



RI Office of Management and Budget

Performance Report

RI Department of Transportation

March 15, 2013

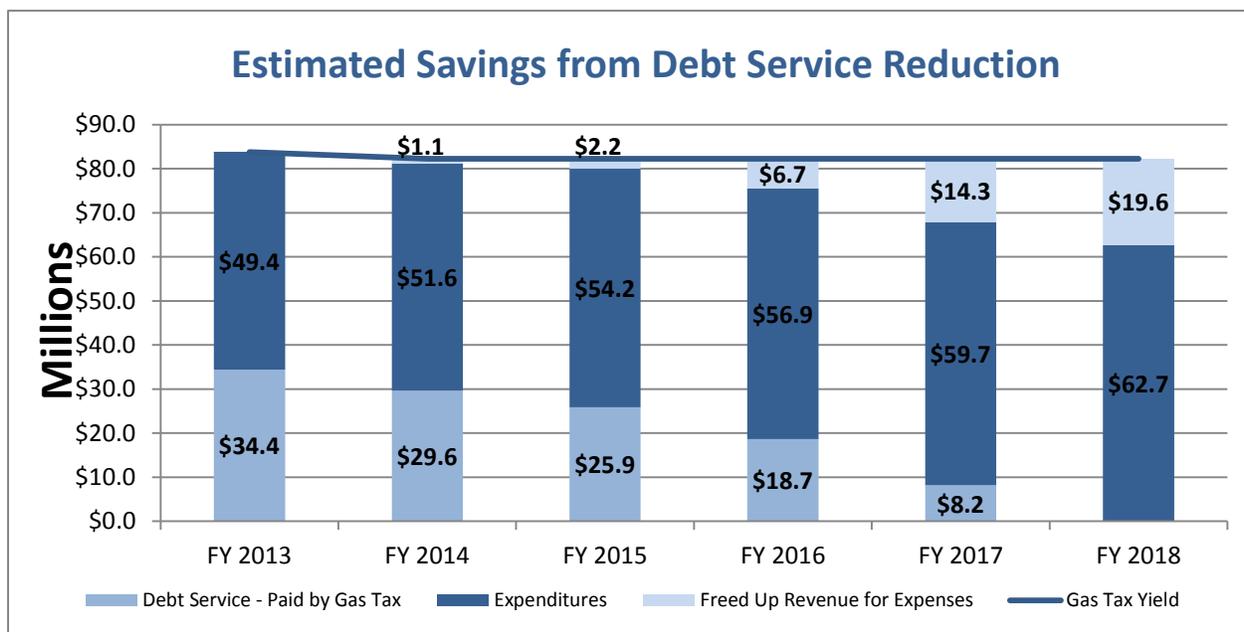
Transportation Budget – Fiscal Year 2013

Funding for the Rhode Island Department of Transportation (RIDOT) in FY 2013 comes from four main sources: the Federal Highway Trust Fund, state gas tax, previously approved general obligation bonds from referenda, and the state capital budget. The charts below illustrate the sources of funding for RIDOT and how funds are budgeted in FY 2013.¹

Source	Amount	Percentage
Federal Funds	\$316,461,117	67.7%
State Gas Tax ²	\$96,106,576	20.6%
Other Sources ³	\$27,057,330	5.8%
RI Capital Budget	\$26,703,511	5.7%
Restricted Receipts	\$1,010,255	0.2%
Total	\$467,338,789	100.0%

Category	Amount	Percentage
Capital Purchases and Equipment	\$182,163,543	39.0%
Personnel & Contracted Services	\$103,795,752	22.2%
Operating Transfers (Debt Service)	\$101,004,927	21.6%
Assistance, Grants, and Benefits	\$41,393,620	8.9%
Operating Supplies and Expenses	\$38,980,947	8.3%
Total	\$467,338,789	100.0%

Governor Chafee has led efforts to end the state’s reliance on public borrowing for transportation projects by dedicating new sources of funds such as vehicle registration and license fees for infrastructure. In 2012, the state ended the practice of issuing bonds through referenda to pay for transportation projects, thereby reducing the state’s future debt service. By FY 2018, Rhode Island will be able to invest an additional \$19.6 million into our roads and bridges because of these reforms.



¹ Revenue and expenditure amounts are based on Governor Chafee’s FY 2013 revised budget request, submitted January 16, 2013. RIDOT budget includes \$40.5 million in pass-through funds for RI Public Transit Authority. Additional RIDOT budget information is available at http://www.budget.ri.gov/Documents/CurrentFY/BudgetVolumeIV/12_Transportation.pdf.

