Strategic Objective 3.1—Enhance Productivity and Growth

Improve the contribution of the transportation system to the Nation's productivity and economic growth by supporting strategic, multi-modal investment decisions and policies that reduce costs, increase reliability and competition, satisfy consumer preferences more efficiently, and advance U.S. transportation interests worldwide.

PERFORMANCE SUMMARY

Based on current economic and demographic forecasts, it is likely that the movement of people and goods within the United States and abroad will continue to increase and the transportation sector will continue to enable economic growth and job creation. The transportation sector contributed approximately \$1.466 trillion, or 9.7 percent, to gross domestic product (GDP) in 2011. Our Nation must make strategic investments that enable the movement of people and goods more efficiently with full utilization of the existing capacity across all transportation modes. The cornerstones of this strategy are investments in high-performance passenger rail, the development of a national freight strategy, investments in public transportation, continued operating improvements that mitigate traffic congestion on our highways, and implementing the Next Generation Air Transportation System, or NextGen, to improve operations and alleviate airport congestion.

DOT Operating Administrations: Federal Aviation Administration (FAA), Federal Highway Administration (FHWA), Federal Motor Carrier Safety Administration (FMCSA), Federal Transit Administration (FTA), Federal Railroad Administration (FRA), Maritime Administration (MARAD), National Highway Traffic Safety Administration (NHTSA), Saint Lawrence Seaway Development Corporation (SLSDC), and Office of the Secretary (OST).

Modernizing Air Traffic Control Systems (FAA)

Overview

As of March 27, 2015, En Route Automation Modernization (ERAM) has replaced the En Route Host computer and backup system used at 20 Federal Aviation Administration (FAA) Air Route Traffic Control Centers (ARTCCs) nationwide. This transition represented a live transplant of the "heart" of today's air traffic control system while maintaining safe and efficient flight operations for the flying public.

ERAM is vital to the future of air navigation, providing the foundational platform required for FAA to enable Next Generation Air Transportation System (NextGen) solutions, via modernization programs such as System Wide Information Management (SWIM), Data Communications (DATACOMM), and Automatic Dependent Surveillance-Broadcast (ADS-B).

Going forward, ERAM will provide benefits for users and the flying public by increasing air traffic flow and improving automated navigation and conflict detection services, both of which are vital to meeting future demand and preventing gridlock and delays.

Modernizing the Automation Platform at the ARTCCs (FAA)										
Goal Description	2010	2011	2012	2013	2014	2015 Target	2015 Actua I	Performance		
DOT PRIORITY GOAL: Cumulative number of continental U.S. En Route air traffic control centers achieving Initial Operating Capability and ultimately Operational Readiness Date (ORD) on ERAM	2 (IOC)	2 (IOC)	9 (IOC)	17 (IOC)	16 (ORD)	20 (ORD)	20 (ORD)	Met		

PERFORMANCE REPORT

ERAM targets were for Initial Operating Capability (IOC) in FY13 and are for Operational Readiness Date (ORD) in FY14-15. There will be no metric for ERAM in FY16.

FY2015 ORD (by Quarter):

- <u>1st Quarter Performance: 0 sites</u>
 2nd Quarter Performance: 4 sites (or 20 cumulative)
- 3rd Quarter Performance: Met (ORD was achieved at all sites on March 27, 2015)
- 4th Quarter Performance: Met (ORD was achieved at all sites on March 27, 2015)

Progress Update-Results

As of March 27, 2015, FAA achieved Operational Readiness Date (ORD) at all 20 Air Route Traffic Control Centers (ARTCCs).

When all centers have declared ORD it is considered the final milestone to achieving full operational capability.

Modernizing the Automation Platform at the Airport Traffic Control Centers (FAA)						
Goal	Indicator	FY 2016 Target	FY 2017 Target			
DOT Priority Goal: Improve the efficiency of the National Airspace System through more effective data communications systems – By the end of FY2017 (September 2017), DATACOMM will be implemented at a cumulative total of 18 Airport Traffic Control Towers (ATCTs). (NEW)	Number of ATCTs achieving Operational Readiness Date for DATACOMM	6	18			

PERFORMANCE PLAN

Overview

The DATACOMM program provides digital communications services between pilots and air traffic controllers (similar to text messaging). DATACOMM will provide a link between ground automation and flight deck avionics for safety-of-flight ATC clearances, instructions, traffic flow management, flight crew requests and reports. DATACOMM is critical to the success of NextGen operational improvements (OIs) by providing needed communication infrastructure enhancements. DATACOMM will reduce the impact of delays due to ground delay programs, airport reconfigurations, convective weather, congestion, and other causes. DATACOMM will also reduce communication errors, improve controller and pilot efficiency through automated information exchange, enable NextGen services (e.g., enhanced re-routes, trajectory operations), and increase controller productivity leading to increased capacity.

