



U.S. Department  
of Transportation

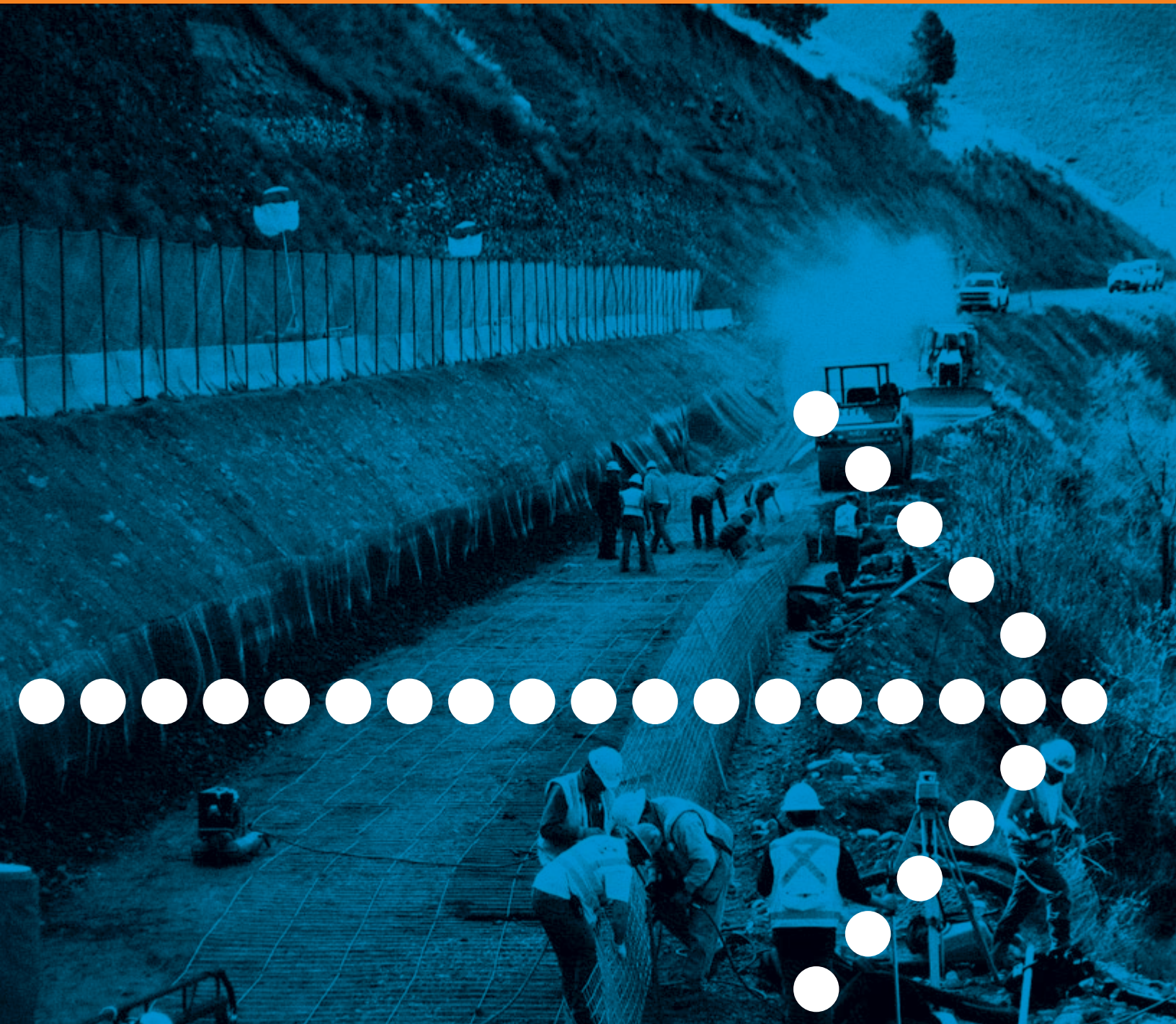
# PERFORMANCE PLAN FISCAL YEAR 2013



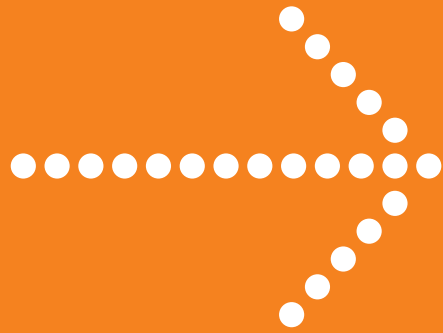
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# OVERVIEW



# OVERVIEW



## MISSION

The Department's mission is to serve the United States by ensuring a fast, safe, efficient, accessible and convenient transportation system that meets our vital national interests and enhances the quality of life of the American people, today and into the future.

## ORGANIZATION

### HISTORY

Established in 1967, DOT sets Federal transportation policy and works with State, local, and private sector partners to promote a safe, secure, efficient, and interconnected National transportation system of roads, railways, pipelines, airways, and seaways. DOT's overall objective of creating a safer, simpler, and smarter transportation program is the guiding principle as we move forward to achieve specific goals.

### HOW WE ARE ORGANIZED

DOT employs almost 60,000 people across the country, in the Office of the Secretary of Transportation (OST) and through twelve Operating Administrations (OAs) and bureaus, each with its own management and organizational structure.

The Office of the Secretary of Transportation provides overall leadership and management direction, administers aviation economic and consumer protection programs, and provides administrative support. The Office of Inspector General (OIG) and the Surface Transportation Board (STB), while formally part of DOT, are independent by law.

## OVERVIEW OF LEGISLATIVE AUTHORITIES

The DOT strategic plan summarizes the legislative authorities of each Operating Administration (OA). To provide a context for the reader, highlights of the responsibilities of each OA are listed below.

### OFFICE OF THE SECRETARY

The Office of the Secretary (OST) oversees the formulation of national transportation policy and promotes intermodal transportation. Other responsibilities range from negotiation and implementation of international transportation agreements, assuring the fitness of U.S. airlines, enforcing airline consumer protection regulations and issuance of regulations to prevent alcohol and illegal drug use in transportation systems.

### FEDERAL AVIATION ADMINISTRATION

The Federal Aviation Administration's (FAA) mission is to promote aviation safety and mobility by building, maintaining, and operating the Nation's air traffic control system; overseeing commercial and general aviation safety through regulation and inspection; and providing assistance to improve the capacity and safety of our airports.

### FEDERAL HIGHWAY ADMINISTRATION

The mission of the Federal Highway Administration (FHWA) is to improve mobility on our Nation's highways through national leadership, innovation, and program delivery.

### FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION

The Federal Motor Carrier Safety Administration's (FMCSA) primary mission is to reduce crashes, injuries and fatalities involving large trucks and buses.

### FEDERAL RAILROAD ADMINISTRATION

The Federal Railroad Administration's (FRA) mission is to ensure the safety of the Nation's passenger and freight rail operations and infrastructure by promoting safe, efficient, accessible and environmentally sound rail transportation.

### FEDERAL TRANSIT ADMINISTRATION

The Federal Transit Administration (FTA) provides leadership, technical assistance, and financial resources for safe, technologically advanced public transportation that enhances mobility and accessibility, improves America's communities, preserves the natural environment, advances economic growth, and ensures that transit systems are prepared to function during and after natural or unnatural disasters.

### MARITIME ADMINISTRATION

The Maritime Administration's (MARAD) mission is to promote the development and maintenance of an adequate, well-balanced U.S. merchant marine that is sufficient to carry the Nation's domestic waterborne commerce and a substantial portion of its waterborne foreign commerce, and to serve as a naval and military auxiliary in time of war or national emergency.

### NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

The National Highway Traffic Safety Administration's (NHTSA) mission is to save lives, prevent injuries and reduce economic costs due to road traffic crashes through education, research, safety standards, and enforcement activity.

### OFFICE OF INSPECTOR GENERAL

The Inspector General Act of 1978, as amended, established the Office of Inspector General (OIG) as an independent and objective organization within the DOT. The OIG's mission is to promote economy, effectiveness, and efficiency and to prevent and detect fraud, waste, and abuse in DOT operations and programs by conducting and supervising independent and objective audits and investigations.

### PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

PHMSA's mission is to protect people and the environment from the risks inherent in transportation of hazardous materials—by pipeline and other modes of transportation.

### SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION

The U.S. Saint Lawrence Seaway Development Corporation (SLSDC), a wholly owned government corporation, is responsible for the operations and maintenance of the U.S. portion of the St. Lawrence Seaway between Montreal and Lake Erie.

### SURFACE TRANSPORTATION BOARD

The Surface Transportation Board (STB) is charged with promoting substantive and procedural regulatory reform in the economic regulation of surface transportation, and with providing an efficient and effective forum for the resolution of disputes and the facilitation of appropriate business transactions.