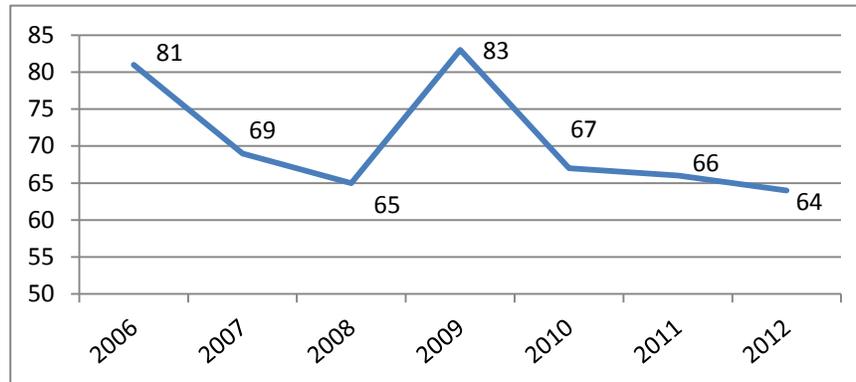
² Gas tax revenues support RIDOT’s operating budget, debt service for GARVEE Motor Fuel bonds and pass-through funds for RIPTA.

³ Other Sources include RIDOT land sale revenue and GARVEE residual fund match.

ROADWAY FATALITIES

RIDOT is committed to reducing the number of fatalities on Rhode Island roadways. A fatality for this purpose is defined as any death that occurs within 720 hours following a crash on RI traffic ways.

Figure A: Annual Roadway Deaths in Rhode Island



Key Points:

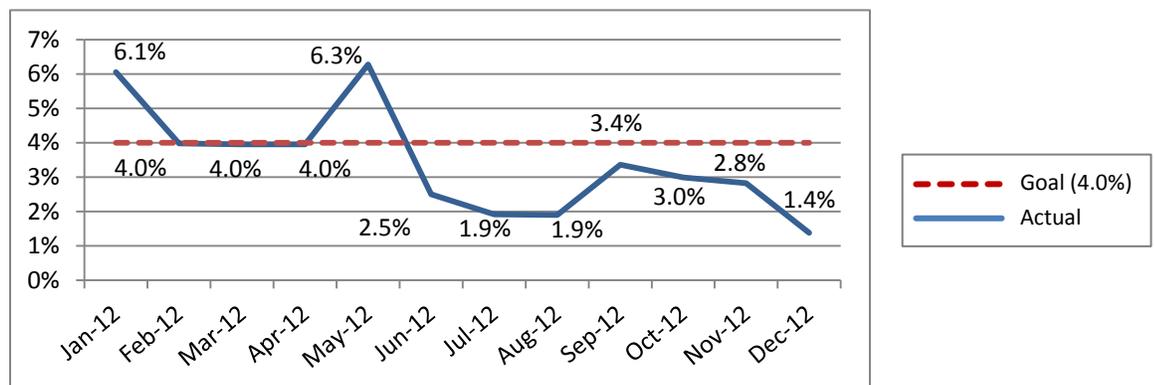
- Roadway fatalities in Rhode Island have decreased 21 percent over the last 7 years.
- RIDOT's objective is to move toward zero deaths with an interim goal to halve fatalities and serious injuries by 2030. This amounts to an annual reduction of 3.2 percent.

The department's efforts to reduce fatalities are outlined in its Strategic Highway Safety Plan, available on the department's website at <http://www.dot.ri.gov>.

FEDERAL INACTIVE LIST PROJECTS

The federal inactive list is a management tool that the department uses to identify federally-funded projects that are experiencing delays and resolve the issue(s) causing the delay.

Figure B: Percent of Projects on Federal Inactive List



Key Points:

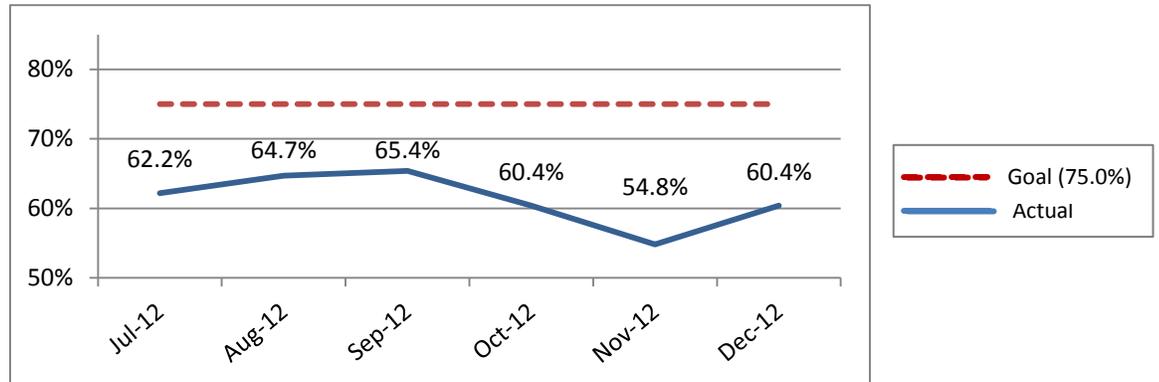
- In 2012, the percent of projects on the federal inactive reduced from over 6.0 percent to less than 2.0 percent.
- The department's objective is for less than 4.0 percent of projects to be on the list.