Key Strategies

DATACOMM will be delivered in several Segments and Phases. The initial deployment, DATACOMM Segment 1 Phase 1 (S1P1) will deploy the Controller-Pilot Data Link Communications (CPDLC) Departure Clearance (DCL) in the Tower domain. In S1P1, the DATACOMM program will deliver CPDLC DCL to 56 airports, to include revisions with full route clearances transmitted directly to the aircraft on the airport surface. The CPDLC DCL service will expedite the delivery of departure clearances to aircraft, streamline clearance delivery operations and enable quicker recovery from adverse weather events. CPDLC DCL will improve efficiency, reduce ground delays, and result in more strategic management of NAS resources.

Following this Segment 1, Phase 1 capability tower deployment, DATACOMM Segment 1 Phase 2 (S1P2) will deliver En Route services. This phase is further broken down into two parts: Initial En Route Services and Full En Route Services. DATACOMM S1P2 Initial En Route Services will leverage the S1P1 infrastructure, which is an enabler and confidence builder for FAA and industry to begin to get measurable benefits in the En Route domain and to deliver services such as transfer of communication/initial check-in, airborne reroutes, altimeter settings and altitudes, limited controller initiated reroutes, limited direct-to-fix messages, and limited crossing restrictions.

DATACOMM S1P2 Full En Route services will deploy additional airspace safety and efficiency support services to the NAS such as tailored arrivals, full crossing restrictions, full direct-to-fix messages, full controller initiated reroutes, stuck microphone, beacon codes, speeds and headings, and advisory messages.

Segment 2 is currently in the planning stages and will add an Aeronautical Telecommunications Network (ATN) infrastructure for DATACOMM as well as enable advanced services such as 4-D trajectories, advanced flight interval management, and dynamic required navigation performance (RNP).

Next Steps

The DATACOMM program is in the final stages of testing prior to implementation of the S1P1 service. DATACOMM has completed a hardware tech refresh of the necessary tower equipment, completed hardware installation and test at the necessary ARTCC, and finished the software modifications to the Tower Data Link Services (TDLS) and ERAM subsystems. DATACOMM has tested and accepted the initial air ground network Data Communications Network Services (DCNS) and cutover the necessary FAA Telecommunications Infrastructure (FTI) ground-ground communications services. DATACOMM has completed Enterprise Integration testing (IT) and Operational Test and Evaluation (OT&E). DATACOMM is in the process of conducting the necessary training of technical operations and air traffic controller personnel to support implementation. DATACOMM is also coordinating with air carriers to ensure appropriately equipped aircraft and trained aircrews are available to support DATACOMM operations.

DATACOMM is planning Initial Operating Capability at three key site towers (Salt Lake City, Houston Intercontinental, and Houston Hobby) in Q4 FY2015. In Q1 FY2016 the FAA completed an Independent Operational Assessment (IOA), and after a successful In Service Decision (ISD) in Q1 FY2016 will deploy DATACOMM to the remaining 53 Airport Traffic Control Towers (ATCTs) by Q4 FY2019.

The FAA commits to begin delivering departure clearances at 56 airports under the DATACOMM program's Segment 1 Phase 1. The baseline calls for this work to be completed by the end of FY2019 but the FAA is working toward challenge dates that would have services at all 56 locations in place by the end of FY2017.

In Q1 FY17 (October – December 2016), measurement of the impact of DATACOMM implementation on Taxi Out Times will begin at two airports, where DATACOMM Segment 1

Phase 1 (S1P1) will already be fully operational: Newark (EWR) and John F Kennedy (JFK). Impact measurement will continue at these two airports through Q3 FY2017.

Goal Leaders

Michael P. Huerta, Administrator, Federal Aviation Administration Teri L. Bristol, Chief Operating Officer, Air Traffic Organization, Federal Aviation Administration

Highway Congestion (FHWA)

Overview

Highway congestion adversely affects the Nation's economy, communities, and quality of life. According to the 2015 Urban Mobility Scorecard, traffic congestion has remained relatively unchanged during the past year in American cities. It is estimated that congestion creates a \$160 billion annual drain on the U.S. economy in the form of 6.9 billion lost hours resulting from travel delay and 3.1 billion gallons of wasted fuel.

While automobile and truck congestion currently imposes a relatively small cost on the overall economy (about 0.6 percent), the cost of congestion has risen at a rate of almost 7 percent per year over the past 25 years, or more than double the growth rate of GDP. Congestion may detract minimally from the overall economy, but the 2015 Urban Mobility Scorecard also estimates the costs of overall truck congestion to be \$28 billion per year. Additionally, congestion identified at known freight bottlenecks is estimated to cost direct users almost \$8 billion a year, reducing the efficiency of freight supply chains. These inefficiencies increase costs of production, consumer prices, and can contribute to businesses shifting their operations and jobs to locations where they can achieve more efficient supply chains, resulting in regional and national job losses.

DOT uses two indicators to measure congestion: the Travel Time Index (TTI) and the Freight Buffer Index. In 2014, FHWA enhanced the TTI measure with a new data source and expanded coverage. The new measure reflects travel on Interstates, freeways and expressways in 52 urban areas, up from 19 in previous years. Using the initial results from a larger number of urban areas as a baseline, FHWA reset the target to 1.36 in FY 2016. FHWA measures the freight buffer index on select interstates and it was recently revised to focus on interstate corridors with the highest levels of freight flow. Based on continued analysis of the data for the 25 freight significant corridors, FHWA increased the target in FY 2015 to 18.5 to more accurately capture the sensitivity of the buffer index. A target of 18.5 will provide a more accurate understanding of reliability, as the new target appears closer to the point of inflection for current freight conditions.

