

2014 Annual Performance Report



Prepared By: The Office of Performance Management and Innovation

December 2014



The data in this report represents the 2014 State Fiscal Year (July 1, 2013 - June 30, 2014) unless otherwise noted.



Message from the Acting Secretary of Transportation



On November 1, 2014 MassDOT celebrated its fifth anniversary. In these early years, the Commonwealth can be proud of the strides we have made to increase transparency and accountability, quantify results, and improve overall performance. While the implementation of performance management is an evolving process, we are proud to report that performance management is embedded throughout MassDOT's four divisions. By measuring our performance, we are able to improve our practices, processes and policies. Examples of this range from new technologies in use by the Registry of Motor Vehicles, to the continued and expanded collection of real time traffic data, to the development of an enterprise-level asset management strategy.

As prescribed by the Acts of 2009 and, Executive Order 540, the attached legislative report summarizes the State Fiscal Year (SFY) 2014 performance of the Aeronautics, Highway, Rail and Transit, and the Registry of Motor Vehicles Divisions. This report provides a comprehensive discussion of each measure, including: the context; relationship to the agency goals; performance trends; measurement methodology; and explanation of its merit. This report serves as a foundation for the quarterly Performance and Accountability Reports, the first of which for SFY 2015 was published in October 2014.

The work completed by MassDOT in 2014 sets the stage for new leadership with a continued emphasis on transparency, accountability, and performance management.

Frank DePaola Acting Secretary Massachusetts Department of Transportation



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INTRODUCTION

Purpose of this Report

In June 2009, Governor Deval Patrick signed Chapter 25 of the Acts of 2009, "An Act Modernizing the Transportation Systems of the Commonwealth of Massachusetts," (as amended by Chapter 26 of the Acts of 2009). The legislation integrated the state's transportation offices into a new Massachusetts Department of Transportation (MassDOT), which is governed by an appointed board and state regulations.

MassDOT is charged with one of the Commonwealth's most important responsibilities: ensuring the mobility of our citizens and visitors by investing in, developing, and operating, a safe and efficient transportation network. Our decisions impact the lives of residents and visitors, the health of businesses and clients, and the growth of our economy.

As part of its reform effort, MassDOT created its Office of Performance Management and Innovation (OPM&I). OPM&I's main responsibilities are:

- To administer the organization's strategic planning process, and ensure that its plans and goals are kept current and accessible.
- To help other offices meet their strategic goals by creating, monitoring, and presenting performance measures
- To partner with businesses, create a culture of continuous process improvement, and promote other innovations throughout the organization.

Since its inception, MassDOT has embraced performance management throughout the agency, and will continue to work to strengthen the elements of this important practice – from data collection, to measure selection and analysis, to context-based reporting, to data-driven operational and policy decisions that will improve the effectiveness of the agency, and help it move closer to the established goals. The most recent federal transportation authorization law, Moving Ahead for Progress in the 21st Century (MAP-21), embraces performance-based management and the reliance on performance measures as a core principal for recipients of federal transportation funding. MassDOT's commitment to performance management provides an excellent foundation for measuring and reporting performance to the federal transportation partners.

This legislative report, as required by the Acts of 2009, summarizes MassDOT's performance for Fiscal Year 2014 (July 2013 through June 2014). It is organized by modal division (Aeronautics, Highway, Rail and Transit, and the Registry of Motor Vehicles), and provides a comprehensive discussion of each administration's measure. All measures are presented in relation to MassDOT's agency goals. This report serves as a foundation for the quarterly Performance and Accountability Reports, the first of which for SFY 2015 was published in October 2014.



MASSDOT'S MISSION

Deliver excellent customer service to people who travel in the Commonwealth, and provide our nation's safest and most reliable transportation system in a way that strengthens our economy and quality of life. We are one transportation organization focused on service and safety.

MassDOT has five established strategic organizational goals which guide the agency in supporting its mission. The five goals are:

- <u>Safety:</u> Work with unwavering commitment to maximize the safety of the public and employees. Minimize risks and injuries through thoughtful design, construction, oversight, enforcement, and employee empowerment.
- **<u>Customer Service</u>**: Deliver superb service that both anticipates and responds to customer needs. Move people in ways that "give them time back" by cultivating system-wide efficiencies.
- <u>Employee Engagement</u>: Maintain a work environment that is diverse, challenging and accommodating. Support and encourage employees. Treat our employees as our internal customers and give them the tools necessary to excel at their jobs.
- **Fiscal Responsibility:** Invest and manage public funds and other resources wisely. Instill a dedication to thrift across our organization. Carefully plan and prioritize projects.
- **Innovation:** Pursue constant improvement in our work and services. Create an environment where employees are eager to use their talents to find better ways to do business and deliver service.





MASSDOT BY THE NUMBERS

In Massachusetts...



There are 36 public-use, general aviation airports Public use airports generate \$11.9 billion in total annual economic activity



MassDOT maintains 2,800 miles of roadway statewide There are over 5,000 bridges There are 4.6 million licensed drivers



There are 30 Registry of Motor Vehicle branches in Massachusetts There are 12 participating AAA branches that conduct Registry transactions There are over 5 million registered vehicles in Massachusetts The RMV collects over \$1 Billion in revenue annually



The MBTA operates and maintains 2,500 trains and buses in its fleet There are 885 miles of track used by the MBTA's subways and trains There are 15 Regional Transit Authorities



There is a 777-mile network of both on and off-road bike routes in the Bay State Greenway

Hubway - the Boston region's bike-share program - operates 140 stations with 1300 bicycles.



PERFORMANCE MANAGEMENT AT MASSDOT

As noted in the Introduction, performance management was legislatively woven into the creation of MassDOT. Since 2009, The Office of Performance Management and Innovation (OPM&I) has been working with each division to enhance and implement the practices of performance management throughout all levels of the organization. The following sections provide a snapshot of some of the ways that performance management is being practiced throughout the agency.

Office of Performance Management and Innovation

OPM&I's goal is to assist in the development and reporting of performance metrics that will enable MassDOT to better manage each operating division, and shared service units, improve the customer experience, and allow MassDOT to take early action in areas where we need to improve. This effort has resulted in both the highlighting and reporting of efforts that were well established, and the implementation of new practices that help drive MassDOT toward its mission and goals. On a quarterly basis, OPM&I presents the Performance Management and Accountability Report (PMAR) to the Secretary of Transportation and the MassDOT Board of Directors at one of their monthly public meetings. The PMAR is a publicly accessible performance review of each of the four Divisions: Aeronautics, Highway, Rail and Transit, and the Registry of Motor Vehicles (RMV). It is intended to give the public a sense of the operational health of MassDOT. To facilitate these reviews, OPM&I works collaboratively with each Division to collect, collate, and analyze performance data and report on progress against their organizational goals and objectives. For those areas which are not meeting expectations, MassDOT's senior management group works collaboratively to develop action plans to address significant performance deficiencies.