The percent of delayed and inactive projects is a dynamic figure that changes each month as projects are added to the list due to inactivity and projects fall off the list due to the department addressing the root causes of inactivity.

TIMELINESS OF CONSTRUCTION PROJECTS

When construction projects are completed on time or ahead of schedule, public benefits include improved safety, mobility, and livability. The graph below reflects the percent of RIDOT construction projects completed on-time or ahead of schedule.

Figure C: Percent of Projects On-time or Ahead of Schedule



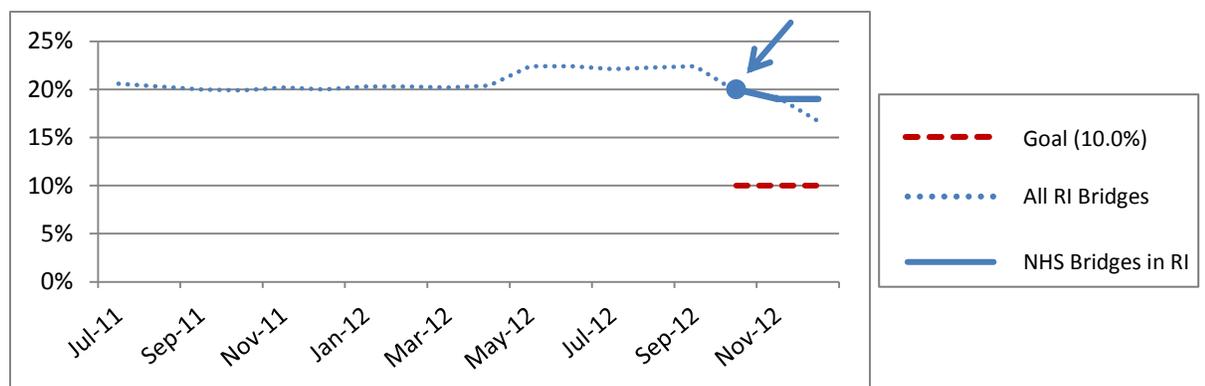
Key Points:

- RIDOT's objective is to have at least 75.0 percent of projects completed on-time or ahead of schedule.
- Office of Management and Budget (OMB) began tracking this data in July 2012.

STRUCTURALLY DEFICIENT BRIDGE DECKING

The condition of Rhode Island bridges has been ranked amongst the worst in the nation. The mission of RIDOT is to improve the state's transportation infrastructure.

Figure D: Percent of Bridge Decking that is Structurally Deficient



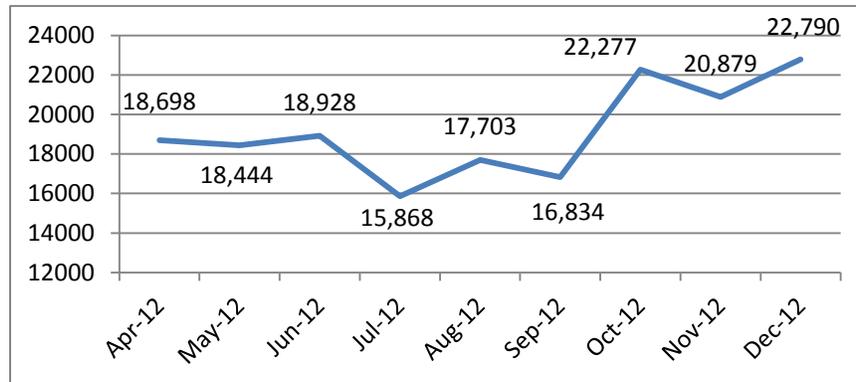
Key Points:

- Prior to October 2012 (see arrow) this measure included all Rhode Island bridges. The measure was modified to include bridges on the National Highway System (NHS), as required by the new federal transportation law MAP-21. As of December 2012, 19.0 percent of NHS bridge surface area in Rhode Island was deemed structurally deficient.
- In January 2013, the Department established a goal for less than 10.0 percent of bridge surface area to be designated "structurally deficient."

MAINTENANCE ACTIVITIES

RIDOT's responsibility is to to keep state-operated roadways safe, operable, and clean by performing activities such as grass cutting, pavement repairs, drainage system maintenance, snow plowing, and removal of litter, sediment, and graffiti.