In 2015, FHWA adopted an additional indicator to track progress in the transition to a performance based approach to transportation planning. Within 5 years, congestion and reliability will figure more prominently in the investment decision making processes of MPOs and State DOTs. The indicator will transition from the existing requirement, which is for MPOs serving Transportation Management Areas (TMAs) to develop a congestion management process (CMP), to a requirement for all MPOs to use congestion reduction strategies for decision-making through a performance-based planning and programming approach. By ensuring that all States and MPOs are utilizing the CMP and eventually, performance based planning and programming

as part of their decision-making process, more effective congestion mitigation strategies can be selected during the planning and programming phase. The FY 2016 target is for approximately 90 percent of the 181 TMAs to use the CMP in making programming and project decisions.

Highway Congestion (FHWA)											
Performance Measure	2010	2011	2012	2013	2014	2015 Target	2015 Actual	Target Met or Not Met			
Maintain Travel Time Reliability in urban areas as measured by a reduction in the Travel Time Index to No More Than 1.36 in 2018.	n/a	n/a	n/a	n/a	1.36	1.36	1.37	Not Met			
Maintain Travel Time Reliability in Top 25 Domestic Trade Corridors at or below 18.5 through 2018.	n/a	n/a	n/a	16.3	18.6	18.5	18.8	Not Met			
Percent of TMAs using CMPs in making programming and project decisions (total of 181 TMAs)	N/A	N/A	N/A	N/A	10%	20%	90%	Met			

PERFORMANCE REPORT

Progress Update -Results

The Travel Time Index (TTI) represents the extra time a driver spends in traffic during congested traffic as compared with light traffic. A TTI of 1.36 represents an extra 10 minutes, on average, for a trip that usually takes 30 minutes. Therefore, a lower TTI is better as it means drivers spend less time stuck in traffic. In FY 2014, the TTI was 1.36 in the 52 metropolitan statistical areas with a population of more than a million that are currently being monitored. During the four quarters of FY 2015, the average TTI ranged from 1.36 to 1.37. Annually, it appears that the level of urban traffic congestion in FY 2015 increased slightly when compared to FY 2014.

FHWA undertook numerous activities to monitor freight performance at the national level and to support freight performance measurement and management at the State and regional level. DOT uses a suite of measures, including the freight buffer index, to routinely analyze national freight corridors, interstates, intermodal areas, border crossings and urban areas to monitor performance. In FY 2015, the average freight buffer index for travel time reliability on the Nation's interstates with the highest levels of freight was 18.8, which was slightly above the anticipated target of 18.5. The buffer index represents the extra time, or time cushion, that has to be added in planning a trip to ensure on time arrival 95 percent of the time. Winter weather events slowed goods movement in many areas of the U.S., as did the port shutdowns on the west coast. The results reveal that most congestion occurs in urban areas and at known freight highway bottlenecks. Urban and interstate mobility decreased due to increased traffic congestion, while intermodal mobility at border crossings, ports and intermodal facilities other than west coast areas was unchanged.

FHWA has made significant progress in developing a number of programs and analytical tools to improve traffic operations and strategically target capital investments to improve congestion including:

- Assistance with reorganization efforts in States to establish divisions dedicated to transportation system management and operations.
- Establishing a Real-Time System Management Information program in States.
- Development of the Freight Analysis Framework and Freight Performance Measurement tools and approaches for identifying areas for improvement.
- A national travel time data set for the entire NHS and border crossings, which is available free to States and MPOs to support their performance measurement and planning programs for both passenger and freight traffic.
- Deploying surface transportation weather monitoring infrastructure in 39 States, five local agencies, and four Canadian provinces.
- Deploying innovative adaptive control, corridor management, and congestion pricing strategies.
- Ensuring greater emphasis on improving reliability in major freight corridors, international border crossings, and intermodal connectors.
- Developing a model that links population, freight demand, driver behavior, and other data to vehicle miles traveled, or VMT.
- Working with State and local DOTs and law enforcement to demonstrate how to collect, analyze and report on three criteria that measure the effectiveness of Traffic Incident Management response operations in opening lanes and reducing non-recurring traffic congestion.

FHWA provided technical assistance and guidance to States in implementing the Real-Time System Management Information Final Rule and conducted Traffic Incident Management (TIM) workshops and decision maker meetings in two urban areas. All 50 states were in compliance with the Final Rule as of June 2015.

