Debt Service.

Figure 2-3: Capital Spending by Mode

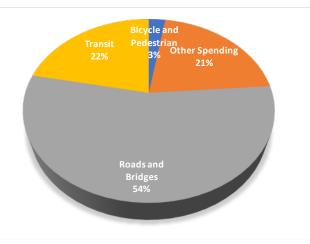


### Spending by Mode

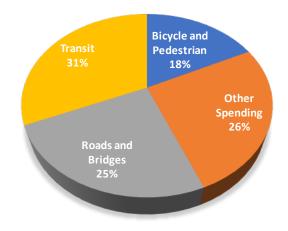
Highways remain the primary mode of travel in Rhode Island. Highway projects receive the greatest share of STIP resources, with the focus on state of good repair and system preservation. Figure 2-4 Spending by Primary Mode depicts spending by transportation mode. To capture the full scope for many of these projects that include improvements to other modes outside of roads and bridges, Figure 2-5 shows spending by secondary mode among projects which include multiple types of improvements. For example, a pavement project which is primarily focused on repairing the roadway and contains sidewalk repairs, the primary mode spending is accounted for in Figure 2-4, Spending by Primary Mode and the sidewalk repairs are accounted for in Figure 2-5, Spending by Secondary Mode.

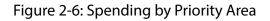
Out of a total of 46 projects that improve or expand transportation assets, 39 projects are dedicated to bicycle and pedestrian amenities (and 6 of the remaining 7 include some secondary investment in bicycle and pedestrian amenities). Of the other 378 projects, 207 of those projects include some level of investment in bicycle infrastructure, pedestrian safety or other alternative transportation feature.

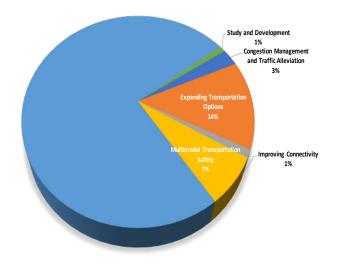
### Figure 2-4: Spending by Primary Mode



### Figure 2-5: Spending by Secondary Mode







### Spending by Priority Area

Based on the STIP Investment Priority Areas outlined in Section I, the greatest share of spending for the STIP focuses on State of Good Repair and Asset Management priorities. These State of Good Repair projects are focused on improving Rhode Island's economic competitiveness by addressing structurally deficient bridges and poor pavement conditions, improving asset resiliency to climate change, storm surge, and sea level rise, and improving resiliency through expanded stormwater and drainage systems.

State of Good Repair projects are focused on addressing safety first and foremost. Replacing a structurally deficient bridge ensures that the asset will not pose or present a safety risk or hazard to those driving, traveling by bus or rail, or walking over such a structure.

After State of Good Repair projects, the second priority area for the STIP is on Expanding Transportation Options. Projects that expand transportation options include modernizing transit to improve convenience and quality of bus travel, improving and expanding the active transportation network to promote walkability and bikeability, supporting community improvements and implementing Complete Streets, and investment that support future "smart" infrastructure (Smart Cities, Connected and Automated Vehicle applications).

The third priority for the STIP is on making improvements to Multimodal Transportation Safety. These types of projects address safety hotspots to reduce serious injuries and roadway facilities and provide infrastructure improvements or tools to enhance safety.

The remaining projects in the STIP are focused on Congestion Management and Traffic Alleviation, Improving Connectivity, or are Future Potential Projects contained within the STIP's Study and Development Program.

### Program Funding by Phase

The STIP accounts for phases of Design, Construction, and Other.

#### Design Phase

The design and preliminary engineering phase outlines a project and through increasingly detailed steps, refines the project to develop highly specific project plans that contractors use to guide their work. A larger or more complex project may include a feasibility and readiness study to outline the issues involved, identify and analyze alternative solutions, and provide comparisons of the alternatives. The design process may include, but is not limited to: scoping and preliminary engineering, rightof-way acquisition, utility identification or coordination, supporting analyses from experts in bridge engineering, materials, traffic, real estate, cultural resources, natural resources, stormwater management, transit, or any other subject area as required. For a typical capital project, design funding will support activities beginning with scoping and ending with advertising the job for procurement of a construction contractor.

#### **Construction Phase**

The construction phase includes all activities involved in building or altering an existing or proposed road or structure, including clearing land, demolition, excavation, moving material to establish curve and grade, drainage, fill, pavement, preservation or replacement of bridges, guardrails, traffic signals, lighting, culverts, and traffic controls.

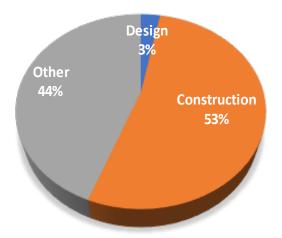
Depending on the project and location, it may also include temporary detours, steps to prevent or mitigate environmental problems and landscaping. Construction may take anywhere from a few days or weeks to several years to complete.

#### Other

For capital projects, the Other category of spending accounts project closeouts, project contingency, and miscellaneous expenses. For operational projects, the Other category accounts administrative spending, including expenses like debt service, staff time, and maintenance operations.

Figure 2-7 accounts for the STIP's FFY 2022-2025 spending by phase for RIDOT programs.

### Figure 2-7 Spending by Phase



### Program Allocation Summary Table

Federal regulations (23 CFR § 450.218) require that the STIP cover a period of no less than four years and be updated at least every four years. When a STIP covers more than four years, as this STIP does, USDOT considers the projects in the additional years as informational only.