## HOW DOT WORKS TO ACHIEVE ITS STRATEGIC OBJECTIVES AND PERFORMANCE GOALS

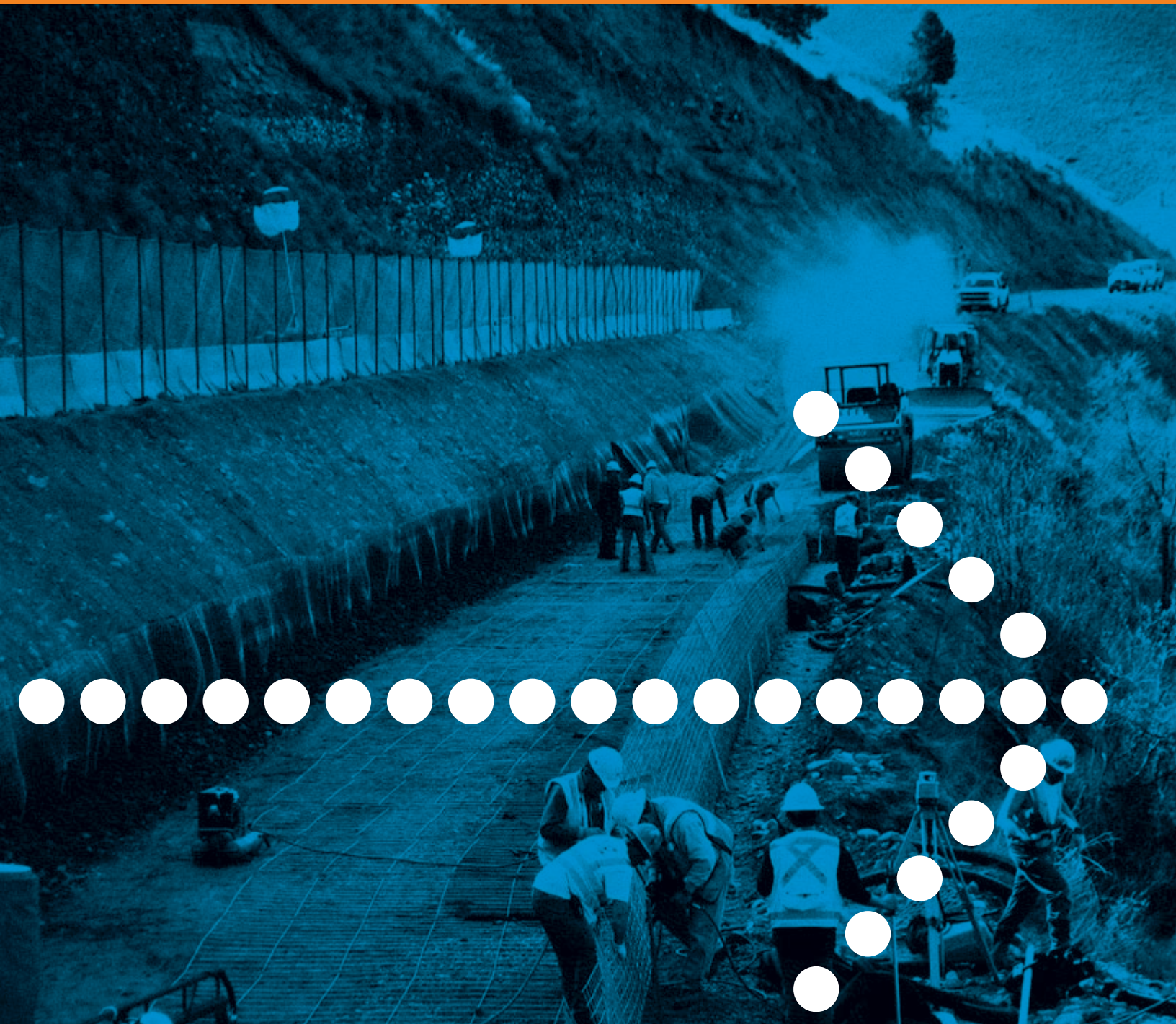
The Department achieves its goals through its leadership role in U.S. transportation policy, operations, investment, and research. To influence results, DOT programs rely on a number of common interventions and actions. These include:

- ❖ *Direct operations and investment in DOT capital assets that provide capability*, such as air traffic control and the St. Lawrence Seaway operations.
- ❖ *Infrastructure investments and other grants*, such as investment in highway, rail, transit, marine highways and shipyards, airport, and Amtrak capital infrastructure, and grants for safety, job access, or other important transportation programs.
- ❖ *Innovative financial tools and credit programs*, such as those provided for by the Transportation Infrastructure Finance and Innovation Act, and the Railroad Rehabilitation and Improvement Financing Program.
- ❖ *Rulemaking*, in areas such as equipment, vehicle, or operator standards; for improving safety; and providing aviation consumer protection, just to name a few.
- ❖ *State/local organizational capacity building*, through training, best practices, peer-to-peer exchanges and other activities that strengthen the capability of State Departments of Transportation, Metropolitan Planning Organizations, and local governments to play their essential front-line role in planning, investing in, and operating highway and transit systems.
- ❖ *Enforcement* to ensure compliance, including inspections, investigations, and penalty actions.
- ❖ *Research and technology development and application*, such as fostering new materials and technologies in transportation, and transportation related research.
- ❖ *Education and outreach*, such as consumer awareness, and campaigns to influence personal behavior.
- ❖ *Public Information*, such as that provided by the Bureau of Transportation Statistics, and each DOT Operating Administration, so that States, localities, regions, and private sector entities can better plan their activities.

Some of these interventions and actions reside entirely within the Federal Government, but most involve significant partnering with State and local authorities and with the transportation industry. These are the broad areas of action that DOT—and State and local governments—commonly use to bring about desired results.

*Note* Funding amounts found in this document are arrayed against the objectives of the Department of Transportation's Strategic Plan. For more information on that display, please see Exhibit II-3-a (FY 2013 Budget Request by DOT outcomes) in each Operating Administration's Congressional Justification available at [www.dot.gov/about.html#perfbudgplan](http://www.dot.gov/about.html#perfbudgplan).

# SAFETY



Improve public health and safety by reducing transportation-related fatalities and injuries

DOT's top priority is to make the U.S. transportation system the safest in the world. Our goal is to work with all of our stakeholders—transportation agencies, elected officials, law enforcement, industry, safety advocates, the disability and older adult communities, and the public—to reduce transportation-related fatalities and injuries and make our system safe for all users.

## ROADWAY SAFETY

(FHWA, FMCSA and NHTSA)

### WHY IS THIS EFFORT NECESSARY?

Almost 33,000 people died on the nation's highways in 2010, and action must be taken to address this serious public health and safety problem. The financial burden of roadway crashes is at least \$230 billion per year—a sign of the economic magnitude of roadway crashes. Only the federal government has the authority to establish national safety standards for vehicles, regulate motor carriers and mandate roadway safety features. A coordinated and comprehensive approach is needed to address roadway safety challenges and issues.

Within the U.S. DOT, the Federal Highway Administration (FHWA), the Federal Motor Carrier Safety Administration (FMCSA) and the National Highway Traffic Safety Administration (NHTSA) work together to address multiple dimensions of roadway safety. Each sponsors and conducts research in their respective areas to address the causality and risk factors associated with roadway crashes. Each also supports outreach, education, enforcement and demonstration programs aimed at the public to reduce roadway crashes, injuries and fatalities. All make extensive use of safety-related data to evaluate the impact of new vehicle and infrastructure technologies, focus inspection activities, prioritize and address risks, and assess enforcement techniques.

## STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

Reduction in transportation-related fatalities and injuries.

### PERFORMANCE MEASURE: REDUCE THE ROADWAY FATALITY RATE PER 100 MILLION VEHICLE MILES TRAVELED (VMT) (PRIORITY GOAL)

	2009	2010	2011	2012	2013
Target	1.35	1.30	1.10	1.05	1.03
Actual	1.13	1.10*	**		

\* Projections based on historical trend data. DOT expects the actual CY 2010 fatality rates will be available in early March 2012.

\*\*Preliminary data for CY 2011 available in Dec. 2012

### PERFORMANCE MEASURE: REDUCE PASSENGER VEHICLE OCCUPANT FATALITIES PER 100 MILLION PASSENGER VEHICLE MILES TRAVELED (PVMT)

	2009	2010	2011	2012	2013
Target	1.02	0.99	0.85	0.85	0.82
Actual	0.89	0.87*	0.83-0.89*		

\* Projections based on historical trend data. DOT expects the actual CY 2010 fatality rates will be available in early March 2012.

### PERFORMANCE MEASURE: REDUCE MOTORCYCLE RIDER FATALITIES PER 100,000 MOTORCYCLE REGISTRATIONS

	2009	2010	2011	2012	2013
Target	77	78	63	63	63
Actual	56	65*	56-58*		

\* Projections based on historical trend data. DOT expects the actual CY 2010 fatality rates will be available in early March 2012.



**PERFORMANCE MEASURE: REDUCE NON-OCCUPANT (PEDESTRIAN AND BICYCLE) FATALITIES PER 100 MILLION VMT**

	2009	2010	2011	2012	2013
Target	0.19	0.19	0.16	0.16	0.16
Actual	0.17	0.17	0.17-0.16*		

\* Projections based on historical trend data. DOT expects the actual CY 2010 fatality rates will be available in early March 2012.

**PERFORMANCE MEASURE: REDUCE ROADWAY FATALITIES INVOLVING LARGE TRUCKS AND BUSES PER 100 MILLION VMT.**

	2009	2010	2011	2012	2013
Target	0.167	0.164	0.121	0.117	0.114
Actual	0.123	0.131*	0.119		

\* Projections based on historical trend data. DOT expects the actual CY 2010 fatality rates will be available in early March 2012.

**PAST PERFORMANCE AND FUTURE MILESTONES**

The cumulative annual rate of 1.10 fatalities per 100 million VMT for CY 2010 is the best performance on record since 1949 and meet the Department’s CY 2010 target of no more than 1.3 fatalities per 100 million VMT.

Currently, our nation is experiencing unprecedented declines in traffic fatalities on our roadways. We attribute the decline to a combination of factors including an increase in the spending rate of the \$1.6 billion Highway Safety Improvement Program (HSIP), including an increase in the spending rate for the HSIP (\$1.6 billion in 2012 and \$2.246 billion in 2013) and roadway infrastructure improvements such as rumble strips and Safety Edge; high-visibility enforcement campaigns like *Click It or Ticket* to increase seat belt use; drunk driving prevention initiatives such as *Drive Sober or Get Pulled Over*; better oversight of licensing for young drivers, commercial operators; and safer vehicles. The decline in large-truck and bus fatalities can be attributed to a combination of factors, including improved New Motor Carrier Applicant Screening; enhanced New Entrant Safety Assurance Process; improved information technology used to identify high-risk carriers; and implementation of the new Compliance, Safety, Accountability (CSA) enforcement model.