In FY 2015, FHWA conducted a total of 76 Train-the-Trainer Traffic Incident Management (TIM) Responder sessions for 2,387 trainers, including two sessions at the National Fire Academy for 286 new trainers from 45 states. The existing and new cadre of trainers reached out to 61,376 responders through post-classroom sessions, and another 1,263 individuals had completed the web-based version through NHI. FHWA has completed or scheduled TIM Responder Training in all 50 States, D.C., and Puerto Rico, and already exceeded a multi-year goal of deploying TIM training to 80,000 responders. In addition, FHWA conducted 26 assessment workshops to determine organizational capabilities for transportation systems management and operations; with 13 implementation plans completed. FHWA also began providing direct technical assistance to 27 States and large metropolitan areas to better focus on improving operation of the transportation system.

To increase freight awareness and understanding among system stakeholders, FHWA provides opportunities including training courses and webinars on freight planning, private sector

engagement, and freight and land use. In addition, FHWA routinely coordinates research and outreach in conjunction with the AASHTO to discuss freight issues and identify collaborative solutions with States and MPOs. FHWA aims to provide continued outreach, analysis, reference material and tools to further the understanding of freight movement in the U.S. and assist decision makers in setting priorities for freight improvement efforts.

A total of 186 MPOs and States are now using the FHWA data set for freight and passenger vehicle congestion to support their freight analysis and planning activities. In addition, FHWA is currently assisting several states, metropolitan regions and regional authorities on freight performance measure projects using FHWA data; working with Canada and Mexico and federal partners such as the Census Bureau and the Department of Commerce to apply a fluidity analysis for North America; and supporting the National Freight Advisory Committee and the development of the Freight Conditions and Performance Report and National Freight Strategic Plan. Also, FHWA provides the Freight Analysis Framework that consolidates valuable information on tonnage, value, origins and destinations by mode and supports freight transportation modeling efforts and the develop of new freight data options.

In FY 2015, FHWA continued and initiated research on several aspects of freight including urban freight movement, economic competitiveness, performance measurement and data opportunities to aid in freight analysis and planning. Specifically, FHWA promoted current research that includes the impacts of context sensitive solutions (CSS) such as Complete Streets and Urban Road Diets, as well as the concept of off-hours delivery.

FHWA provided analysis, input and management for implementation of key freight provisions in MAP-21. For example, the Agency is working with the States of Vermont, Indiana and Georgia on Section 1116 freight projects that allow for an increased federal share of funding. FHWA made significant progress toward implementation of Section 1118 of MAP-21 that direct the Secretary to encourage each State to develop a comprehensive State Freight Plan that outlines immediate and long-range plans for freight-related transportation investments. State freight plans identify policies, strategies, and performance measures that can guide the freight-related transportation investment decisions of the State. At the end of Fiscal Year 2015, 16 States had a MAP-21 compliant plan, and 34 had a MAP-21 compliant plan or update in progress.

Highway Congestion (FHWA)								
Goal	Indicator	FY 2016	FY 2017					
		Target	Target					
Maintain Travel Time Reliability in urban areas as measured by a reduction in the Travel Time Index to No More Than 1.36 in 2018.— <u>REVISED</u>	The ratio of the peak-period travel time as compared to the free-flow travel time. This measure is computed for the AM peak period (6:00 a.m. to 9:00 a.m.) and PM peak period (4:00 p.m. to 7:00 p.m.) on weekdays	1.36 (r)	1.36 (r)					
Maintain Travel Time Reliability in Top 25 Domestic Trade Corridors at or below 18.5 through 2018.—NEW	Freight buffer index (A representation of the extra time that would have to be added to the average travel time to ensure on-time arrival 95% of the time.)	1.02	1.01					
All Metropolitan Planning Organizations	Percent of TMAs using CMPs in making	90%	Discontinued					

Goal	Indicator	FY 2016 Target	FY 2017 Target
(MPO) serving a Transportation Management Area (TMA) develop and utilize a congestion management process (CMP) in making programming and project decisions within 5 years.	programming and project decisions (currently there are 181 TMAs). Note: FHWA will replace this with a performance-based planning rule in FY 2017.		

Key Strategies

Future efforts will support the continued implementation of operations-based congestion reduction strategies in the Nation's largest metropolitan areas. These efforts will address both recurring and nonrecurring congestion problems and include increasing the availability of real-time traveler information, evaluating the success of TIM operations on quickly and safely opening lanes impacted by traffic accidents by using technology to quickly collect and transmit TIM performance based on time lanes are closed, time responders are on scene, number of secondary incidents, and number of responders killed or injured during traffic incident response operations, improving reliability in major freight corridors and connections through analysis of bottlenecks, arterial connections, accessibility, truck volumes and multi-corridor approaches. They will also address the challenges brought on by adverse weather, work zones, special events and emergencies, as well as international border crossings; and intermodal connectors.

FHWA also seeks to improve the capacity of States and MPOs to develop congestion management strategies through the transportation planning process. FHWA will work to enhance tools and performance based processes for States, MPOs and regional and local governments to assess congestion and target operational and capital improvements most appropriately.

FHWA is providing access to a national data set of average travel time for cars and trucks that States and MPOs are using to support their measurement programs. Additionally, FHWA is focusing on a comprehensive set of freight performance measures by developing best practices on these measures and providing a primer for the application and use of these measures. Significant efforts are under way to also engage the public and private sector in a measure of freight fluidity and total supply chain analysis to increase understanding of freight flow impacts and relate to private sector focus areas for congestion.