The PMAR is an evolving document. The performance measures and their corresponding performance targets are regularly reviewed and refined. As operational realities dictate, performance targets change. New performance measures are added and old measures retired as they outlive their usefulness. Understanding that transportation metrics are not all black and white, the report includes an analysis and discussion of each quarter's data. The context for each performance metric is critical to a broader understanding of the organization's overall health.

This Annual Report serves as the foundation for the PMAR. It includes an explanation for all measures, and compiles the full annual dataset. Where possible, this report provides a snapshot of the trends since SFY 2010. As indicated throughout, there are some instances where data is only available on a different reporting calendar or where an inclusive 5-year trend is not available.





weMove Massachusetts

MassDOT's Office of Transportation Planning (OTP) oversees the planning process, completes all statewide plans, maintains the Massachusetts transportation geographic information system, and coordinates with the regional agencies, among other things. In 2013 the OTP completed and published the most recent Long Range Transportation Plan (LRTP) – weMove Massachusetts (WMM). This was the first multi-modal LRTP developed for one unified statewide agency. Per the federal transportation legislation, MAP-21, the LRTP must be performance-based. WMM was structured to meet this requirement.

As part of WMM, MassDOT developed a Planning for Performance scenario tool. An example of the use of performance management for forecasting, the tool projected the performance outcomes of two funding and project selection scenarios designed around the agency's policy points. This tool can be used by MassDOT for future investment decisions.





GreenDOT

MassDOT launched GreenDOT in 2010, established as a comprehensive environmental responsibility and sustainability initiative driven by three primary goals:

- Reduce greenhouse gas (GHG) emissions;
- Promote the healthy transportation options of walking, bicycling, and public transportation; and
- Support smart growth development.

These goals, and GreenDOT's efforts, are closely related to a number of other initiatives and programs at the DOT and throughout the Commonwealth. These include, among others, the MassDOT Energy Initiative, MassRIDES, NuRide, Safe Routes to School, and the Healthy Transportation Compact.

To track progress toward these goals, and subset of supporting goals, GreenDOT has adopted a set of selected performance measures. In 2014 the GreenDOT staff developed and selected these measures, which were presented in the 2014 GreenDOT Report in December, 2014. Heading into 2015, the GreenDOT staff will coordinate closely with OPM&I staff to determine the preferred methods for collecting and reporting these metrics.



MBTA Sustainability Report

The MBTA has established an Environmental Management and Sustainability Policy, which is expressed in ten guiding principles. The MBTA has many projects underway to improve sustainability, including reducing water consumption, installing renewable energy sources, promoting sustainability in community outreach programs, and retrofitting outdated facilities to be more efficient. Additionally, the MBTA is working closely with the other divisions at MassDOT to coordinate and implement the GreenDOT goals.

In the Spring of 2014, the MBTA published the Sustainability Report. The report is organized around seven impact areas: energy, water, air, recycling & waste, community, future, and people. It provides an overview, supported by detail on specific metrics, of how the transit agency is performing in relation to these seven impact areas.



Strategic Highway Safety Plan

Massachusetts developed its first Strategic Highway Safety Plan (SHSP) in 2006. An updated version was published in 2013, providing data through 2011. The purpose of the SHSP is to provide a context for recent safety related initiatives and outputs, and to present a coordinated safety plan for meeting established statewide goals. The development of a SHSP has been recommended since 1997, but MAP-21 formalized the requirement that all states develop, implement, evaluate and update this strategic document. Per MAP-21 guidelines, the MassDOT SHSP presents goals and associated data that indicate change in relation to those goals.

MassDOT's 2013 SHSP update is organized around Strategic Emphasis Areas: nine areas that represent at least ten percent of annual fatalities or severe injuries on Massachusetts roadways. This framework allows MassDOT to identify those actions that are most likely to assist in progress toward the three overall SHSP gaols:

- Reduce motor vehicle fatalities and hospitalizations by 20 percent in the five-year period following adoption of the SHSP (short-term goal);
- Halve the number of fatalities and serious injuries by 2030 (interim goal); and
- Move Toward Zero Deaths and eliminate fatalities and serious injuries on the roadways (long-term goal).

Reporting on safety statistics in the Commonwealth is challenging, due to a current lag in reporting time. Therefore, it is difficult to meaningfully incorporate safety performance measures into the OPM&I reports. However, OPM&I is committed to working closely with the Traffic and Safety Engineering Section and other involved parties to try to reduce the delay in data reporting and availability.



HIGHWAY DIVISION: 2014 performance Trends and Highlights

Ensuring high-performance highway management at the Massachusetts Department of Transportation by:

- Providing an excellent roadway user experience on Massachusetts highways
- Managing highway infrastructure in a disciplined, responsible fashion



Overview:

MassDOT's Highway Division consists of over 3,300 employees, who aim to maintain a safe and durable highway network that supports job growth, industrial development, and the Commonwealth's economy. It's core responsibilities are to:

- **Ensure Highway Safety** Ensure the highest standards of public and employee safety on the highway system and in the work place. Massachusetts has one of the lowest fatality rates in the nation per 100 million vehicle miles traveled. MassDOT's Highway Division, in conjunction with their partners in safety, implements safety improvements and initiatives to maintain this standing. Worker safety is critically important, and the Highway Division continues to implement best practices in safety equipment, safety training and safety awareness.
- **Design Highway Infrastructure** Oversee the design of transportation improvement projects in a comprehensive and consistent manner, with a focus on safety, context sensitive design, innovation and multi-modal considerations. Projects are designed in accordance with the Massachusetts Project Development and Design Guide, as well as State and federal regulations. Permits and right of way acquisitions are secured in advance of construction. A comprehensive public outreach program exists to ensure that all road users and stakeholders have an opportunity or forum for vetting their concerns. These concerns would be evaluated during the project development process. All projects would then be aligned with the state, local and regional transportation plans.
- **Construct and Preserve Highway Infrastructure** Oversee the annual road and bridge construction program, closely managing projects to ensure they are delivered safely, with high quality, on time, and on budget. Implement innovative construction techniques and effective traffic management strategies, to minimize the impact of MassDOT projects on roadway users and abutting communities. Provide sufficient oversight to guarantee cost effectiveness, high quality materials and premium workmanship, ensuring capital investments result in long-term benefits for the Commonwealth.
- Maintain and Operate Highway Infrastructure Operate and maintain the State Highway system in a safe and effective manner that responds to customer needs. Minimize clearance times associated with operator, weather and maintenance related incidents, to improve safety and reduce congestion. Prioritize maintenance projects to ensure a high performing, attractive highway system that is accessible to all.