In addition to Departmental roadway safety efforts, DOT recognizes that fluctuations in gas prices and the economic downturn have also had an effect on decreased driving exposure, especially recreational

driving, which has also contributed to the decrease in the number of crashes, injuries and fatalities.

Total highway fatalities declined from 43,510 fatalities in 2005 to 32,885 fatalities in 2010, which reflects approximately a 24.42 percent improvement over CY 2005 performance, the year the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy For Users (SAFETEA-LU) was enacted. FHWA, FMCSA, and NHTSA are working together to reduce roadway fatalities by the end of CY 2012 to 1.05 fatalities per 100 million VMT.

In the future, DOT expects the fatality rate for large trucks and buses to continue to fall as changes in enforcement processes ensure that motor carriers are fit, willing and able to comply with all safety regulations. The Agency is proposing to modernize the next generation of safety programs led by the CSA initiative. CSA will enhance the efficiency and effectiveness of enforcement activities through early contact with a greater number of motor carriers. The Agency is seeking broader legal authorities to increase fines resulting from carriers violating certain safety regulations and to take enforcement action against carriers which attempt to evade regulation and civil penalties by reincorporating into a new commercial motor vehicle carrier.

Roadway infrastructure improvements, particularly investments of the HSIP funds and implementation of proven countermeasures, continue to lead to reductions in the overall fatality rates. DOT tracks states’ implementation of nine safety countermeasures, including safety edge, roundabouts, rumble strips, and road safety audits, in an index. As the index score increases, we expect more lives will be saved and more serious injuries will be prevented. The index increased from a baseline of 66 in 2009 to 73 in 2011, out of a possible score of 104.

**HOW OUTCOMES WILL BE ACHIEVED**

**PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME**

Grants or Financial Assistance:

- Provide funding to states to implement the Highway Safety Improvement Program and the Highway Safety Data Improvement Program (\$2.539 million proposed in 2013).
- Issue grants to our state partners to perform commercial motor vehicle safety audits, roadside inspections, targeted on-site reviews, comprehensive on-site reviews and off-site reviews.
- Issue traffic safety grants to states to implement highway safety programs.

**DECLINE IN HIGHWAY FATALITIES BETWEEN 2005–2010**

	2005	2006	2007	2008	2009	2010
All Highway Fatalities (Calendar Year)	43,510	42,708	41,259	37,423	33,883	32,885
Percent change from CY 2006 for highway fatalities		1.84%	5.17%	13.99%	22.13%	24.42%
Fatality Rate per all 100 million VMT	1.46	1.42	1.36	1.26	1.15	1.10

#### Research and Modernization:

- ❖ Provide technical assistance and expertise in researching, designing and implementing roadway infrastructure countermeasures and improvements.
- ❖ Modernize highway geometric features and safety hardware as part of road and bridge construction, reconstruction, replacement, restoration, rehabilitation and system preservation projects.

#### Information Technology and Analysis:

- ❖ Develop analysis tools and procedures to support better highway, intersection, roadside, pedestrian, and bicyclist safety design.
- ❖ Promote appropriate use of new technologies to reduce crashes.

#### Focused Safety Improvement Initiatives:

- ❖ Implement impaired driving and occupant protection, High Visibility Enforcement (HVE) campaigns.
- ❖ Fund the implementation of certain safety features in order to provide an incentive to states to make these investments.
- ❖ Conduct vehicle crashworthiness and crash avoidance testing.
- ❖ Utilize distraction state demonstration projects, including media campaigns.

### ENABLING LEGISLATION AND REGULATIONS

#### Legislation:

- ❖ Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of 2005 (P.L. 109-59), as extended by the Surface and Air Transportation Programs Extension Act of 2011 (P.L. 112-30)
  - » Highway Safety Improvement Program (§1401)
  - » Coordinated national highway safety grant programs (§402)
  - » Research and development programs (§403)
  - » Emergency Medical Services programs and coordination (Title X)
  - » Highway safety incentive grant programs to encourage states to enhance effectiveness of:
    - Occupant protection programs and laws (§405 & §406)
    - Highway safety data improvement programs (§408)
    - Alcohol-impaired driving countermeasures (§410)
    - High-visibility enforcement program (§2009)
    - Motorcyclist safety (§2010)
    - Child safety and child booster seat safety programs (§2011)

#### REGULATIONS:

- ❖ U.S.C., Title 49 Transportation, Subtitle VI Motor Vehicle and Driver Programs, Chapters 301-331
- ❖ U.S.C., Title 49 Transportation, Subtitle B—Other Regulations Relating to Transportation, Chapter III, Federal Motor Carrier Safety Administration, Subchapter A—General Regulations and Subchapter B—Federal Motor Carrier Safety Regulations
- ❖ 23 CFR 924 Highway Safety Improvement Program
- ❖ Code of Federal Regulations (CFR) Parts 40 (Procedures of Transportation Workplace Drug and Alcohol Testing Programs), 303 (Civil Rights), 325 (Compliance with Interstate Motor Carrier Noise Emission Standards), 350-399 (Federal Motor Carrier Safety Regulations)
- ❖ Establishment and enforcement of safety standards for new vehicles and equipment and providing related research
- ❖ Recall and remedy of noncompliant or defective vehicles and equipment
- ❖ Requirement that imported vehicles comply before entry
- ❖ Motor Vehicle Information and Cost Savings

### RESOURCES, TRAINING AND SKILLS

#### Federal Highway Administration:

- ❖ IT—An online Highway Safety Improvement Program (HSIP) reporting tool has been implemented to facilitate the submittal and review processes of the HSIP, High Risk Rural Roads Program, Railway-Highway Grade Crossing Program and Transparency (5%) reports. A Crash Modification Factors Clearinghouse and a Roadway Safety Noteworthy Practices database were added online to assist safety practitioners in choosing the most effective countermeasures.
- ❖ Training—FHWA assesses its learning and development needs for safety engineers and specialists within the Agency and among our partners. Training is available through the National Highway Institute (NHI), as well as outside trade organizations. FHWA training activities include Roundabout peer exchanges, RSA training on Tribal and Federal Lands and outreach on Safety Edge implementation in support of the Every Day Counts initiative. Deployment of proven safety countermeasures has risen steadily providing effective techniques for improving infrastructure safety. FHWA also conducts Designing for Pedestrian Safety courses for Federal, State and local practitioners to focus on engineering and design solutions to address pedestrian safety needs.
- ❖ Skills—Safety engineers, management and program analysts, and transportation specialists who are competent in interpreting and applying Federal safety laws, regulations and statutory requirements; traffic data analysis tools; safety roadway design; traffic engineering and operations; transportation safety planning; roadway design; and intersection design.

Federal Motor Carrier Safety Administration:

- ✦ IT—FMCSA’s new CSA Safety Measurement System (SMS) is an automated system that quantifies motor carriers’ on-road safety performance by Behavioral Analysis and Safety Improvement Categories (BASICs). FMCSA uses the SMS results and serious violations in these BASICs to prioritize its enforcement resources.
- ✦ Skills—Safety enforcement, grant administration, research and information technology, regulatory and program development and delivery, and organizational infrastructure skills.

National Highway Traffic Safety Administration:

- ✦ IT—NHTSA has several safety-related databases: Artemis provides an efficient means to identify and track serious safety defects. The Grants Tracking System is designed to automate the financial process involved with State Highway Safety Program funds (Section 402). The National Driver Register is a database of drivers who have had their licenses revoked, suspended, canceled, denied, or who have been convicted of serious traffic violations such as DUI.
- ✦ Skills—Skills required include engineering, statistical, econometric and analytical skill sets (particularly in the areas of electronics, alternative fuels and vehicle crash and import safety), highway safety data collection and analysis, effective program and contract management, strategic planning, effective networking and communication, understanding the federal budget process, and managing federal finances.
- ✦ Training—Specialized training is needed to fully prepare federal safety professionals on the Agency’s new initiatives related to electronic systems in vehicles, and alternative fuel systems.

**PARTNERS**

DOT’s partners in this effort include enforcement officials, safety advocates, public health community, state transportation agencies, metropolitan planning organizations, local governments, Tribal nations, grant recipients, vehicle manufacturers and suppliers, industry associations, University Transportation Centers (UTC), American Association of State Highway Transportation Officials, Transportation Research Board, National Association of County Engineers, Intelligent Transportation Systems Institute, and the public.

**RESPONSIBLE OFFICIAL**

Victor Mendez, Administrator, FHWA; Anne Ferro, Administrator, FMCSA; David Strickland, Administrator, NHTSA.

**ASSOCIATED FUNDING**

\$8,636,112,000 (FHWA); \$558,882,000 (FMCSA); \$950,050,000 (NHTSA).

**Total:** \$10.1 billion

**AVIATION SAFETY**

(Federal Aviation Administration)

**WHY IS THIS EFFORT NECESSARY?**

The FAA will continue to focus resources on improving the safety of air travel. The FAA will transform the way it assures safety by enhancing a positive safety culture to strengthen our standards and oversight. Additionally, FAA will take action to manage risk by proactively identifying hazards and risk based on continuous analysis of data. Runway Safety, Commercial Safety and General Aviation Safety are three of the areas on which FAA will concentrate efforts to improve safety.

**STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES**

- ✦ Reduction in transportation-related fatalities.

The following four measures constitute DOT’s priority goal “Addressing Aviation Risk.”