FHWA's efforts will continue to support the significant focus on freight in Title 23 U.S.C. 167 and FAST the development of national freight policy, funding to support freight infrastructure, the prioritization of projects to improve freight movement, the establishment of freight stakeholder advisory committees, the development of statewide freight plans, and required reporting on freight performance. With such focus on freight flow improvements and project development and implementation, FHWA hopes for greater achievements in congestion reduction, which will create efficiencies for all highway travel.

Next Steps

The National Highway Performance Program (NHPP) will establish techniques to:

• Assess the performance of the highway system, including measuring the relationship between freight movement, congestion, and reliability and the speed and safety in opening temporarily closed lanes due to crashes or other non-recurring incidents like

mechanical breakdowns, weather impacts, traffic crashes, hazardous material releases, and medical emergencies.

- Strengthen routine traffic operations and control practices, and also to proactively manage the transportation system during disruptions such as traffic incidents, work zones, adverse weather, special events, and emergency situations.
- Provide useful, real-time information to travelers.
- Foster a more balanced transportation supply and demand through ridesharing, parking demand management, and congestion pricing.

The Surface Transportation Block Grant Program will help reduce congestion through:

- Techniques and tools, including an Intelligent Transportation System, to improve traffic operations and control and manage disruptions such as traffic incidents, work zones, adverse weather, special events, and emergency situations.
- Application of current technology (e.g. Smartphones, GPS tracking, dashboard cameras mounted on public safety vehicles, unmanned aerial vehicles) to rapidly capture real-time situation status reporting that will aid in rapid deployment of the correct mix of resources to an incident scene, operational tactical planning, and collection of key performance measurement metrics.
- Demonstrating innovative practices that speed construction, reducing traffic delays.
- Providing useful, real-time information to travelers.
- Investigating and implementing ridesharing, parking demand management, and congestion pricing.

These efforts will be supported by research and outreach from the Highway Research, Technology, and Education, or RT&E, Program.

Metropolitan Transportation Planning will provide for each MPO to carry out a coordinated, performance based, transportation planning process and develop long-range transportation plans and transportation improvement programs that make effective use of limited transportation funding by focusing decision making on transportation system performance outcomes.

The FAST Act includes a new Performance Management Data Support Program, funded at up to \$10 million per year, to develop and maintain data sets and analysis tools to assist States, MPOs, and other stakeholders in carrying out performance management analyses.

Goal Leader

Jeff Lindley, Assistant Administrator for Operations, Federal Highway Administration

Gloria Shepherd, Assistant Administrator for Planning, Environment, and Realty, Federal Highway Administration

Michael Trentacoste, Assistant Administrator for Research, Development and Technology, Federal Highway Administration

STRATEGIC GOAL 3: ECONOMIC COMPETIVENESS Strategic Objective 3.1: Enhance Productivity and Growth *High-Performance Passenger Rail (FRA)*

Overview

High-speed and intercity passenger rail represents an innovative approach to addressing the complex 21st century transportation challenges facing the United States. By 2050, the U.S. population will likely increase by more than 95 million people from 2015. Freight shipments are forecasted to increase by 4 billion more tons of freight by 2050. Highway and airport congestion are increasing, with related severe economic and environmental impacts. To help address these challenges and strengthen the country's competitive position in an increasingly global economy, DOT has a comprehensive program to develop high-speed and intercity passenger rail. FRA manages an approximately \$23 billion grant and loan portfolio focused on:

- Upgrading existing intercity passenger rail corridors to improve reliability, speed, and frequency of existing services.
- Building new high-speed rail corridors that expand and fundamentally improve passenger transportation in the geographic regions they serve.
- Laying the groundwork, through corridor, multi-State, and State planning, for future high-speed rail services.
- Relocating, rehabilitating, and increasing the capacity of freight rail.

	Hig	sh Perfo	ormanc	e Passe	enger R	ail		
Performance Measure	2010	2011	2012	2013	2014	2015 Target	2015 Actual	Perforamance
Number of individual construction projects that achieve initial construction	N/A	8	27	48	60	65	67	Met
Number of planning, preliminary engineering, environmental analysis, and construction projects that are substantially complete	N/A	N/A	N/A	36	51	74	74	Met

PERFORMANCE REPORT

Progress Update-Results

Projects Completed and Rail Services Improved: Project sponsors have substantially completed more than 70 projects, resulting in upgraded stations, improved operational efficiency, and enhanced services. Passenger rail service has been extended to Freeport and Brunswick, Maine, and track, signal, and bridge improvements are now in service on Amtrak's Vermonter, reducing travel times by nearly 30 minutes. Initial reliability and travel time improvements have also been achieved on the Chicago-St. Louis, Chicago-Detroit, Los Angeles-San Diego, and Philadelphia-Harrisburg corridors.