| Highway Division - 2014 Scorecard | | | | | |
|--|-------------------------------|-----------|---------|----------------------------|-----------------------|
| Division/Performance Measure | Policy Goal | Target | Current | Trending Toward Goal | Reporting Schedule |
| Reliably maintain and improve bridges in the Commonwealth | | | | | |
| Number of structurally deficient bridges | Safety | ≤463 | 452 | \checkmark | SFY |
| Reliably maintain and improve all MassDOT-owned pavement | | | | | |
| PSI | Safety/Customer Service | ≥65% | 66% | \checkmark | SFY |
| CRSI | Safety/Customer Service | ≥80% | 82% | \checkmark | SFY |
| Responsibly manage highway project planning | | | | | |
| Number of STIP projects advertised in the Federal Fiscal Year | Fiscal Responsibility | ≥80% | 89% | \checkmark | FFY |
| Average days from advertise to Notice-to-Proceed | Fiscal Responsibility | ≤140 days | 163 | - | Qtrly |
| Responsibly manage highway construction projects | | | | | |
| Percentage of construction projects trending on or under budget | Fiscal Responsibility | ≥90% | 72% | - | Qtrly |
| Percentage of construction projects trending on time | Fiscal Responsibility | ≥80% | 67% | - | Qtrly |
| Maintain and improve reliability of system for customers | | | | | |
| Increase the % of customers using EZ pass from the previous year | Customer Service/ GreenDOT | | 76% | \checkmark | Calendar Yr |
| Maintain and improve safety of system for customers | | | | | |
| Rate of fatalities per 100 million miles traveled | Safety | 0 | 0.62 | \checkmark | FFY |
| Road safety audits conducted each year | Safety | 40 | 64 | \checkmark | Calendar Yr |



Reliably Maintain and Improve Bridge Conditions

Bridge condition is critical to the safety of the Commonwealth's infrastructure. MassDOT vigilantly maintains over 5,000 bridges. Structural deficiency (SD) is a key indicator of bridge safety and capacity. It is important to note that a structurally deficient rating does not mean that the bridge is unsafe, simply that it requires repair to one or more of its elements. By the end of 2014, there were 443 structurally deficient bridges in Massachusetts. This continues the general positive (downward) trend of the past five years, meeting the target of fewer than 463 SD bridges.



Structurally Deficient Bridges

How it is Measured: Using regular inspection data, bridges are rated on a scale of 0 to 9. A bridge is rated as structurally deficient when the combination of its major components (deck, substructure and superstructure) have measurably deteriorated to the point at which action is needed or when any individual component is rated at four or below on the nine-point scale.

Why this Matters: This measure is an indicator for the general condition and safety of the Commonwealth's bridges, and demonstrates a backlog of maintenance and construction work.

Highway Spotlight

Becoming a Data Driven Agency: Asset Management as Performance Management

The Highway Division is developing an enterprise-level asset management strategy. Once implemented, the strategy will improve the business processes, tools, data, and IT architecture supporting the management of MassDOT's highway assets. Asset management relies on making data driven, performance-based decisions; it is a well-established example of performance management practices. Implementing the strategy will improve the Highway Division's and OPM&I's ability to capture and report key measures. For example, the ability to report the number and extent of new bicycle and pedestrian facilities - efforts which historically have been difficult to extract from pavement projects - will be practicable, more accurate, and transparent once the data management principles are installed and the systems using them are implemented. As the strategic plan is completed and implemented, OPM&I will be working closely with the Highway Division to leverage the new capabilities, share the improved data, and to translate those data into better decisions.



Reliably Maintain and Improve all MassDOT-Owned Pavement

The quality of the pavement on roadways across the Commonwealth has a direct impact on many elements of the transportation system and MassDOT goals - from safety, to customer service, to fiscal responsibility. MassDOT measures the overall condition of highway pavement using two measures: Pavement Serviceability and Customer Ride Satisfaction.

MassDOT has a goal to maintain 65% of MassDOT-owned pavement in good or excellent condition, as measured by the Pavement Serviceability Index (PSI). At the end of CY2013 the Highway Division was maintaining 66% of pavement in good or excellent condition. The CY2014 analysis will not be concluded until early 2015 at which point this report will be updated to reflect the most recent data.



Since 2009, Customer Ride Satisfaction Index (CRSI) has hovered between 81 and 83 percent, and in 2013 CRSI rating was 82. CRSI is reported on the Federal Fiscal Year to coordinate with Federal reporting practices. FFY 2014 data will be available in early 2015. This report will be updated when it becomes available.



Pavement Condition – CRSI

How it is Measured: A testing vehicle equipped with a measurement system that contains a combination of lasers and accelerometers determines the longitudinal pavement profile and ultimately the pavement smoothness.

Why this Matters: CRSI is an indicator of pavement smoothness as measured by the International Roughness Index (IRI) which has become the preferred method worldwide for reporting road roughness. Thresholds classify roadway conditions as Excellent, Good, Fair, or Poor and most closely align with the conditions a customer experiences on the road.



Responsibly Manage Highway Project Planning

Highway project planning is a critical link in the process of the construction, maintenance, and improvement of the Commonwealth's roadway network. It includes the prioritization and selection of projects, as well as the effort involved in putting projects out to bid and getting them under contract. Performance in this area is measured by looking at the timing of when the projects are advertised in relation to the funding availability, and by the amount of time that lapses between when the projects are advertised and when contractors are given the notice to proceed. Both are indicators of the efficiencies of internal agency processes.

The State Transportation Improvement Program (STIP) outlines all projects funded with federal funds in a fiscal year. Since it represents the majority of the projects that are put out to bid, this metric is measured on the federal calendar. By the end of FFY 2014, 81 projects were advertised, out of a possible 91 listed on the STIP. This progress exceeds the target by 8 projects.



Getting the projects advertised is only half the battle towards responsibly managing highway project planning. The other critical metric is the length of time between advertising the project and issuing a Notice-to-Proceed (NTP) to begin work.

The Highway Division monitors days between advertising to NTP for each project in its portfolio. The average for each quarter is compared to the target of 140 days.

The increase in SFY2014, was due to the severe delay in Transportation Bond Bill approval, which was finally signed in April 2014. Without the approval of the Transportation Bond Bill, funding was unavailable to the division and therefore it was unable to issue NTPs. With the ability to issue NTPs restored, the Highway Division made some progress in the last quarter of 2014 - ultimately finishing the year at 163 days.





Responsibly Manage Highway Construction Project

Once highway projects are in the construction phase, MassDOT tracks certain indicators to ensure that they are being completed on time, and on budget. During the course of SFY 2014, MassDOT managed 639 projects. For FY 2015, 711 projects are planned.

Through extensive project and internal controls, the Highway Division monitors project timelines, schedules and performance in an effort to reduce or mitigate the number of projects that go over budget or are delivered late. The percentage of projects trending on budget has remained consistently at about 72% since 2011.





The percentage of contracts trending on time for SFY 2014 was 67%, which illustrates little change over the past three years since a drop between 2011 and 2012.