**PERFORMANCE MEASURE: REDUCE COMMERCIAL AIR CARRIER FATALITIES PER 100 MILLION PERSONS ON BOARD BY 24 PERCENT OVER 9-YEAR PERIOD (2010-2018). NO MORE THAN 6.7 IN FY 2016.**

	2009	2010	2011	2012	2013
Target	8.4	8.1	7.9	7.6	7.4
Actual	6.7	0.3	0.0 <sup>2</sup>		

**PERFORMANCE MEASURE: REDUCE GENERAL AVIATION FATAL ACCIDENT RATE TO NO MORE THAN 1.02 FATAL ACCIDENTS PER 100,000 FLIGHT HOURS BY 2016.**

	2009	2010	2011	2012	2013
Target	1.11	1.10	1.08	1.07	1.06
Actual	1.17 <sup>3</sup>	1.10 <sup>3</sup>	1.11 <sup>2</sup>		

**PERFORMANCE MEASURE: REDUCE THE TOTAL NUMBER OF RUNWAY INCURSIONS 10 PERCENT FROM THE FY 2008 BASELINE OF 1,009 TO 909 BY THE END OF FY 2013.**

	2009	2010	2011	2012	2013
Target	999	979	959	939	909
Actual	951	966	953 <sup>1</sup>		

**PERFORMANCE MEASURE: IMPLEMENT 80% OF APPROVED INTERVENTIONS TO MITIGATE THE TOP 5 HAZARDS ASSOCIATED WITH AIRBORNE LOSSES OF SEPERATION (NEW MEASURE IN FY 2013)**

	2009	2010	2011	2012	2013
Target	NA	NA	NA	NA	80
Actual					

<sup>1</sup> Preliminary estimate. Final result available March 30, 2013

<sup>2</sup> Preliminary estimate. Final result available March 30, 2013

## PAST PERFORMANCE AND FUTURE MILESTONES

### RUNWAY INCURSIONS

In August 2007, the FAA initiated a Call to Action to improve runway safety. Over the last four years, numerous initiatives have been implemented resulting in the reduced risk of a serious runway incursion. These initiatives have included enhanced airport surface markings, a review of pilot taxi procedures and distractions, additional pilot and driver training, revised FAA air traffic control procedures, the formation of the Runway Safety Council, and ongoing emphasis on education and awareness.

The Call to Action initiative also identified several mid-term and long-term initiatives to reduce the risk of runway incursions, including additional air traffic control procedural changes, deployment of Runway Status Lights by the end of 2015, development of low-cost ground surveillance by the end of FY 2013, and enhanced cockpit systems to improve pilot situational awareness. These initiatives, combined with the Runway Safety Council's effort to identify and mitigate the root causes of runway incursions, are expected to contribute to reductions in the rate of serious runway incursions once fully implemented.

### COMMERCIAL AVIATION

Over the last five years, nearly four billion airline passengers reached their destination safely. In three of the last four calendar years, U.S. airlines have had no fatal accidents.

FAA's challenge now is to identify remaining risks and eliminate, minimize or manage them. FAA is working with aviation industry stakeholders to establish safety management systems within their operations. With these systems in place, FAA and the aviation industry will work together to address risks. Additionally, FAA will develop rules, regulations, and policies and conduct studies to support aviation stakeholders in their efforts to reduce safety risks.

### GENERAL AVIATION

FAA did not meet the FY 2011 target for reducing the General Aviation Fatal Accident Rate per 100,000 flight hours. The primary reasons for the FY 2011 shortfall are in the area of amateur-built aircraft and human factors influences.

### AIRBORNE LOSS OF SEPARATION RISK MITIGATION:

This is a new measure for FY 2013. This metric reduces the risks found within the National Airspace System and moves the agency away from merely counting mistakes. By identifying the Top 5 hazards and developing associated interventions, the agency is taking a proactive stance in correcting the hazards identified. The Top 5 hazards associated with airborne losses are:

1. Arrival Sequencing—Same Altitude Parallel Runway
2. Arrival Sequencing—Speed and Angle
3. Clearance Compliance Altitude
4. Coordination
5. Go Around

The hazards produced 23 interventions to be completed during FY 2012. Fiscal year 2011 accomplishments included:

#### Clearance Compliance Altitude

- Developed new and revised courses for controllers specifically tailored to raise awareness and address High Risk RAE's to preclude their occurrence.
- Partnered with NATCA, FAA and the Aircraft Owners and Pilots Association for outreach programs such as *Say It Right*.

#### Go Around

- Validated and improved the parameters for the Safety Logic false alerts that were issued by FAA's airport surface detection system.
- FAA revised internal policies and training requirements so that controllers must also have Go Around or Missed Approach Procedure refresher training. Generally, a pilot must use these procedures when a runway is not in sight or if a safe landing is not possible.

Moving forward, our key initiatives include transforming the training curriculum, expanding use of simulators, investing in technology infrastructure, increasing collaboration with stakeholders and improving ATCOTS.

## HOW OUTCOMES WILL BE ACHIEVED

### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

#### Runway Incursions:

The following FAA initiatives and activities contribute to the reduction in the total number of runway incursions:

- Publish National Runway Safety Plan—Continue to mature the National Runway Safety Plan (NRSP). This plan establishes FAA's strategy for improving runway safety.
- Conduct Direct Warning System Study—Continue to conduct an integrated assessment of emergent runway safety technologies and conduct simulation analyses to assess effectiveness, interoperability and level of readiness for operational transition to a National Airspace System (NAS) ground movement safety infrastructure.
- Manage Core Runway Safety—Maintain and improve educational training and awareness tools to commercial and general aviation pilots, airport vehicle operators and air traffic controllers. Utilize runway safety technology and tools such as training, education and awareness to reduce the number of serious runway incursions.

### Commercial Aviation:

Commercial related activities FAA will pursue in the near future:

- ❖ Engage in rulemaking projects on:
  - » Part 121 air carriers flight crewmember mentoring programs and improve professional development and leadership training.
  - » Stall and upset recognition recovery training.
  - » Remedial training programs.
  - » Training programs for flight crewmembers and aircraft dispatchers.
  - » Part 121 air carrier implementation of a safety management system (SMS).
  - » Part 121 air carrier development and implementation of methods to ensure that flight crewmembers have proper qualifications and experience.
  - » Amend part 61 certification to modify requirements for the issuance of an airline transport pilot certificate.
- ❖ Establish an “FAA Pilots Records Database”
- ❖ Conduct studies:
  - » Aviation industry best practices with regard to flight crewmember pairing, crew resource management techniques, and pilot commuting.
  - » Methods to increase familiarity of flight crewmembers with stick pusher systems, icing conditions, and microburst and wind shear weather events.
- ❖ Implement improved training for pilots and aviation safety inspectors to reduce runway incursions.
- ❖ Increase capability and expand Aviation Safety Information Analysis and Sharing (ASIAS) to provide better access and more effectively monitor safety data.
- ❖ Develop an integrated agency-wide Safety Management System (SMS).

### General Aviation:

General aviation related activities FAA will pursue in the near future:

- ❖ Conduct oversight of design production, worthiness and air agency across the U.S.
- ❖ Conduct aero-medical training and medical certifications and surveillance of airmen.
- ❖ Examine root causes of loss of control accidents.
- ❖ Continue to lead FAA efforts in general aviation safety outreach and education through the direction of the FAA Safety Team (FAASafetyTeam).
- ❖ Focus on flight standardization for certification, fleet characteristics, and provide recommendations for revisions to training and operations guidance for experimental amateur-built aircraft.

### Airborne Loss of Separation Risk Mitigation:

Airborne loss of separation risk mitigation activities FAA will pursue in the near future:

Arrival Sequencing—Same Altitude Parallel Runway

- ❖ Require facilities to develop Standard Operating Procedure instructions to implement new procedures

Clearance Compliance Altitude

- ❖ Determine feasibility of voice recognition software used to detect incomplete/incorrect read backs.

Go Around

- ❖ Ensure facilities develop training at all Air Traffic Control Towers and Tower Simulation System facilities.

### ENABLING LEGISLATION AND REGULATIONS

#### Runway Incursions:

- ❖ FAA Advisory Circular 150/5300-
- ❖ Title 14, Code of Federal Regulations (CFR), Aeronautics and Space:
  - » Part 61-Certification: Pilots, Flight Instructors, and Ground Instructors
  - » Part 91-General Operating and Flight Rules
  - » Part 121-Operating Requirements: Domestic, Flag, and Supplemental Operations
  - » Part 135-Operating Requirements: Commuter and On Demand Operations and Rules Governing Persons on Board Such Aircraft
  - » Part 139-Certification of Airports
  - » Part 141-Pilot Schools
  - » Part 142-Training Centers

#### Commercial and General Aviation:

- ❖ H.R. 5900-Airline Safety and Federal Aviation Administration Extension Act of 2010, Public Law No: 111-216.
- ❖ H.R. 1893-“To amend the Internal Revenue Code of 1986 to extend the funding and expenditure authority of the Airport and Airway Trust Fund, to amend title 49, United States Code, to extend the airport improvement program, and for other purposes”

- ✦ Senate Bill S.223-FAA Air Transportation Modernization and Safety Improvement Act; HR 658, FAA Reauthorization and Reform Act of 2011
- ✦ Federal Register-Rulemaking-14 Code of Federal Regulations (CFR) CFR Part 39 Airworthiness Directives
- ✦ Title 49, U.S.C., Transportation

#### **Airborne Loss of Separation Risk Mitigation:**

- ✦ FAA Order JO7110.65, Air Traffic Control Procedures
- ✦ FAA Order JO7210.3, Facility Operation and Administration
- ✦ FAA Order JO3120.4 Air Traffic Technical Training

#### **RESOURCES, TRAINING AND SKILLS**

##### **Runway Incursions:**

- ✦ IT—*Business Objects* is used to support runway safety data analysis requirements.
- ✦ Training—Safety Management Systems, Airports Geographic Information System (GIS), Runway Status Light Systems, etc. FAA staff must learn these technologies because they provide guidance to airports about how to implement the technology.
- ✦ Skills—The Runway Safety Office requires expertise from all technical areas within the FAA to include pilots, controllers, environmental specialists, engineers, analysts, IT and airport inspectors.