Construction Underway Throughout the United States. Construction is under way on almost 35 projects for approximately \$5 billion in Federal investments. FRA's partners are investing billions of their own funds to match these Federal investments. Additionally, the freight rail

industry invested more than \$28 billion of private capital in the Nation's rail network in 2014, with \$29 billion expected in 2015.

Since the passage of the Passenger Railroad Investment and Improvement Act in 2008, states and local governments have spent significant time and money on planning, engineering, and environmental analyses. Seventy-five planning, environmental analysis, and engineering projects across the country are complete or underway. As a result, many states and local governments now have a strong pipeline of rail capital projects across the country. This pipeline is ready for market-based investments that will transform the studies into improved and new passenger rail service. Substantial private sector participation is anticipated for several corridors, particularly those that will provide higher speed services.

PERFORMANCE PLAN

Key Strategies

FRA's National High-Performance Rail System (NHPRS) will substantially improve the Nation's rail system to accommodate a growing population and growing freight traffic. NHPRS will support the development of passenger rail networks concentrated in the Nation's mega-regions: dense networks of metropolitan areas with interlocking economies and shared transportation, environmental, and cultural resources. Although mega-regions encompass 26 percent of U.S. land area, approximately 75 percent of the U.S. population lives in these regions. This share is expected to grow larger, as the majority of expected population growth will occur in these areas. These mega-regions are well-suited for intercity rail transportation, given the relatively short distances, generally less than 600 miles, between large cities.

Each regional network will contain a range of corridor types, based on the market conditions and transportation needs of the specific region. Consequently, a range of levels of service will meet these conditions and needs—some regions will need numerous trains per hour operating at speeds above 125 miles-per-hour; others will be better suited to incremental, cost-effective upgrades to existing services. This market-based approach is consistent with the investment strategy followed in rail programs throughout the world.

FRA has developed a sophisticated grants management apparatus, laid the foundation for sustainable long-term passenger rail improvements, and strengthened industry capacity to deliver rail projects through technical assistance and strategic initiatives. FRA is strongly committed to robust stakeholder outreach, communication, and collaboration as central components of program management, allowing FRA to identify program improvements, engage in project planning and development, and provide the support necessary for grantees to carry out projects successfully.

Next Steps

To ensure that grantees deliver projects on schedule, within budget, and with their specified scopes and purposes, FRA has established a monitoring program to oversee grantees' project implementation and provide guidance to assist project development and delivery. Project monitoring is a comprehensive review of a grantee's compliance with the grant conditions, as well as an assessment of the grantee's performance in meeting milestones. Monitoring also proactively identifies issues and facilitates work with the grantee to address concerns or

implementation impediments through technical assistance. Monitoring by FRA staff and contractors occurs in conjunction with other types of oversight, such as frequent and substantive communications between FRA and its grantees. Monitoring activities can reveal opportunities for FRA to provide grantees training and technical assistance to increase the likelihood of project success. Results, including positive observations, are discussed in detail with the grantee, including recommendations to resolve compliance and performance concerns.

FRA uses a risk-based methodology and professional judgment to prioritize onsite monitoring reviews. The methodology considers detailed risk indicators, such as Federal investment amount, last review date, and previous monitoring findings. Professional judgment factors include schedule efficiencies, deliverable quality, and recipient responsiveness. FRA has also established a tool that tracks the initiation and substantial completion of High-Speed Intercity Passenger Rail Program, or HSIPR, construction projects. FRA uses this tool as part of its monitoring program to oversee grantees' project implementation and guide project development and delivery.

Goal Leader

Jamie Rennert, Acting Director, Program Delivery, Federal Railroad Administration

Domestic and International Commerce (MARAD)

Overview

The America's Marine Highway (AMH) Program is a DOT-led program to create new supply chain solutions that take advantage of the excess capacity of our Nation's navigable waterways to increase national economic competitiveness while contributing to the efficiency of the surface transportation system.

The AMH program does not develop or operate Marine Highway services. The private sector and state/local governments develop and operate Marine Highway services. The AMH program was designed to reduce landside congestion by integrating commercially-operated Marine Highway services into the nation's surface transportation system. Once integrated, Marine Highway services connect with all modes of transportation for freight and passengers, providing a convenient transportation alternative alongside landside transportation corridors.

The efficiency, flexibility and system resiliency provided by our navigable waterways can provide national public benefits, but are currently underutilized within the U.S. surface transportation system. By acting to increase the use of the United States' underutilized marine transportation assets, AMHs contribute to public benefits that are not normally considered by shippers by increasing the following:

- Economic competitiveness by adding new, cost-effective freight and passenger transportation capacity; thus creating/sustaining jobs in U.S. vessels, ports, and shipyards;
- State of good repair of the U.S. transportation system by reducing maintenance costs from wear and tear on roads and bridges;
- Environmental sustainability of the U.S. transportation system by using less energy and reducing air emissions per passenger or ton-mile of freight moved. Further benefits come from the mandatory use of modern engine technology on designated projects; and

• Public safety and security by providing alternatives for the movement of hazardous materials outside of heavily populated areas, and by adding to the nation's strategic sealift resources.