Maintain and Improve Safety of System for Customers

For MassDOT, and its users, safety is the most critical condition of a roadway system. MassDOT is committed to providing a safe system for all users – whether they are traveling in a personal vehicle, a bus, on bike, or by foot. The Highway Division measures both its own input actions (e.g. number of road safety audits completed) as well as how the system is actually performing with respect to safety (e.g. number of fatalities). Massachusetts has adopted the Federal Highway Administration's strategy, Toward Zero Deaths (TZD), as part of their overall highway safety initiative.

Between 2009 and 2012, the number of fatalities per 100 million miles traveled remained consistently low, at about .62. Compared with other States, Massachusetts ranked first or second on this metric during this time period. The data for this measure lag due to the reporting and collection process, and therefore more recent numbers are not available. The Highway Division is exploring methods for decreasing this lag time in the future.



Road Safety Audits (RSAs) are completed on all projects that fall under the Highway Safety Improvement Program (HSIP). A strategy for identifying potential safety issues and possible opportunities for safety improvements, MassDOT has found RSAs to be a low cost opportunity to make significant safety improvements. RSAs are tracked on a calendar year. The graph below shows the growth in the number of RSAs completed each year. The 2014 numbers include those completed through October 2014, and is therefore not a full year. This number will be updated when it becomes available.



HIGHWAY SPOTLIGHT Improving the Performance of Highway Speed Enforcement through Data



MassDOT and the Massachusetts State Police announced the establishment of a new Highway Safety Corridor Program for I-495 through the towns of Chelmsford, Westford, Littleton, Boxborough, Bolton, and Berlin.

The program posts public safety signs that read, "Highway Safety Corridor / Laws Strictly Enforced" at eight locations through the corridor. In partnership with the State Police, additional patrols will be on hand to enforce speed limits, reduce aggressive driving and prevent distracted driving. The program uses radar technology to calculate the average rate of speed through this segment of I-495, and will be used to deploy State Police patrols during times when the data show vehicle speeds above the posted limit.

"MassDOT's new program of speed measuring along the Interstate 495 corridor will greatly enhance our ability to conduct enforcement at the most appropriate times and locations," said Frank DePaola, MassDOT's Acting Secretary and CEO.

The enforcement program is a \$201,000 effort funded through the Highway Safety Improvement Program as a strategy to curb speeding and other moving violations under the Massachusetts Strategic Highway Safety Plan. The program includes the purchase of the eight Variable Message Boards with radar. The data collected from the radar will be used to measure the reduction of average vehicle speeds because of the additional State Police patrols. In the future, the equipment will be deployed along other portions of state highway to establish additional Highway Safety Corridor campaigns.



Highway Spotlight

Performance Improvement through Technology: All Electronic Tolling

Efforts to roll out the statewide All Electronic Tolling System (AETS) kicked off in July 2014 when the MassDOT board signed the first contract. The contract involves the removal of toll plaza cash collection and the elimination of the ticket system for toll collection. Toll collection will be completely automated through E-ZPass and Image Based Tolling (IBT) with no in-lane toll payment accepted. Instead vehicles will be "tolled" as they pass through a toll zone and under a gantry furnished with E-ZPass and camera equipment. When a transponder is not detected, IBT will capture vehicle license plate images with a camera and invoice the vehicle's owner for the amount of the tolls. The complete system is expected to go live in July 2016.

MassDOT has been collecting tolls electronically since 1998. Since implementation, vehicle operators have had the option to use an E-ZPass transponder, or to pay for tolls using cash. Electronic tolling has been widely adopted and used; since 1998 over 2.3 million transponders have been issued in the Commonwealth, and E-ZPass accounts for over 72% of all transactions taking place at MassDOT toll facilities. The move to AETS will save MassDOT money in the long run, reduce trip time for travelers, and support the MassDOT and State goals toward a reduction in greenhouse gas emissions.







AERONAUTICS DIVISION: 2014 PERFORMANCE TRENDS AND HIGHLIGHTS

To promote aviation throughout the Commonwealth while establishing an efficient integrated airport system that will enhance airport safety, economic development, and environmental stewardship.

Overview:

The Aeronautics Division regulates 36 of the 39 public-use general aviation airports, private use landing areas and seaplane bases throughout the Commonwealth. The three remaining airports (Worcester, Hanscom, and Logan) are under the jurisdiction of the Massachusetts Port Authority. The Aeronautics Division certifies airports and heliports, licenses airport managers, conducts annual airport inspections, and enforces safety and security regulations. In addition, its responsibilities include:

- Overseeing the statewide Airport Capital Projects Program •
- Developing statewide aviation safety programs
- Overseeing state-owned navigational aids
- Conducting statewide aviation planning studies
- Licensing airport managers
- Conducting annual airport safety inspections
- Implementing statewide airport security initiatives
- Promoting statewide aviation education outreach across the Commonwealth

| Aeronautics Division - 2014 Scorecard | | | | | | | |
|--|---------------------|--------|---------|----------------------------|-----------------------|--|--|
| Division/Performance Measure | Policy Goal | Target | Current | Trending Toward Goal | Reporting Schedule | | |
| Reliably monitor conditions of each general use airport | | | | | | | |
| Inspection of each general use airport | Safety | ≥22 | 36 | \checkmark | Qtrly | | |
| Reliably maintain and improve all airport pavement condition | | | | | | | |
| Runway pavement condition | Safety | ≥75 | 70 | N/A | Other | | |
| Responsibly manage airport project planning and implementation | | | | | | | |
| Number of projects under construction during year | Customer Service | N/A | 3 | - | SFY | | |





Reliably monitor conditions of each general use airport

Airport safety is of critical importance to all. The Aeronautics Division performs an annual inspection for all 36 airports in Massachusetts in compliance with the FAA contract. As of July 2014, the Aeronautics Division has inspected 30 of 36 airports, and is on schedule to complete all inspections by year's end. A comprehensive airport inspection includes the following areas: paved and unpaved aprons, runways, taxiways, safety areas, markings and lighting, navigable airspace, navigational aids, traffic and weather indicators, fueling operations, construction safety, wildlife hazard management, airport operations, and compliance with MassDOT Aeronautics Regulations.



Reliably maintain and improve all airport pavement condition

Pavements represent one of the largest capital investments in the Massachusetts aviation system. The condition of these pavements is important from both cost-effectiveness and safety standpoints. Pavement rehabilitation costs increase as conditions deteriorate. Additionally, airport pavement weaknesses, such as cracks and loose debris, pose a significant safety risk.

Runway pavement condition is monitored using a statewide airport pavement management system (APMS). The Aeronautics Division established this in 2012 to monitor the condition of the Massachusetts airport infrastructure. This tool is useful to the airports, MassDOT Aeronautics, and the FAA as they identify pavement-related needs, optimize the selection of projects and treatments over a multi-year period, and evaluate the longterm impacts of project priorities.