##### **Commercial Aviation:**

- ✦ IT—Safety Management System; Aviation Safety Information Analysis and Sharing program; and database matching program to identify airmen who have intentionally falsified their Application for Airman Medical Certificate (FAA Form 8500-8).
- ✦ Training—Internal Leadership, Enhancement and Development Program; New Manager’s course, initial and recurring technical training.
- ✦ Skills—Safety inspectors, experienced Part 121 air carrier flight crewmembers, engineers; knowledge of safety regulations and avionics.

##### **General Aviation:**

- ✦ Training—Internal Leadership, Enhancement and Development Program; New Manager’s course, initial and recurring technical training.
- ✦ Skills—Safety inspectors, FAA certified and approved pilots, certified flight instructors, engineers; knowledge of safety regulations and avionics.

#### **Airborne Loss of Separation Risk Mitigation:**

- ✦ IT—Utilizing the Risk Analysis Process and Tool
- ✦ Training—Safety Management System Training

#### **PARTNERS**

##### **Runway Incursions:**

The FAA co-chairs the Runway Safety Council with the Air Line Pilots Association. Other Runway Safety Council members include the Airline Transport Association, Aircraft Owners and Pilots Association, National Association of Flight Instructors, National Business Aviation Association, Regional Airline Association, National Air Traffic Controllers Association, Airport Councils International-North America, and the American Association of Airport Executives.

##### **Commercial and General Aviation:**

FAA's partners in this effort include the National Transportation Safety Board and General Aviation Joint Steering Committee, Congress, manufacturers, training schools, associations, and Civil Airworthiness Authority.

#### **Airborne Loss of Separation Risk Mitigation:**

Air Traffic Organization, the Office of Aviation Safety and the National Air Traffic Controllers Association (NATCA) and the Aircraft Owners and Pilots Association (AOPA) work together to address this issue.

#### **RESPONSIBLE OFFICIAL**

Peggy Gilligan, Associated Administrator for Aviation Safety, Federal Aviation Administration; David Grizzle, Chief Operating Officer for Air Traffic Organization, Federal Aviation Administration.

#### **ASSOCIATED FUNDING**

\$7.4 billion

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## **PIPELINE SAFETY**

### **(PHMSA)**

#### **WHY IS THIS EFFORT NECESSARY?**

Natural gas and hazardous liquid pipelines supply more than two-thirds of the fuel used to heat, cool and operate American homes, cars and businesses, including most of the energy for transportation—through a network of 2.6 million miles of pipelines. While pipelines are the safest mode of transportation for these materials, the nature of the cargo is inherently dangerous, and because of the large volumes transported it presents a particular risk of low-probability, high-consequence failure.

#### **STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES**

- ✦ Reduction in transportation-related deaths and injuries.

**PERFORMANCE MEASURE: PIPELINE INCIDENTS INVOLVING DEATH OR MAJOR INJURY**

	2009	2010	2011	2012	2013
Target	38	30-43	31-44	30-42	29-41
Actual	49	39	39		

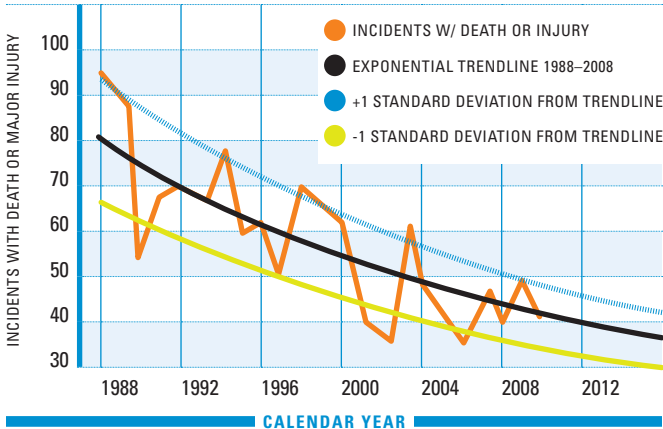
**PAST PERFORMANCE AND FUTURE MILESTONES**

Pipeline incidents with death or major injury (serious incidents) have declined an average of 10 percent every three years over the long term (1988-2010). At the same time, most measures of risk exposure—U.S. population, energy consumption, pipeline mileage, and pipeline ton-miles—have increased. Several recent incidents (including San Bruno, California; Allentown, Pennsylvania; and Marshall, Michigan) have highlighted the serious risks and potential consequences associated with pipeline failures.

Most of the risk (about 80 percent of the incidents with death or major injury) occur on natural gas distribution systems, which provide direct services to households and businesses. Since 1988, the accident rate has dropped from about 1.5 serious incidents per million services to 0.5 per million services—below the six sigma (one in a million) threshold.

Future targets are set to continue this long-term trend of performance, using a range to account for normal, annual variation in the numbers.

**PIPELINE INCIDENTS WITH DEATH OR MAJOR INJURY (1988–2010)**



Exponential regression to show longterm trend:  $y=81.238e0.032x$   
 Data sources: PHMSA incident data—as of May 2, 2011.

**HOW OUTCOMES WILL BE ACHIEVED**

**PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME**

PHMSA oversees the safety, security, and environmental protection of pipelines through:

- analysis of data;
- damage prevention;
- education and training;
- rulemaking;

- enforcement of regulations and standards;
- research and development;
- grants for states pipeline safety programs;
- community assistance and outreach; and
- emergency planning for response to accidents.

**ENABLING LEGISLATION AND REGULATIONS**

- 49 U.S.C. 60101-60134 pipeline safety legislation.
- 49 CFR 190-199 pipeline safety regulation.

**RESOURCES, TRAINING AND SKILLS**

- IT—*SMART* provides a central repository for pipeline safety information; FedStar provides information and tools for state programs; and the National Pipeline Mapping System provides geospatial information on the national pipeline infrastructure.
- Training—PHMSA provides a comprehensive training and qualification program for federal and state inspectors, including a three-year core program for new inspectors.
- Skills—The program needs a mix of skills, with special focus on expertise in engineering, analysis, communications and grant administration.

**PARTNERS**

State pipeline safety agencies inspect approximately 80 percent of all pipelines to help prevent incidents. State and local emergency responders play an important role in mitigating the consequences of incidents that do occur.

**RESPONSIBLE OFFICIAL**

Jeffrey Wiese, Associate Administrator for Pipeline Safety.

**ASSOCIATED FUNDING:**

\$188 million

**HAZARDOUS MATERIALS SAFETY**

**(PHMSA)**

**WHY IS THIS EFFORT NECESSARY?**

On a typical day, more than 6 million tons of hazmat, valued at about \$4 billion, are moved nearly 900 million miles on the nation’s interconnected transportation network. Petroleum products are used to heat and cool homes and businesses, produce electricity, transport virtually all commercial products, travel to work or recreation, and provide raw materials for many products including plastics, fibers and paints. We use a variety of chemicals to purify water, fertilize crops, create medicines and manufacture clothing. These chemicals and energy products are essential to Americans’ quality of life. They also introduce some inherent risk.

## STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- Reduction in transportation-related deaths and injuries.

### PERFORMANCE MEASURE: HAZARDOUS MATERIALS INCIDENTS INVOLVING DEATH OR MAJOR INJURY

	2009	2010	2011	2012	2013
Target	36	22-36	22-34	22-34	21-33
Actual	29	24	27		

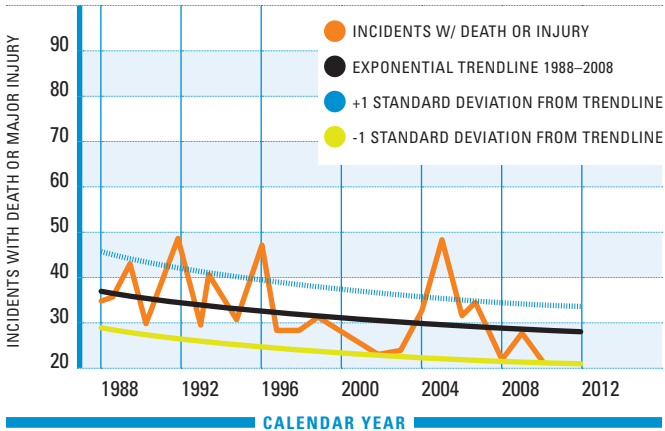
### PAST PERFORMANCE AND FUTURE MILESTONES

Hazardous materials incidents with death or major injury have declined an average of 4 percent every three years over the long term (1988–2010). At the same time, most measures of risk exposure—U.S. population, energy consumption, freight shipments and hazardous materials ton-miles—have increased.

Most of the incidents with death or major injury occur in the highway mode, and most of these incidents involve crashes or rollovers of tank trucks. But there is also a significant risk of low-probability high-consequence events in rail (especially with materials that are toxic-by-inhalation) and in aviation (especially with materials that present a fire risk aboard aircraft).

Future targets are set to continue this long-term trend of performance, using a range to account for normal, annual variation in the numbers.

### HAZMAT INCIDENTS WITH DEATH OR MAJOR INJURY (1988–2010)



Data sources: PHMSA incident data—as of May 1, 2011.

### HOW OUTCOMES WILL BE ACHIEVED

#### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

The hazardous materials safety program achieves its goals through:

- evaluating hazardous materials transportation safety risks;
- developing and enforcing standards for transporting hazmat;
- providing compliance assistance to hazardous materials shippers and carriers;
- offering assistance to state and local emergency responders and law enforcement officials on hazardous materials transportation issues;

- investigating hazardous materials incidents and failures;
- conducting research; and
- providing grants to improve emergency response to incidents.

### ENABLING LEGISLATION AND REGULATIONS

- 49 USC 5101-5128 hazardous materials safety legislation
- The Emergency Planning and Community Right-to-Know Act of 1986 authorizes planning and training grants to states, territories and tribes for response to hazardous materials incidents
- Basic authorizing legislation for each of the modes of transportation (air, rail, highway and maritime) provides authority for inspection and enforcement by each of the modal operating administrations.
- 49 CFR 100-185 Hazardous materials safety regulations govern the packaging, shipping, carriage and hazard communication for hazardous materials in transportation.