The Program Allocation Summary Table summarizes RIDOT and RIPTA's programs funding amounts by federal fiscal year for the ten years of the STIP FFY 2022-2031.

#### STIP Program Allocation Summary STIP: 2022-2031 (Revision 12 with Pending Changes)

RIDOT STIP Programs	2022	2023	2024	2025	Subtotal	% of Subtotal	2026	2027	2028	2029	2030	2031	Total	% of Total
Active Transportation Program	\$19.50	\$28.61	\$33.96	\$43.39	\$125.46	2.82%	\$50.23	\$52.27	\$42.48	\$21.95	\$19.73	\$20.75	332.87	3.29%
RIDOT Bridge Program	\$158.45	\$178.11	\$176.26	\$198.26	\$711.07	16.01%	\$202.38	\$186.95	\$200.65	\$224.55	\$179.33	\$166.75	1,871.67	18.49%
RIDOT Corridor Projects Program	\$1.30	\$9.59	\$18.91	\$30.30	\$60.10	1.35%	\$42.36	\$55.40	\$39.45	\$36.20	\$29.45	\$17.90	280.86	2.77%
RIDOT Debt Service Program	\$113.42	\$116.22	\$116.10	\$112.35	\$458.09	10.31%	\$111.54	\$108.67	\$107.47	\$107.47	\$107.47	\$107.27	1,107.98	10.94%
RIDOT Headquarters Operations Program	\$47.62	\$46.41	\$44.76	\$47.11	\$185.90	4.19%	\$47.01	\$47.30	\$47.62	\$47.93	\$48.35	\$48.68	472.79	4.67%
RIDOT Maintenance Operations Program	\$76.55	\$79.98	\$80.52	\$81.18	\$318.21	7.16%	\$81.65	\$77.59	\$78.43	\$79.27	\$80.17	\$81.13	796.42	7.87%
RIDOT Major Capital Projects Program	\$191.10	\$262.85	\$238.61	\$225.18	\$917.74	20.66%	\$250.60	\$214.50	\$113.93	\$70.50	\$64.50	\$47.75	1,679.51	16.59%
RIDOT NHTSA Program	\$9.08	\$9.08	\$9.08	\$9.08	\$36.32	0.82%	\$9.08	\$9.08	\$9.08	\$9.08	\$9.08	\$9.08	90.80	0.90%
RIDOT Pavement Program	\$103.33	\$141.59	\$112.49	\$95.56	\$452.97	10.20%	\$68.29	\$60.06	\$50.20	\$51.09	\$55.57	\$53.89	792.06	7.82%
RIDOT Stormwater Program	\$16.80	\$15.70	\$11.00	\$10.00	\$53.50	1.20%	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	113.50	1.12%
RIDOT Study and Development Program	\$17.36	\$15.56	\$15.51	\$15.60	\$64.04	1.44%	\$16.56	\$10.75	\$9.75	\$9.75	\$9.75	\$9.75	130.35	1.29%
RIDOT Traffic Safety Program	\$58.84	\$32.88	\$33.99	\$38.28	\$163.99	3.69%	\$34.98	\$34.82	\$35.46	\$35.51	\$36.55	\$35.85	377.16	3.73%
RIDOT Transit Program	\$35.41	\$34.66	\$30.50	\$22.46	\$123.01	2.77%	\$25.12	\$25.06	\$27.24	\$29.42	\$34.60	\$39.78	304.23	3.00%
Subtotal RIDOT	\$848.75	\$971.24	\$921.68	\$928.73	\$3,670.39	82.63%	\$949.79	\$892.45	\$771.75	\$732.71	\$684.55	\$648.57	\$8,350.20	82.47%
RIPTA STIP Programs	2022	2023	2024	2025	Subtotal	% of Subtotal	2026	2027	2028	2029	2030	2031	Total	% of Total
RIPTA Transit Capital	\$11.29	\$86.35	\$21.16	\$23.16	\$141.96	3.20%	\$22.11	\$21.47	\$21.47	\$21.47	\$21.47	\$22.09	272.04	2.69%
RIPTA Transit Service	\$21.68	\$14.25	\$17.73	\$14.27	\$67.93	1.53%	\$14.42	\$14.72	\$15.14	\$15.43	\$15.86	\$16.15	159.62	1.58%
RIPTA Transit Support Operations	\$106.62	\$130.80	\$118.52	\$123.37	\$479.32	10.79%	\$110.69	\$110.05	\$110.25	\$110.35	\$110.14	\$110.15	1,140.96	11.27%
Subtotal RIPTA	\$139.59	\$231.40	\$157.42	\$160.80	\$689.21	15.52%	\$147.22	\$146.24	\$146.85	\$147.25	\$147.46	\$148.39	\$1,572.61	15.53%
RITBA STIP Programs	2022	2023	2024	2025	Subtotal	% of Subtotal	2026	2027	2028	2029	2030	2031	Total	% of Total
RITBA Capital Projects Program	\$0.00	\$0.22	\$23.02	\$58.86	\$82.11	1.85%	\$68.32	\$45.39	\$6.36	\$0.00	\$0.00	\$0.00	202.18	2.00%
Subtotal RITBA	\$0.00	\$0.22	\$23.02	\$58.86	\$82.11	1.85%	\$68.32	\$45.39	\$6.36	\$0.00	\$0.00	\$0.00	\$202.18	2.00%
Total	\$988.33	\$1,202.86	\$1,102.12	\$1,148.39	\$4,441.70	100.00%	\$1,165.34	\$1,084.07	\$924.96	\$879.96	\$832.01	\$796.96	\$10,124.99	100.00%