For example, MassDOT is currently completing a rehabilitation of one of the major runways at the New Bedford Regional Airport. As of September 30, 2014 all paving was completed. The remaining work includes installation of the approach lighting systems. The Grand Opening is scheduled for October 2014.

Through their Airport Pavement Management System Plan development process, the Division of Aeronautics adopted a goal of achieving a Pavement Condition Index (PCI) of 75 for all runways by 2018. The current PCI, last measured in 2012, is 70.

Runway Pavement Condition

How it is Measured: Pavements are evaluated using the pavement condition index (PCI) procedure. During the survey, the types, severities, and amounts of distress present on a pavement are quantified. This information is then used to develop a composite index that represents the overall condition of the pavement in numerical terms, ranging from 0 (failed) to 100 (excellent). The average PCI for all airports is adjusted to account for the relative size of the pavement sections.

Why this Matters: This measure is an indicator of overall condition of the runways, and is indicative of the level of work that will be required to maintain or repair a pavement



Responsibly manage airport project planning and implementation

The following three projects were active during FY 2014.

- The Westfield Barnes Runway 2-20 project (now completed)
- The Statewide Airport Administration Building Program is now in progress. This project includes the Design and Construction
 of Administration Buildings at 15 airports statewide over the next 5 years. Three buildings, at Beverly, Fitchburg and Mansfield were identified in May, and negotiations on the design began in June. (NOTE: The scope of work and timeline for the
 Statewide Airport Administration Building project was delayed due to the timing of the transportation bond bill.)
- The Runway 5-23 reconstruction project at New Bedford Regional Airport started up again in April after being on hold due to winter weather.



Nantucket Airport - 1941

Nantucket Airport - 2014

<u>Aeronautics Spotlight</u> Reducing the Commonwealth's Transportation Carbon Footprint: Carbon Neutral Airport Project

The Aeronautics Division is working with the Volpe National Transportation Systems Center to establish the first ever carbon neutral airport in the United States.

The project will develop a carbon neutral airport concept and implement measures to dramatically reduce fossil fuel consumption and Greenhouse Gas (GHG) emissions for ground-based operations at Nantucket Memorial Airport. In Phase 1 the project focused on planning and design; Phase 2 will focus on implementation at the airport. Following successful implementation, the project will identify lessons and practices learned at Nantucket Airport that are relevant to airports of all sizes and service types—ranging from the smallest general aviation airport, to large and complex commercial service airports. Phase 2 commenced in May 2014 and will conclude in January 2016.

This program plays a part in addressing one of three GreenDOT goals: to reduce GHG emissions. Additionally, the program will assist the Aeronautics Division in meeting its own Environmental Compliance and Stewardship goal set forth in the Massachusetts Statewide Airport System Plan. This goal requires each airport to embed sustainability practices into airport operations, planning and development projects to protect 1) the natural environment; 2) the quality of life for airport employees and neighbors; and 3) the economic development potential of the airport.



Responsibly manage airport funding and finance

The Aeronautics Division had a goal of spending 90% of the funds budgeted for airport capital improvements. In FY14 \$16.0 million of the budgeted \$17.5 million, or 92%, was disbursed for airport projects.



Disbursement of Capital Budget

How it is Measured: Percentage of total allocated capital budget that is dispersed to contractors, vendors, etc. by the end of the year.

Why this Matters: This measure is an indicator of how well the Aeronautics Division is staying on track compared to its planned expenditures.



Aeronautics Spotlight Measuring Effect: Aviation Economic Impact Study

The 2014 Massachusetts Statewide Aviation Economic Impact Study kicked off in April 2014. The objective of this project is to measure the economic impact of the activity associated with the 39 public-use airports in the Commonwealth. The economic contributions come from spending associated with business operations, on-airport construction, military aviation, visitors who arrived via commercial airlines, and visitors who arrived on privately-owned general aviation aircraft.

Data collected using surveys that target both airport sponsors and airport tenants will support the economic model to estimate the impacts: direct, indirect, and induced. The project team has started capturing data on qualitative benefits, primarily as they relate to health, welfare, and safety. Next steps include analyzing the tax impacts of the Commonwealth's airports, and developing two case studies highlighting the economic impact of selected activities.

This project is on schedule to be completed in early 2015.



Registry of Motor Vehicles Division 2014 performance Trends and Highlights

To ensure the safety of every driver that we license and vehicle that we register, while maintaining the integrity and security of our processes for every product issued and service delivered.

Overview:

The Registry of Motor Vehicles (RMV) is responsible for collecting over \$1.2 billion in annual revenue. Its staff of approximately 730 employees regulate the Commonwealth's motor vehicles, identification cards, driver's licenses, motor vehicle registrations and titles, vehicle and bus inspections, and the Merit Rating Board (MRB). Specifically, the RMV is responsible for:

- Licensing 4.73 million drivers to ensure that only qualified individuals operate motor vehicles in the Commonwealth
- Registering and titling over 5 million vehicles to protect drivers and provide a database of motor vehicle assets
- Issuing 700,000 license suspension notices, every year, to operators prohibited from driving on the Commonwealth's roadways
- Inspecting 9,000 school buses three times per year to protect the safety of student riders



- Overseeing more than 1,600 commercial and non-commercial inspection stations
- Overseeing annual safety and emission checks on over 4.4 million vehicles to ensure the safety of vehicles traveling on Massachusetts roadways
- Through MRB, maintain operator driving records consisting of traffic law violations, at-fault and comprehensive insurance claim records, and out-of-state driving records
- Certifying more than 400 driving schools and nearly 1,800 driving instructors to ensure that Massachusetts' motorists receive proper education and training.

| Registry of Motor Vehicles Division - 2014 Scorecard | | | | | | | |
|--|------------------|---------|---------|----------------------------|-----------------------|--|--|
| Division/Performance Measure | Policy Goal | Target | Current | Trending Toward Goal | Reporting Schedule | | |
| Improve the efficiency of the Branches and Call Center | | | | | | | |
| Branch Wait Time | Customer Service | ≤15 | 29:01 | - | Qtrly | | |
| Call Center Wait Time | Customer Service | ≤10 | 21:56 | \checkmark | Qtrly | | |
| Online license renewal | Customer Service | ≥50% | 50% | \checkmark | Qtrly | | |
| Transactions by industry partners | Customer Service | ≥239057 | 250996 | \checkmark | Qtrly | | |
| Reduce Road Test Wait Time | Customer Service | ≤28 | 37 | - | SFY | | |
| Maintain safety of the Commonwealth's school buses and inspection stations | | | | | | | |
| Conduct public school bus inspection | Safety | ≥ 27000 | 26816 | - | SFY | | |



Improve the efficiency of the Branches and Call Center

The RMV branches serve over 3.5 million customers and process about 4.38 million transactions. The call center handles 1.2 million calls each year. For many residents of the Commonwealth, these are the only person-to-person interactions that they have with employees of MassDOT. Therefore, the RMV is really on the "front line" of the agency, and is a critical component of MassDOT's customer service goal. To track this performance, the RMV reviews the customer service wait time at both the branches and the contact (call) center.