### RESOURCES, TRAINING AND SKILLS

- IT—The Hazardous Materials Information Portal provides a central repository for hazmat information used in carrying out the program.
- Training—Each operating administration provides training for its inspectors.
- Skills—The program needs a broad mix of skills, including expertise in chemistry, physics, engineering, modal operations, analysis, packaging, rulemaking, inspection, enforcement, and grant administration.

### PARTNERS

PHMSA, FMCSA, FAA, FRA and the U.S. Coast Guard all contribute to achieving this goal through prevention programs focused on their modes of transportation. State and local emergency responders play an important role in mitigating the consequences of incidents that do occur.

### RESPONSIBLE OFFICIAL

Magdy el-Sibaie, Associate Administrator for Hazardous Materials Safety.

### ASSOCIATED FUNDING

\$87.2 million

## TRANSIT SAFETY

(Federal Transit Administration)

### WHY IS THIS EFFORT NECESSARY?

In FY 2010, more than 100 people were killed in transit accidents, and hundreds more were injured. Several rail transit safety-related events over the past few years, along with the July 2010 National Transportation Safety Board (NTSB) report on the deadly June 2009 Washington Metropolitan Area Transit Authority (WMATA) rail collision, have demonstrated the clear need for increased oversight by DOT of safety at the nation's urban rail transit systems.



New statutory authority to regulate transit safety will enable DOT to create consistent safety standards and oversight levels, as evidenced by the success of other modes of transportation with similar authorities. Therefore, the riding public will be exposed to less risk of injury and death, which is the case with other modes of transportation.

## STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- Reduction in transportation-related fatalities.

### PERFORMANCE MEASURE: TRANSIT FATALITIES PER 100 MILLION PASSENGER MILES TRAVELED\*

	2009	2010	2011	2012	2013
Target	NA	NA	0.60	0.59	0.58
Actual	0.597	0.656	.536**		

\* Includes commuter rail and all heavy rail operators. Includes all fatalities related to revenue service.

\*\* Preliminary

Note: Definition to be revised in new DOT strategic plan to include all fatalities, so previous goals are NA.

## PAST PERFORMANCE AND FUTURE MILESTONES

Data shows that 353 people died in accidents, suicides, and homicides associated with the nation’s transit systems in 2010. Preliminary data for 2011 includes 185 deaths through November (not including commuter rail).

Future milestones include:

- Take actions in support of Administration’s proposed safety authorization.
- Assess safety and security training.
- Undertake research in support of transit safety.

## HOW OUTCOMES WILL BE ACHIEVED

### PRIMARY ACTIVITIES SUPPORTING THIS OBJECTIVE

FTA proposes to oversee the safety of transit systems through the following new and continued activities:

- Establish and enforce safety policy and regulations, pending enactment of legislation.
- Create the Office of Safety.
- Research and development targeted at supporting transit authority.
- Technical assistance and workforce development.

### ENABLING LEGISLATION AND REGULATIONS

FTA is the only mode within the Department without comprehensive federal safety regulation, oversight or enforcement authority.

- Section 5327(c)(1) of Title 49, U.S.C., permits the Secretary to appropriate a percentage of funds to “review and audit” the safety compliance of grant recipients.

- 49 U.S.C. 5329-5330 enables DOT to investigate safety hazards and security risks
- Section 5331 of Title 49, U.S.C., mandates the Secretary to implement regulation to combat controlled substance and alcohol misuse in the transportation industry.
- 49 CFR 659 requires states to oversee safety and security of fixed rail guideway systems through a designated oversight agency.
- 49 CFR Part 655, “Prevention of Alcohol Misuse and Prohibited Drug Use in Transit Operations,” applies to all employers and contractors who receive FTA funds.

## RESOURCES, TRAINING AND SKILLS

- IT—This activity relies on the IT systems FTA maintains as part of the National Transit Database and also on the agency’s grants management systems.
- Training—Safety technical assistances, whether regulator or advisory, requires staff with engineering, analysis, outreach, and management skills.
- Skills—Safety technical assistance, whether regulatory or advisory, requires staff with engineering, analysis, outreach and management skills.

## PARTNERS

FTA’s partners in this effort are State departments of transportation, and state and locally operated transit agencies.

## RESPONSIBLE OFFICIAL

Henrika Buchanan-Smith, Associate Administrator for Project Management

Gerald Powers, Acting Director, Office of Safety

## ASSOCIATED FUNDING

\$211 million

## RAILROAD SAFETY

(Federal Railroad Administration)

### WHY IS THIS EFFORT NECESSARY?

In FY 2010, approximately 11,377 rail-related accidents and incidents occurred on our nation’s railroads, including train accidents, at-grade crossing collisions, trespassing on railroad property, and railroad of employee incidents, resulting in the death of 732 people and injury of 8,162 others. Although these numbers are lower than previous years, too many deaths and accidents occur annually, many of which are preventable.

Freight and passenger rail transportation are critical to interstate commerce and our national economy and a strong national program is required to keep the industry safe. FRA is the sole federal agency responsible for overseeing the safety of the nation’s rail industry through implementation and enforcement and safety laws. FRA

programs addressing rail safety and reducing rail-related accidents and incidents include:

- establishing and enforcing safety standards;
- Railroad Safety Advisory Committee;
- comprehensive safety inspections;
- automated track inspections;
- Risk Reduction Program;
- highway-rail grade crossing and trespasser prevention;
- training; and
- data analysis.

### STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- Reduce rail-related accidents and incidents.

#### PERFORMANCE MEASURE: RATE OF RAIL-RELATED ACCIDENTS AND INCIDENTS PER MILLION TRAIN MILES

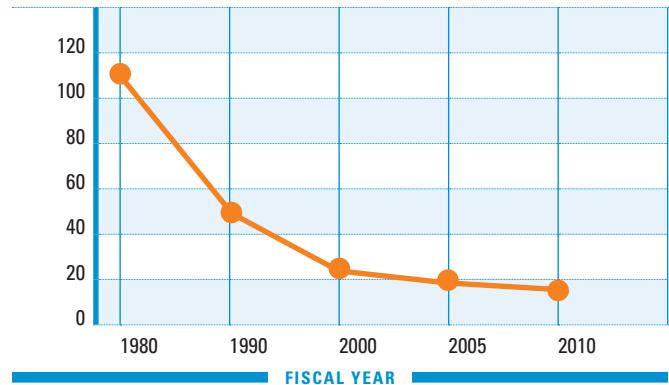
	2009	2010	2011	2012	2013
Target	17.00	16.40	16.40	16.30	16.30
Actual	16.75	16.45	15.40*	---	---

\* FY 2011 actuals are based on 12 months of preliminary data and are provided for transparency of reporting to date, but might differ significantly from the full-year data due to reporting submission requirements. Official data will be published in FRA's annual rail safety statistics report.

#### PAST PERFORMANCE AND FUTURE MILESTONES

In FY 2010, the rate of rail-related accidents and incidents was at its lowest level since FRA began collecting safety data in the 1970s. From 2001 to 2010, the number of reportable rail-related accidents and incidents declined from 16,699 to 11,450 (31 percent); train accidents fell from 3,093 to 1,901 (38 percent); grade crossing incidents decreased from 3,415 to 1,982 (42 percent); and casualties dropped from 12,349 to 8,856 (27 percent). Preliminary data for FY 2011, along with analytical forecasting, indicate that this downward trend will continue for the next several years. The following chart shows the decline in the rate during the past 30 years.

#### RAIL-RELATED ACCIDENTS AND INCIDENTS PER MILLION TRAIN-MILES, 1980-2010



Source: FRA data

Future milestones include:

- FRA will expand the “Confidential Close Call Reporting System” (C3RS) from 12 pilot projects on four railroads to a nationwide safety program. The C3RS initiative enhances railroad safety culture by building trust and relying on the program’s core operating principles—it is voluntary, confidential, non-punitive, and the data is used to recommend corrective actions and provide feedback.
- FRA plans to integrate the “Autonomous Track Geometry Measurements System” into its ATIP program. When fully developed, this system will offer a more cost-effective, efficient and automated means of inspecting track.
- Risk reduction programs will begin development and implementation on each Class I railroad, on each railroad with an inadequate safety record, and on each passenger railroad.
- FRA will issue a report to Congress on the progress of railroad carriers in implementing Positive Train Control Systems and Hours of Service Pilot Projects.
- FRA will issue a report to Congress on the results of specified track inspection time and track safety study.

#### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- Developing safety standards for rail vehicles, employees, and operating practices.
- Researching and promoting advanced safety technologies, such as positive train control and automated track inspection.
- Providing technical training.
- Working with railroads to develop and implement risk reduction initiatives.
- Inspecting railroads.
- Analyzing data to enhance decision making and target inspections.
- Enforcing safety regulations with civil and criminal penalties, compliance orders and agreements, and emergency orders.

- ❖ Providing grants for safety-related activities, including Operation Lifesaver.

### ENABLING LEGISLATION AND REGULATIONS

The Federal Railroad Safety Act of 1970 authorized the Secretary of Transportation (through FRA) to regulate railroad safety.

The Rail Safety Improvement Act of 2008 requires implementation of positive train control, amends hours of service rules, enhances grade crossing safety, and directs FRA to develop a railroad safety strategy.

Parts 200-249 of Title 49, CFR, contain FRA’s primary safety regulations, covering such areas as track, passenger equipment, locomotives, freight cars, power brakes, locomotive event recorders, signal and train control systems, maintenance of active warning devices at highway-rail grade crossings, accident reporting, alcohol and drug testing, protection of roadway workers, operating rules and practices, locomotive engineer certification, and use of train horns at grade crossings.