International and Domestic Commerce (MARAD)											
Goal Description	2010	2011	2012	2013	2014	2015 Target	2015 Actua I	Performance			
Number of Twenty Foot Equivalent (TEU) containers transported across America's Marine Highway routes.	N/A	5,901	16,031	16,191	29,981	30,000	29,318	Not Met			

PERFORMANCE REPORT

Progress Update - Results

MARAD's America's Marine Highway (AMH) Program was enacted to expand use of waterway transportation routes and to facilitate incorporation of our Nation's rivers, waterways, Great Lakes, and coastlines as extensions of the surface transportation system. MARAD's baseline measure of performance for the AMH Program is volume of containers, or twenty-foot equivalent units (TEUs), moved by grant-program-assisted services, which is a direct indicator of program performance and enables further downstream calculation of program benefits. Every TEU transported across the marine highway corridors is equal to the removal of one truck on our roadways. For FY 2015, MARAD did not meet the agency target for TEUs transported by program assisted marine highway projects. The decrease in performance is due to a lower volume than normal of TEUs transported owing to a company merger disruption, seasonality slumps, and severe weather conditions that caused cancellations in service.

PERFORMANCE PLAN

International and De			
Goal	Indicator	FY 2016 Target	FY 2017 Target
Number of Twenty Foot Equivalent (TEU) containers transported across America's Marine Highway (AMH) routes.	Number of containers transported across AMH.	35,000	40,000

Key Strategies and Next Steps

While AMH performance is currently measured by TEUs moved via grant-assisted projects, the impact of the program is having a greater effect on how State DOTs and Metropolitan Planning Organizations (MPOs) view water transportation within their region as well as increasing the market opportunities being developed through program activities. Through the management of its grants and technical assistance efforts since 2009, AMH has identified the following steps as shown in Figure 1 below. This service development process reflects the key strategies for effectively establishing new short-sea services, and engaging stakeholders from concept to fully sustainable operations, which requires about five years per service.

Figure 1: Service Development Process



Potential future program performance measurements could include number of projects designated during a given period. Additionally, support for designated projects actively moving freight can extend beyond grant funding, making it more appropriate to measure TEUs moved by designated projects rather than limiting it to TEUs moved only by grant-assisted projects.

The FAST Act gives the Department important authorities to collect performance data, including statistics on freight capacity and throughput, from the Nation's top ports. This, coupled with a new emphasis on multimodal freight planning has the potential to expand our performance data and analysis of this important mode of transportation.

The program works extensively with other Federal agencies including U.S. Customs and Border Protection, U.S. Coast Guard, Delta Regional Authority, and others to address challenges in creating efficiencies in the marine transportation system and marine highway services.

Goal Leader

Lauren Brand, Associate Administrator for Intermodal System Development, Maritime Administration

Domestic and International Commerce (SLSDC)

Overview

The binational St. Lawrence Seaway is the international shipping gateway to the Great Lakes, with almost 50 percent of Seaway traffic traveling to and from overseas ports, especially in Europe, the Middle East, and Africa. SLSDC operations impact 227,000 U.S. and Canadian jobs with associated benefits of \$35 billion in annual business revenue from transportation firms and \$14 billion in annual wages and salaries, and provide approximately \$3.6 billion in annual transportation cost savings compared to the next least expensive mode of transportation. The St. Lawrence Seaway directly serves the eight-State, two-province Great Lakes region, which represents the world's third largest economy with economic output of almost \$5 billion. The Seaway offers access and competitive costs with other routes and modes to the Midwest portion of North America, so it is critical that the U.S. Seaway waters and locks maintained by SLSDC be open and navigable continuously during the navigation season.

SLSDC's principal performance goal is to provide a safe, secure, reliable, and efficient U.S. portion of the St. Lawrence Seaway to its commercial users. The annual goal is 99 percent reliability of the U.S. section of the Seaway, including the two U.S. locks, during the annual navigation season (typically late March to late December each year). Downtime is measured in minutes/hours of delay for weather, vessel incidents, water level and rate of flow regulation, and lock equipment malfunction.

International and Domestic Commerce (MARAD)											
Goal Description	2010	2011	2012	2013	2014	2015 Target	2015 Actua I	Performance			
Percent of time the U.S. portion of the St. Lawrence Seaway is available to commercial users (SLSDC)	99.8%	99.0%	99.7%	99.1%	97.2%	99.0%	97.3%	Not Met			

Progress Update

The U.S. Seaway System reliability rate for FY 2015 was 97.3 percent. Adverse weather conditions at the start of the 2015 season and three significant vessel incidents/groundings caused the missed performance target. The SLSDC has the most control over the functioning of its lock equipment. In FY 2015, only 4 percent of all system delays were lock-related.

PERFORMANCE PLAN

International and Domestic Commerce (SLSDC)						
Goal	Indicator	FY 2016 Target	FY 2017 Target			
Maintain availability of the St. Lawrence Seaway is available to commercial users.	Percent of time the U.S. portion of the St. Lawrence Seaway is available to commercial users.	99%	99%			

Key Strategies and Next Steps

SLSDC's activities for this measure are related primarily to efficient management and operations of the locks and vessel traffic control and capital asset renewal investment in aging lock parts and machinery.