Over the past year, branch wait time decreased from the first to the second quarter, but has been increasing for the second half of the year. The five year trend shows that after a significant drop in 2011, the wait time has been steadily rising to a high in 2014 of a 28 minute average wait. This increase ties closely with branch staffing levels. The branch staffing level decreased by 87 employees over the last 4 years. In January 2011, there were 390 customer service representatives in the branches compared to 202 in December 2014.

As the average age of the branch workforce increases, there is an uptick in the use of approved leave, which greatly reduces the number of employees working in the branches, thus increasing the wait time.

Branch Wait Time

How it is Measured: The average length of time a customer waits to be served after checking in at an RMV branch.

Why this Matters: This measure provides the RMV with an indicator of customer experience, and of how existing staff levels are aligning with customer needs.

The RMV, working with OPM&I, is exploring ways to conduct a more nuanced analysis that considers the different geographic contexts of the branches, as well as the services that they provide. Those branches in larger metropolitan areas, and those that offer a greater range of services, are likely to have longer wait times. By organizing the branches into "tiers," the RMV will be able to set more appropriate targets for each group of similar branches, and prioritize the issues and the strategies used to address them.



The contact (or call) center, provides over the phone service to customers. Customers are able to renew vehicle registrations, change their address, and complete an out-of-branch license renewal, among other services. The RMV is focused on reducing wait times for customers by implementing new technologies. Phase I of this effort, called OneVoice, was implemented in FY 2012. Phase II was completed in FY 2013, and Phase III in FY 2014.





Average Contact Center Wait Time

How it is Measured: The average length of time a customer waits before his/her call is answered by an RMV employee after the phone has been connected.

Why this Matters: This measure provides the RMV with an indicator of customer experience, and of how existing staff levels are aligning with customer needs.

In January 2014, the RMV implemented "Virtual Hold." This feature allows customers to select a call back option, and receive a call once a service representative is available. In addition to Virtual Hold, the RMV added more self-service options for phone customers, such as voice-activated menus. The impact of this technology is clear in the graph presented. After rising steadily to 23 minutes, average wait times dropped dramatically from the second to the third guarter, and continued to decline in the fourth quarter to just over 21 minutes for the average user. The five year trend graph shows that the wait times had been steadily climbing, but that the new technology has had an impact in reversing that trend. The Registry expects that this new technology will continue to play a role in overall decreased wait times, though the impact will likely level off.



One successful strategy the Registry has employed to positively impact branch and contact center wait times is to promote online and industry partner (e.g. AAA, insurance agencies, car dealerships, etc.) transactions. When customers visit the website they are greeted with a prominent link to the available online services. The Registry tracks out-of-branch transactions as one of their performance metrics. As the two graphs below indicate, both the number of online and industry partner transactions had an overall upward trend through the course of FY 2014.

Online and Industry Partner Transactions

How it is Measured: The number of individual transactions that are completed online, or via an industry partner.

Why this Matters: This measure provides the RMV with an indicator of how user-friendly and widely knows these other service options are to customers.



SFY2014 - Transactions by industry Patners 270000 260000 250000 240000 230000 220000 Jul -Sep 13 Oct- Dec 13 Jan - Mar 14 Apr -Jun 14





The annual trend data of the online and industry partner transactions also show the continued growth in this area.







The RMV also tracks the average time a customer must wait to complete a road test. As noted in the graph below, the average wait time was close to forty days during the first quarter of SFY 2014. The average number dipped below 30 days in the third quarter but, climbed again in the fourth quarter. This wait time is a result of an insufficient number of road test examiners. The RMV is in the process of hiring additional staff and is exploring new ways to reduce its wait times including expanding partnerships with the professional driving schools.



Over the past three years, the average wait time for a road test decreased to just over a month, and then increased again in 2014.



<u>RMV Spotlight</u> Reducing the Customer Wait Time through Self Service Options

As the RMV engages in the multiyear modernization of its legacy licensing and registration system, the team at the RMV is also committed to delivering new in-branch technologies to improve the customer experience. The RMV's new Haymarket Center branch in Downtown Boston features a tablet station for customers, who may not have realized they were eligible to perform their transactions online at MassRMV.com. Customers can complete their transaction and print their receipt using a tablet. This new modern amenity eliminates or reduces the wait times for simple transactions such as address changes or registration renewals, thus allowing our customer service representatives more time to focus on complex transactions.





In addition to the tablet station, in 2015, the Registry will be demonstrating the new Fas-Track kiosk. The kiosk will allow customers to update their own license or ID photo and request a duplicate license or ID in a few minutes. The on-your-own renewal kiosk will reduce lines and provide a safe and secure transaction experience for Massachusetts license and ID holders. By the end of 2014, the FasTrack kiosks will appear in several branches across the Commonwealth as part of the pilot program.



RMV Spotlight

Performance Improvement through Technology: RMV Modernization Program

To better address the evolving needs of its customers and business partners the RMV is undergoing an innovative modernization effort which requires the installation of the latest technologies and a recasting of its nearly 500 underlying business processes. This new solution will not only create a better workplace environment for the RMV's employees, but also improve the overall experience of the division's customers by affording them more self-service options and reducing their wait-times.

The RMV Modernization Program (RMVM) achieved significant milestones in 2014 including:

- Finalized business requirements definition in preparation for Release 1
- Completed the system design "look and feel"
- Built four of 11 infrastructure environments (in conjunction with MassIT)
- Began software and testing construction
- Initiated a cloud technology solution for document and customer relationship management
- Created one master customer record for each person

The most substantive accomplishment was the finalization of the prototype for the 360 Degree View of the Customer – a new approach to customer relationship management enabling customers, employees and select business partners to have immediate, 24/7 access to all of the principal data regarding an individual's relationship with the RMV.





RAIL AND TRANSIT DIVISION 2014 performance Trends and Highlights

To provide a world class transportation system built upon customer service excellence, accessibility, reliability, state-of-the-art technology, and a diverse workforce that reflects our commitment to the communities we serve.