### RESOURCES, TRAINING AND SKILLS

- ❖ IT—The Railroad Safety Information System (RSIS) is an effective and efficient data management and analysis tool for FRA’s inspectors and analysts, who use laptop computers and a national network. FRA’s website provides important safety information to a wide range of audiences.
- ❖ Training—FRA’s Safety Improvement and Development team develops and provides discipline-specific training throughout the year on FRA safety regulations.
- ❖ Skills—FRA’s rail safety staff includes economists, lawyers, engineers, operations-research analysts, program and management analysts, grant administrators, industrial hygienists, information technology specialists and writer-editors.

### PARTNERS

Private rail operators, state and local governments, domestic and international associations and organizations as members of the Rail Safety Advisory Committee, and Operation Lifesaver.

### RESPONSIBLE OFFICIAL

Jo Strang, Associate Administrator for Railroad Safety and Chief Safety Officer, Federal Railroad Administration.

### ASSOCIATED FUNDING

\$470 million

## IMPROVED SAFETY EXPERIENCE FOR ALL ROAD USERS

(Office of the Secretary)

### WHY IS THIS EFFORT NECESSARY?

Many roadways, especially in urban areas, still fail to provide adequate safety for pedestrians, bicyclists and people with disabilities. In 2010, 4,280 pedestrians were killed and 70,000 pedestrians were injured in traffic crashes; 618 bicyclists were killed and an additional 51,000 were injured in traffic crashes. These fatalities and injuries can be reduced through “complete streets” policies where roadways are designed to accommodate all users. Complete streets policies also make walking and biking more attractive options and support livable communities. DOT can support transportation planners, engineers and state/local transportation agencies as they develop and implement complete streets policies. FHWA adopts safety standards for roadway design and NHTSA has authority to establish safety standards for vehicles and promotes safe travel behaviors.

### STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- ❖ Improved safety experience for all road users, including motorists, pedestrians and cyclists, with a focus on children, older adults, and individuals with disabilities.

#### PERFORMANCE MEASURE: INCREASE THE NUMBER OF STATES AND LOCALITIES THAT ADOPT ROADWAY DESIGNS THAT ACCOMMODATE ALL ROAD USERS (COMPLETE STREETS)

	2009	2010	2011	2012	2013
State–Target	N/A	N/A	25	26	27
State–Actual	15	22			
Local–Target			220	230	240
Local–Actual	115	192			

### PAST PERFORMANCE AND FUTURE MILESTONES

For CY 2010, four states enacted laws, while an additional three states adopted internal policies supporting complete streets policies. From 2009 to 2010, 77 metropolitan planning organizations, counties and cities passed resolutions and ordinances, issued executive orders, adopted tax ordinance and internal policies, or completed design guidance or master plans that incorporated and supported the concept of complete streets. With the growing recognition that communities need to accommodate all roadway users, we expect continued momentum in the adoption of complete streets legislation, policies and plans, at a somewhat lower rate of growth than evidences between 2009 and 2010.

### HOW OUTCOMES WILL BE ACHIEVED

#### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

OST will improve the safety experience for all road users through:

- ❖ Encouraging adoption of state and local complete streets policies and programs that improve safety.

- ❖ Providing technical assistance to state and local agencies.
- ❖ Developing training programs and educational materials for motorists, children, pedestrians and bicyclists.
- ❖ Support transportation practitioners through context sensitive solutions program activities.

**ENABLING LEGISLATION AND REGULATIONS**

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of 2005 (P.L.109-59), as extended by the Surface and Air Transportation Programs Extension Act of 2011 (P.L. 112-30)

**RESOURCES, TRAINING AND SKILLS**

- ❖ IT—Data derived from the National Complete Streets Coalition.
- ❖ Training—No additional training was required.
- ❖ Skills—The program needs a mix of analytical and communication skills.

**PARTNERS**

States, metropolitan planning organizations, counties and cities constitute the governing community with the power to enact laws, resolutions and ordinances, or adopt policies and plans to implement the complete streets concept. Our other partners—safety advocates such as the Complete Streets Coalition, Safe Routes to School organizations, pedestrian, bicycle, and national safety advocates, along with law enforcement agencies, vehicle manufacturers, highway engineers and parent organizations—can promote awareness of and the adoption of roadway designs that are responsive to all users.

**RESPONSIBLE OFFICIAL**

Polly Trottenberg, Assistant Secretary for Transportation Policy.

**ASSOCIATED FUNDING**

\$ 438 thousand

# STATE OF GOOD REPAIR



# STATE OF GOOD REPAIR

Ensure the U.S. proactively maintains its critical transportation infrastructure in a state of good repair

Recent reports on the condition of our highways, bridges, transit assets and airport facilities reveal that many fall short of a state of good repair. As a result, they compromise the safety, capacity and efficiency of the U.S. transportation network. As a nation, we have not sufficiently invested in our major highway and transit systems. At a time when transportation programs face unprecedented fiscal challenges, we believe that stewardship of transportation infrastructure rises to the level of a federal strategic goal. DOT has committed to making state of good repair a top priority in its ongoing programmatic and legislative proposals, including reauthorization.

## HIGHWAY INFRASTRUCTURE

(Federal Highways Administration)

### WHY IS THIS EFFORT NECESSARY?

Over the past five years, more than 50 percent of states reported an increase in the number of National Highway System (NHS) bridges that are eligible for rehabilitation; while incremental improvements in pavement condition have been observed. The condition of pavement and bridges across the country varies considerably, with many states struggling to maintain current conditions.

Over the next 40 years, the U.S. population is expected to rise by 43 percent and the Gross Domestic Product is expected to almost triple. To support this growth, we expect demand for freight and passenger transportation to increase by about two-and-a-half times by 2050. Maintaining and preserving an efficient transportation system is critical to maintaining the competitiveness of our economy. This program supports the Administration's National Export Initiative and the goal of doubling exports over a five-year period.

## STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- Increased percentage of highways in good condition.
- Increased percentage of bridges in good and fair condition.

### PERFORMANCE MEASURE: PERCENT OF TRAVEL ON THE ENHANCED NHS ROADS WITH PAVEMENT PERFORMANCE STANDARDS RATED GOOD

	2009	2010	2011	2012	2013
Target	52	54(r)	55(r)	56(r)	57(r)
Actual	52	NA*	NA*		

(r)—revised  
 NA\* Data will be available December 2012. The 2010 data is not available yet due to data collection issues associated with the newly revised measure.

### PERFORMANCE MEASURE: PERCENT OF DECK AREA (I.E., THE ROADWAY SURFACE OF A BRIDGE) ON THE ENHANCED NHS BRIDGES RATED STRUCTURALLY DEFICIENT

	2009	2010	2011	2012	2013
Target	N/A	N/A	7.9(r)	7.8(r)	7.7(r)
Actual	8.4	8.5	7.9		

## PAST PERFORMANCE AND FUTURE MILESTONES

FHWA adopted new measures based on the Enhanced NHS in FY 2012. Based on a review of historical data, the actual pavement condition on the Enhanced NHS tends to be lower than on the current NHS network. On average, the difference is about 4 percent nationwide. This difference is reflected in the actual result for 2009, which is 54 percent on the Enhanced NHS. This result compares with 58 percent on the NHS. The 2012 and 2013 targets have also been adjusted accordingly. The actuals and targets for the bridge condition on the Enhanced NHS have also been adjusted based on an analysis of the trend during the past decade prior to 2011.

A large increase in federal highway capital investment under the American Recovery and Reinvestment Act of 2009, combined with a decrease in construction materials prices after a peak in 2006, should result in improvement to the overall physical condition of the Enhanced NHS through 2013. The requested funding for the Highway Infrastructure Performance Program (HIPP) is expected to maintain the condition of the Enhanced NHS at this level until 2017. States can use Flexible Investment Program (FIP) funds to further improve NHS pavements and bridges, to address pavement and bridge needs off the NHS, or to address operational performance issues.

Bridge deck area, or the surface area upon which traffic rides on a bridge, serves as a surrogate indicator of trends in improving bridge condition. Progress continues to be made in reducing deck area on structurally deficient bridges on the Enhanced NHS. Going forward, FHWA and the American Association of State Highway Transportation Officials (AASHTO) are exploring methods of examining bridge data to categorize bridges as good, fair, or poor. These new categories use terminology that is easier to understand and should reflect a more meaningful picture of national bridge conditions.

Despite overall positive trends in bridge conditions, the challenge of continuing the improvement trends and preserving existing assets remains. Maximizing federal investment in surface transportation infrastructure is particularly challenging because the majority of the federally assisted highway programs are administered by states, which have broad flexibility in deciding how to use their funds, which projects to pick and how to implement them.

FHWA developed and implemented a new National Bridge Inspection Program (NBIP) oversight process that is data-driven and risk-based. A bridge management technical assistance plan was developed during 2011. FHWA will continue implementation of the new NBIP oversight processes in all 52 states and will continue working with states to set performance goals and measures for infrastructure condition.

## HOW OUTCOMES WILL BE ACHIEVED

### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- Redefinition of the NHS to reflect those highways of national significance.
- Establishment of national goals for condition and performance of the enhanced NHS.
- Research and development leading to improved design methods, tools and technologies.

### ENABLING LEGISLATION AND REGULATIONS

The success of this program is contingent on enactment of transportation authorizing legislation that will establish the National Highway Program and will make related changes to Title 23. Regulations to implement a proposed performance management-based approach will be required.