SLSDC will work to improve its system reliability performance by providing safer and more efficient vessel traffic control and passage through the U.S. locks and waters. These efforts include maintaining, rehabilitating, and modernizing U.S. Seaway infrastructure, performing safety inspections and ballast water examinations of all foreign-flag vessels, continuing close coordination and involvement with the Canadian St. Lawrence Seaway Management Corporation in all aspects of Seaway operations, and utilizing and enhancing technology to more efficiently manage vessel traffic control and lock transits.

In addition to managing and operating the St. Lawrence Seaway with the Canadian St. Lawrence Seaway Management Corporation, SLSDC coordinates closely with the U.S. Coast Guard on safety, security, and environmental programs.

Goal Leader

Thomas Lavigne, Associate Administrator, Saint Lawrence Seaway Development Corporation

STRATEGIC GOAL 3: ECONOMIC COMPETIVENESS Strategic Objective 3.1: Enhance Productivity and Growth Transit Ridership (FTA)

Overview

Every day, tens of millions of Americans benefit from having transit as a transportation option for getting to work, health care, education, shopping, and recreation destinations. FTA's goal is to increase transit ridership by making public transportation increasingly available and convenient for transit-dependent populations, and by making transit a "mode of choice" to populations with multiple transportation options.

Transit Ridership (FTA)											
Performance Measure	2010	2011	2012	2013	2014	2015 Target	2015 Actual	Performance			
Increase the total number of urban boardings from 10.4 billion in 2012 to 11.2 billion in 2018 (in billions of passenger boardings.)	10.1	10.12	10.33	10.39	10.53	10.8	N/A	Potentially not met			
Number of planning, preliminary engineering, environmental analysis, and construction projects that are substantially complete	N/A	N/A	N/A	36	51	74	74	Met			
Increase the transit market share among commuters to work in at least 10 of the top 50 urbanized areas by population, when compared to a 2010 baseline	0	1	4	3	N/A	5	TBD	Potentially not met			

PERFORMANCE REPORT

Progress Updates - Results

In 2015, FTA awarded 2,001 grants totaling \$13.2 billion. FTA has also carried out several discretionary grant programs – undertaking a solicitation for applications for the Tribal Transit Program as well as the Passenger Ferry Grant Program, and announcing the selections of projects under the Pilot Program for Transit-Oriented Development, the Workforce Development Program, the Low or No Emission Vehicle Deployment Program, and the National Research Program. FTA continued progress in closing out older grants. In 2015, FTA updated its Standard Operating Procedure for determining grant activity. Overall, FTA closed 2,072 grants/cooperative agreements, deobligating approximately \$175 million.

In 2015, FTA completed the implementation of MAP-21 for its major grant programs. During the year, FTA final program circular to reflect changes to MAP-21 for the remaining grant programs: the Bus and Bus Facilities Circular, State of Good Repair Program Circular, and the Formula Grant for Rural Areas Circular; all after responding to public comments received. Additionally, FTA has worked to implement the new Common Rule, by providing webinars to stakeholders on the new requirements and by working on an update to the Grants Management

Circular. Further, in 2015, FTA made substantial progress in developing FTA's new grant management system, TrAMS.

Additionally – FTA has worked to improve grants development and management and held training for headquarters and regional staff on issues related to grants management at a Grants Management and Oversight Workshop held in September 2015.

PERFORMANCE PLAN

International and Domestic Commerce (SLSDC)			
Goal	Indicator	FY 2016 Target	FY 2017 Target
Increase the total number of urban transit boarding's from 10.4 billion in 2012 to 11.2 billion in 2018.	Number of urban and rural transit boardings (in billions.)	10.9	11.1
Increase the transit market share among commuters to work in at least 10 of the top 50 urbanized areas by population, when compared to a 2010 baseline.	Transit market share among commuters to work in the top 50 urbanized areas.	8	9

Key Strategies and Next Steps

National transit ridership increased in 2014. Three of the Top 50 urbanized areas reported a statistically significant increase in transit market share in 2013; results for this goal are running behind target. This measure relies on three-year averages from the American Community Survey (ACS). However, national transit ridership growth was higher in 2014 compared with 2013, which may translate into increased transit market share in other urbanized areas. FTA expects to meet the 2014 target.

Data collections are being supported by new ACS data that is now available from the Census Bureau. The ACS provides data on the mode of travel to work for people over 16 years of age by urbanized area. FTA is targeting a statistically significant increase in the percentage of commuters who use transit to ride to work in at least 10 of the largest 50 urbanized areas. Key activities include:

- Developing data sources and maintaining a public database of transit access points and service levels;
- Working with other Federal agencies to identify specific policies or programs to reinforce common agency development efforts;
- Awarding grants to support construction of new and extended transit services; and,
- Using research to improve understanding and performance in livability and environmentally sustainable outcomes.

Goal Leader

Robert J. Tuccillo, Associate Administrator for Budget and Policy, Federal Transit Administration