Overview

The Rail and Transit Division is responsible for all transit initiatives including oversight and management of the Massachusetts Bay Transportation Authority (MBTA) and oversight of all Regional Transit Authorities (RTAs) in the Commonwealth. The MBTA is one of the oldest and largest public transportation agencies, transporting over 1.3 million passengers daily. As of the end of June 2014, the MBTA had approximately 6,000 employees. The MBTA's main services include:



- Bus the MBTA operates a variety of bus lines, including local, key, commuter, express, and community routes.
- Light Rail the MBTA's primary light rail system, the Green Line, provides street-running service to outlying areas and subway service through the center of the city. The MBTA also operates the Mattapan High Speed Line which services as a Red Line extension from Ashmont to Mattapan.
- Heavy Rail The MBTA operates three heavy rail lines the Red Line, Blue Line and Orange Line. Collectively, these lines provide core subway service.
- Commuter Rail The MBTA's commuter rail routes link cities and towns around the state with downtown Boston. As of July 2014, the commuter rail is operated by Keolis. The previous operator of the service was the Massachusetts Bay Commuter Rail Company.
- Boat The MBTA provides ferry service between downtown Boston, the South Shore, and Logan Airport.
- Paratransit The MBTA provides parallel paratransit service via The Ride to eligible customers in 60 cities and towns in Eastern Massachusetts.





| Rail and Transit Division - 2014 Scorecard | | | | The P | |
|---|--|-----------------------------------|-------------|----------------------------|-----------------------|
| Division/Performance Measure | Policy Goal | Target | Current | Trending Toward Goal | Reporting Schedule |
| Reliably operate equipment on the transit system (MMBF) | | | | | |
| Red Line | Customer Service | ≥47,000 | 56,584 | \checkmark | Qtrly |
| Orange Line | Customer Service | ≥37,000 | 41,986 | \checkmark | Qtrly |
| Blue Line | Customer Service | ≥35,000 | 56,986 | \checkmark | Qtrly |
| Green Line | Customer Service | ≥5,500 | 5,491 | - | Qtrly |
| Bus | Customer Service | ≥12,000 | 13,359 | ✓ | Qtrly |
| Commuter Rail | Customer Service | ≥10,200 | 5,773 | - | Qtrly |
| Provide reliable on-time performance of the transit system | | | | | |
| Red Line Passenger Wait Time | Customer Service/ GreenDOT | 88% | 86% | \checkmark | Qtrly |
| Orange Line Passenger Wait Time | Customer Service/ GreenDOT | 83% | 82% | - | Qtrly |
| Blue Line Passenger Wait Time | Customer Service/ GreenDOT | 95% | 93% | ~ | Qtrly |
| Commuter Rail On Time Performance | Customer Service/ GreenDOT | 95% | 90% | - | Qtrly |
| Key Bus Routes & Silver Line On Time Performance | Customer Service/ GreenDOT | 75% | 73% | - | Qtrly |
| Paratransit On Time Performance | Customer Service/ GreenDOT | 93% | 93% | \checkmark | Qtrly |
| Provide a safe environment for customers of the transit syste | em | | | | |
| Average Rate of Crime in Transit Locations | Safety | ≤1.9 | 2.1 | - | Qtrly |
| Operate an efficient and fiscally responsible transit system | | | | | <u>.</u> |
| Ridership on all lines | Fiscal Responsibility/ Customer Service | n/a | 351,599,677 | n/a | Qtrly |
| Farebox recovery | Fiscal Responsibility | 10% in- crease | 31% | \checkmark | Qtrly |
| Responsibly manage transit capital projects | | | | | |
| Complete construction projects on time | Fiscal Responsibility/ Customer Service | n/a | 70% | n/a | Annual |
| Number of projects completed in year | Fiscal Responsibility | n/a | 6 | n/a | Annual |
| Number of projects advertised early or on time | Fiscal Responsibility | n/a | 4 | n/a | Annual |
| Number of projects currently under construction | Fiscal Responsibility | n/a | 46 | n/a | Annual |
| Number of projects planned for the next year | Fiscal Responsibility | n/a | 18 | n/a | Annual |
| Maintain accessibility for all users | | | | | |
| Elevator availability | Customer Service | 99% | 99% | ✓ | Qtrly |
| Escalator availability | Customer Service | 99% | 99% | ~ | Qtrly |
| Response rate to MBTA customer inquiries are closed within 5 days | Customer Service | 95% closed within 5 days | 87% | _ | Qtrly |

Reliably operate equipment on the transit system

To measure the reliability of the operations and equipment on the Commonwealth's transit system, the MBTA tracks miles between system failures (Mean Miles Between Failures (MMBF)). This is a standard industry metric, and one which the MBTA reports to the National Transit Database (NTD) for each of the subway lines, the light rail, commuter rail and bus. A higher number (greater distance between failures) indicates improved system condition and the MBTA typically strives to meet or exceed the number from the previous fiscal year for each mode in the system.

The multi-year trends, going back to 2011, show a positive trend (with greater distance between failures) for each of the subway lines. Particularly noteworthy is that even though the Blue Line's MMBF decreased over the course of the year (see tables), the average for the year was a positive change from previous years. Looking long-term, the MBTA announced in 2014 that it will be replacing the entire fleet of Orange Line cars and 74 Red Line cars by 2019. These new vehicles will have a significant impact on the operating reliability of the Red and Orange Lines.



Mean Miles Between Failures

How it is Measured: The MBTA tracks the number of miles between each failure. A major failure 1) requires someone other than the revenue vehicle operator to restore the vehicle to operating condition, and 2) usually prohibits the vehicle from completing its revenue service trip.

Why this Matters: This measure provides the MBTA with an indicator of asset condition, and operational efficiency.

Each of the three subway lines (Red, Orange, and Blue) experienced some fluctuation in the MMBF metric over the course of 2014. For the subway lines, the Red Line displayed a positive trend, the Orange Line remained consistent, and the Blue Line's MMBF declined over the course of the year (See tables on the following page).



| State Fiscal Year 2014 | Red Line | Orange Line | Blue Line |
|------------------------|----------|-------------|-----------|
| Quarter 1 | 61405 | 40406 | 54814 |
| Quarter 2 | 47804 | 46555 | 65932 |
| Quarter 3 | 43569 | 38126 | 59040 |
| Quarter 4 | 73557 | 42855 | 48156 |
| SFY2014 Average | 56584 | 41986 | 56986 |

All transit lines, including the commuter rail and bus, displayed a decrease in MMBF in the third quarter (January to March). The winter of 2014 had a number of significant weather events, and may have played a role in this performance trend. MMBF for the Green Line also fluctuated over the course of the year with one significant increase from the first to second quarter, but overall displayed an upward trend. The trend since 2011 also shows a consistent change in a positive direction.

| 4- Year Average | Green Line | State Fiscal Year 2014 | Green Line |
|-----------------|------------|------------------------|------------|
| SFY2011 | 3825 | Quarter 1 | 4833 |
| SFY2012 | 4137 | Quarter 2 | 6313 |
| SFY2013 | 4919 | Quarter 3 | 5418 |
| SFY2014 | 5491 | Quarter 4 | 5401 |
| 4-Year Average | 4593 | SFY2014 Average | 5491 |

On the commuter rail, the MMBF also dipped significantly in the third quarter. Overall, the annual trend was in the upward direction. The Commuter Rail's 2014 average MMBF declined over previous years; however the overall trend maintained a positive direction. With a new operator contract in place starting in July 2014, the MBTA is hopeful that the MMBF will again begin to climb in SFY2015.