Figure E: Total RIDOT Maintenance Crew Hours



Key Points:

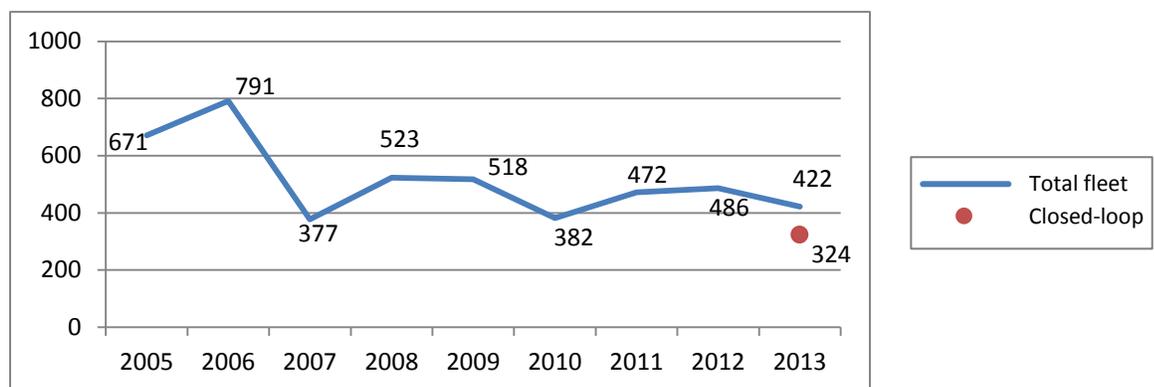
- This graph does not reflect winter maintenance overtime hours.
- OMB began tracking this data in April 2012. Objective development and analysis is ongoing.

The total number of RIDOT crew hours is dependent on weather conditions, emergencies requiring reprioritization of daily activities, and available staff.

SALT APPLICATION

The Department is committed to reducing winter costs and alleviating environmental concerns related to the use of salt products to treat roadways during winter storms. RIDOT has retro-fitted a portion of its winter operations fleet to use a closed-loop system to reduce salt usage in winter storms.

Figure F: Average Pounds of Salt per Lane Mile



Key Points:

- This graph represents average salt usage for all RIDOT and contractor equipment, in pounds per lane-mile. The solid line represents usage for the entire fleet, while the dot illustrates the amount used by fleet equipment equipped with closed-loop systems as of 1/30/2013.
- The Department has reduced roadway salt application by more than 27.0 percent over the last seven years. For additional information about winter maintenance cost reductions, see the *Focus on Performance* page.

FOCUS ON PERFORMANCE

Winter Maintenance

Over the last five years, RIDOT has spent an average of \$10.4 million on winter maintenance. Of that total, 51.6 percent has been allocated for materials, including salt. If this trend continues, FY 2013's winter maintenance budget of \$12.4 million would require \$6.4 in material costs. The Department is making improvements to its winter maintenance operations to reduce material costs and enhance efficiency.

Closed-Loop System

As of March 2013, RIDOT has installed "closed-loop" systems in 61 of 109 (56.0 percent) state-owned snowplows. Closed-loop controllers provide more uniform salt and sand application and computerized data tracking, which is useful in monitoring material usage and developing plowing strategy. These systems achieve a 20.0 - 30.0 percent reduction in material usage as compared to conventional spreaders because the added feedback and adjustments result in a more efficient application of salt consistent with road conditions. Closed-loop controllers also enhance the ability of RIDOT personnel to track material usage and application rates in specific locations. At the end of storm event, the computer controller provides a summary printout of the amount of material applied, miles traveled, and number of miles to which material was applied.



Closed-loop Snowplow Control Module

Brine Application

When anticipating a winter storm, RIDOT now pre-treats a portion of Rhode Island roadways with a salt water mixture called "liquid brine." Using liquid brine allows salt to be applied directly to the highway surface, nullifying the "bounce and scatter" that occurs when solid materials are applied to a dry surface. While plows typically deposit a mixture of 200-300 pounds of salt-sand pretreatment per road mile, that same area requires the equivalent of only 80 pounds when applied as salt brine. Lower salt and sand usage can reduce roadway wear-and-tear and provide cost and environmental benefits to the state. Seven of eight tanker trucks in RIDOT's winter maintenance fleet can use salt brine as an anti-icing pretreatment, and 61 closed-loop snowplows are capable of using salt brine to pre-wet the salt.

Looking Forward

In addition to equipment upgrades, RIDOT has adjusted its hired equipment policy to provide incentives for private contractors to use new cost-saving technologies. With more widespread implementation of closed-loop controllers and other salt reduction measures, the state will continue to see fiscal and environmental benefits. RIDOT and the OMB will continue to monitor the material and cost savings associated with these initiatives, as well as explore additional areas of opportunity for further performance improvement.