| 4- Year Average | Commuter Rail | State Fiscal Year 2014 | Commuter Rail |
|-----------------|---------------|------------------------|---------------|
| SFY2011 | 4234 | Quarter 1 | 6230 |
| SFY2012 | 6221 | Quarter 2 | 5853 |
| SFY2013 | 7168 | Quarter 3 | 4594 |
| SFY2014 | 5853 | Quarter 4 | 6736 |
| 4-Year Average | 5869 | SFY2014 Average | 5853 |

The MBTA bus fleet experienced variation in MMBF over the course of the year, but overall displayed a downward trend. The trend in MMBF on buses since 2011 shows a slight upward trend.

| 4- Year Average | Bus | State Fiscal Year 2014 | Bus |
|-----------------|-------|------------------------|-------|
| SFY2011 | 10602 | Quarter 1 | 14175 |
| SFY2012 | 12617 | Quarter 2 | 14490 |
| SFY2013 | 13353 | Quarter 3 | 11940 |
| SFY2014 | 13359 | Quarter 4 | 12831 |
| 4-Year Average | 12483 | SFY2014 Average | 13359 |



Provide reliable on-time performance of the transit system

While the MMBF measures the condition of the MBTA's rolling stock, the passenger wait time performance metric provides a reliability measure from the customer perspective. It captures the percent of customers who wait on the platform no longer than the scheduled time between trains. Certainly the vehicle condition (measured by MMBF) has an impact on on-time performance, but this measure also captures operational issues that influence the ability of the MBTA to operate on schedule.

Over the course of SFY 2104, the Red Line and Orange line passenger wait time both decreased during the third quarter (consistent with the trends in MMBF) and showed an overall stable trend. The Blue Line's passenger wait time performance trended positively. Since 2012, the Blue Line is also the only subway line to display a positive performance direction in this area.



Passenger Wait Time Metric

How it is Measured: The passenger wait time metric was developed in conjunction with MIT. It correlates Automated Fare Collection data and track circuitry data to determine the percent of passengers whose wait time was less than or equal to the scheduled interval between trains.

Why this Matters: This measure provides the MBTA with the picture of how the operations of each line is performing, from the customer experience perspective.









Due to different ticketing technology, the passenger wait time method used for the subway system is not measurable for the Commuter Rail, the Silver Line, or the other bus routes. Instead, on time performance is measured by the actual arrival time of each vehicle in comparison to the scheduled arrival time. The Commuter Rail showed variability over the course of 2014, but ended on an overall downward trend for the year. The same is true for this rail line over the past three years.



On-Time Performance - Commuter Rail

How it is Measured: On time performance is measured by the difference between the scheduled arrival time, and the actual arrival time. Commuter rail trips are considered on time if they arrive at their terminal point no more than 4:59 minutes beyond their scheduled arrival.

Why this Matters: This measure provides the MBTA with the picture of how the operations of each line is performing.

The Silver Line and key bus route performance was trending up, until the final quarter when it dropped back to the same on time rate that it began with. The on time performance on the bus routes has been increasing positively since 2012.







The MBTA's paratransit service (The RIDE), provided consistent on-time performance in 2014. There has been a slight downward trend over the last 3 years with on-time performance dropping three percentage points since 2012.



On-Time Performance - Paratransit

How it is Measured: On-time performance for The RIDE is measured by how promptly vehicles arrive at the starting point of each scheduled trip. A RIDE trip is considered "completed" when the vehicle collects the patron from the starting point and begins its journey towards the scheduled destination. Such a trip is considered on time if this occurs within 15 minutes of the scheduled reservation start.

Why this Matters: This measure provides the MBTA with the picture of how the RIDE's customers are experiencing the service.







Provide a safe environment for customers of the transit system

Ensuring a safe experience for all users of the system is of utmost importance to the MBTA. One measure that MassDOT tracks is the rate of crime in transit locations. The rate of crime trended down over the course of SFY 2014. This improvement has been continuous since 2012.



Rate of Crime in Transit Locations

How it is Measured: The crime rate measures the number of Part 1 crimes perpetrated on MBTA property, per 1 million unlinked trips. Part 1 crimes are defined by the FBI as: homicide, rape and attempted rape, robbery and attempted robbery, aggravated assault, burglary and attempted burglary, larceny and attempted larceny, vehicle theft and attempted vehicle theft, and arson.

Why this Matters: This measure provides the MBTA with the relative level of safety that users can assume to experience while using the system. It also allows the MBTA to determine whether policing levels are sufficient.

MBTA Spotlight

Measuring Sustainability: APTA Awards the MBTA Gold Level Status

In May 2012, the MBTA signed the American Public Transportation Association (APTA) Sustainability Commitment Pledge. This voluntary program for transit agencies requires demonstrated commitment to "preserving the environment, being socially responsible, and maintaining economic viability, with an overall contribution to quality of life." Commitment is demonstrated through the implementation of procedures, policies, and programs designed to quantify their level of continuous improvements in the areas of water, energy, and fuel consumption, reduction in greenhouse gas emissions, increased recycling, and decreased waste generation, as well as other areas within the organization. Agencies are rated based upon an evaluation system that qualifies their level of implementation from Bronze, to Silver, to Gold, to Platinum.

The MBTA has reported the following metrics to APTA each year, starting in 2009:

- Water Usage
- GHG Emissions
- GHG Savings
- Energy Use
- Recycling
- Ridership
- Non-MBTA Vehicle Miles Traveled
- Operating Expense

In 2014, the MBTA was awarded the Gold level recognition, for their reported progress to date.





CONCLUSION

Throughout 2014, MassDOT continued to work collaboratively to increase transparency and accountability, quantify results delivered, and improve performance throughout the secretariat. This work spanned all divisions, and included efforts such as small improvements in day to day operations along with larger innovations in transportation system data collection and customer service improvements. These initiatives – as highlighted throughout this report – are critical to supporting MassDOT's and the Commonwealth's responsibility to provide a safe and efficient transportation network.

OPM&I is looking forward to working internally with MassDOT leadership in 2015 to update strategic plans and initiatives, and conduct further data analyses to provide a clearer picture of the impacts and outputs of agency actions and decisions. This work will be conducted in coordination with partners at the Federal Highway Administration and the Federal Transit Administration as the MAP-21 performance rule-making is finalized and reporting requirements come into effect.

As MassDOT celebrated its fifth anniversary, the extent to which performance management and measurement is embedded throughout agency practices is notable and impressive. The agency is considered a leader among state agencies in turning data into meaningful measures and informed decisions, and has been active in sharing these experiences among the Secretariats.

MassDOT is poised to support a new administration focused on strong management, transparency and accountability. We are ready to utilize the established measurement infrastructure to further elevate performance management – and with that to provide a better transportation system for the residents of the Commonwealth.