## RESOURCES, TRAINING AND SKILLS

- IT—Multiple tools and resources have been developed and made available to FHWA staff and partners, including economic and benefit-cost analysis tools.
- Training—FHWA assesses its learning and development needs for highway engineers and specialists within the Agency. Training is available through the Agency, including the Resource Center and the National Highway Institute (NHI), as well as outside trade organizations. Training provided to FHWA staff include: 1) courses designed to assist in the development and delivery of transportation performance management materials, as well as other tools and resources; 2) workshops and training courses on tools that are helpful in advancing asset management principles (e.g., Pavement Management Systems, Accelerated Construction Management, Pavement Designs, and Material Quality Assurance); and 3) development and delivery of new and updated NHI bridge inspection training courses and reference materials.
- Skills—the FHWA provides leadership, guidance and direction and support to numerous infrastructure-related disciplines; including, but not limited to, pavement and materials, structures, geotechnical, hydraulics, construction and project management, and design. Each discipline has its own competency (i.e., knowledge and skill set) model geared towards that discipline. Some cross-cutting competencies include knowledge of the Federal-aid Highway Program laws, regulations, and statutory requirements specific to that discipline; as well as knowledge of performance-based management principles such as performance measure development, data and benefit cost analysis, and data visualization.

## PARTNERS

FHWA's partners in this effort are State DOTs, State and Federal agencies, FAA, AASHTO, TRB, MPOs and local governments.

## RESPONSIBLE OFFICIALS

John Baxter, Associate Administrator, FHWA Office of Infrastructure; Amy Lucero, Acting Associate Administrator, Office of Federal Lands Highway; and Michael Trentacoste, Associate Administrator, Office of Research, Development and Technology.

## ASSOCIATED FUNDING

\$19 billion

## TRANSIT ASSETS

(Federal Transit Administration)

### WHY IS THIS EFFORT NECESSARY?

FTA has found that 29 percent of transit capital assets nationwide are in marginal or poor condition and 12 percent are in need of replacement. This directly translates into a degradation of transit systems' reliability and safety performance. This is partly due to the general scarcity of resources available for reinvestment in transit infrastructure. FTA proposes a major new program to significantly increase funding for reinvestment and to require that grantees adopt

best management practices to ensure that capital funds are put to best use.

## STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- Increased percentage of transit assets in good condition.

### PERFORMANCE MEASURE: REDUCE THE BACKLOG OF TRANSIT CAPITAL ASSETS IN NEED OF REPLACEMENT OR REFURBISHMENT BY 2% BY 2016\*

	2009	2010	2011	2012	2013
Target	NA	\$78.0B	\$77.8B	\$77.5B	\$77.2B
Actual	\$78.0B				

\*Total replacement value in 2008 dollars of all transit assets that are determined to be in need of replacement or significant reinvestment as estimated by the Transit Economic Requirements Model (TERM) condition rating of 2.5 or lower.  
 \*\*This measure has been produced biannually for the Conditions and Performance Report to Congress and therefore 2010 data is not yet available.

## PAST PERFORMANCE AND FUTURE MILESTONES

Based on estimated total 2009 investment, the replacement value of all U.S. transit assets is \$663 billion. Of these assets, \$77.3 billion (constant 2008 dollars), or 12 percent, are in need of replacement according to a 2010 FTA National State of Good Repair Assessment. FTA has proposed a goal of reducing this backlog by 2 percent by 2016. Meeting this goal requires replacing all assets that wear out during the six years, performing required asset rehabilitations, and replacing an additional number of assets from the backlog.

Future milestones include:

- Provide grants to increase state of good repair.
- Collect data on transit assets in need of repair to ensure progress.
- Address asset management issues through technical assistance and research.

### PRIMARY ACTIVITIES SUPPORTING THIS OBJECTIVE

- Target grant-making to transit agencies with a demonstrated need for reinvestment;
- Require asset management systems as a condition to receive federal funding;;
- Collect and analyze data to measure progress and benchmark systems;
- Support and develop analysis tools for planners;
- Provide technical assistance to grantees;
- Support information sharing among industry engineers and capital planning experts to identify best practices and share solutions; and
- Conduct research.

## ENABLING LEGISLATION AND REGULATIONS

- Section 5307(1)(C) of Title 49, U.S.C., permits the Secretary to grant funds for “transit enhancements” and also allows for the cost of preventive maintenance as a capital expense.
- Section 5309(b)(2) and (3) of Title 49, U.S.C., respectively, authorizes the Secretary to grant funds to state and local governments for capital projects to “modernize existing fixed guideway systems” and “replace, rehabilitate, and purchase buses and related equipment.”

## RESOURCES, TRAINING AND SKILLS

- IT—State of Good Repair relies on the systems FTA maintains as part of the National Transit Database and also on the Agency’s grants management systems.
- Training—FTA needs substantial workforce development in asset management.
- Skills—FTA needs engineers and financial analysts to address asset management issues, planning and public policy skills to focus on capital planning.

## PARTNERS

FTA’s partners in this effort are State and local governments, transit agencies, metropolitan planning organizations, transit industry trade organizations, local decision makers and asset management industry.

## RESPONSIBLE OFFICIAL

Henrika Buchanan-Smith, Associate Administrator for Program Management. Robert Tuccillo, Associate Administrator for Budget and Policy\Chief Financial Officer

## ASSOCIATED FUNDING

\$3.2 billion

## AIRPORT RUNWAYS

(Federal Aviation Administration)

### WHY IS THIS EFFORT NECESSARY?

Periodic maintenance of runways, particularly resurfacing, has proven a cost-effective way to delay the need for major runway rehabilitation. The FAA funds initial infrastructure development at all National Plan of Integrated Airport Systems (NPIAS) airports; however, funding for maintenance is limited to those airports that generally do not generate sufficient revenue for periodic repairs—usually smaller airports. Deferred or delayed maintenance creates an increasing risk of damage to aircraft and is a safety concern for the travelling public, and increases both the scope and cost of eventual rehabilitation or reconstruction.

## STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- Maintain percentage of airport runways in good or fair condition.



**PERFORMANCE MEASURE: MAINTAIN RUNWAY PAVEMENT IN GOOD OR FAIR CONDITION FOR 93 PERCENT OF THE PAVED RUNWAYS IN THE NATIONAL PLAN OF INTEGRATED AIRPORT SYSTEMS**

	2009	2010	2011	2012	2013
Target	93.00%	93.00%	93.00%	93.00%	93.00%
Actual	97.00%	97.20%	97.40%	TBD	TBD

**PAST PERFORMANCE AND FUTURE MILESTONES**

FY 2011 performance results indicate our nation’s airports continue to remain in a state of good repair. We have been able to meet the FY 2011 and prior fiscal year targets due to the success of multiple efforts by the FAA and our nation’s airports to improve project management, promote best practices, and to coordinate project funding, construction, and airport capacity needs. FAA and airports cosponsor conferences throughout the year covering topics such as capital planning, pavement management, flexible pavement design, new taxiway design standards, airport preservation, construction safety and airport construction. The FAA prioritizes investments to preserve existing infrastructure in a state of good repair. Federally supported airport sponsors are required to maintain a systematic approach to preventive pavement maintenance. All airports provide capital needs data included in the NPIAS on a biennial basis. High-priority capital projects (including runway pavement rehabilitation and/or reconstruction projects) are prioritized and considered for Airport Improvement Program (AIP) funding as part of the annual update of the three-year Airports Capital Improvement Plan process.

In addition to continuing these successful practices, the FAA also plans to update priorities for infrastructure investments—including runway capabilities—to maintain and enhance existing airport capacity across all types of airports.

**HOW OUTCOMES WILL BE ACHIEVED**

**PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME**

- Develop Airport Pavement and Construction—Conduct research in airport pavement to develop new pavement designs and construction techniques.
- Maintain Existing Pavement—Ensure AIP funding is targeted to projects to maintain pavements in excellent, good or fair condition.

**ENABLING LEGISLATION AND REGULATIONS**

- Title 49, Code of Federal Regulations (CFR), Transportation; Aviation Programs; Part B- Airport Development and Noise; Chapter 471- Airport Development:
  - » Section 47102(3)(A)
  - » Section 471053
- Title 49, CFR, Transportation; Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments

- Title 14, CFR, Part 139, Certification of Airports
- Advisory Circular 150/5320-17, Airfield Pavement Surface Evaluation and Rating Manual
- Advisory Circular 150/5380-6B, Guidelines and Procedures for Maintenance of Airport Pavements
- Advisory Circular 150/5380-7A, Airport Pavement Management Program

**RESOURCES, TRAINING AND SKILLS**

- IT—FAA manages this process using several critical resources, including the planning module within the System of Airports Reporting (SOAR), which it uses to manage the entire NPIAS. The Agency also uses a number of technical resources to evaluate Pavement Condition Index.
- Training—The FAA provides Initial and recurrent training for airport certification safety inspectors and civil and structural engineers.
- Skills—FAA staff in this area are civil and structural engineers, airport certification safety inspectors, airport planners and grant administrators.

**PARTNERS**

FAA's partners in this effort include State aeronautical agencies, aviation industry associations, airlines and other aeronautical user groups.

**RESPONSIBLE OFFICIAL**

Christa Fornarotto, Associate Administrator for Airports, Federal Aviation Administration.

**ASSOCIATED FUNDING**

\$760,140,000

**AMTRAK**

(Federal Railroad Administration)

**WHY IS THIS EFFORT NECESSARY?**

Federal investment in transportation infrastructure has historically been essential to increasing our national economic productivity and connecting our diverse population. Amtrak’s Northeast Corridor is the backbone of the transportation network in the Northeastern United States. It provides high-speed passenger rail service that links Boston, New York City, Philadelphia and Washington, D.C., and connects millions of Americans through regional corridors and commuter rail service. To ensure the safety and reliability of these services, and improve trip times and the overall passenger experience, Amtrak needs to address its \$5.5 billion backlog of state of good repair projects.

FRA’s System Preservation and Renewal program, part of the National High Performance Rail System, provides dedicated funding to eliminate the backlog of Northeast Corridor state of good repair projects. Previously, FRA funded state of good repair projects through the Amtrak Capital Grants and the Capital Assistance for High-Speed Rail Corridors and Intercity Passenger Rail Service programs.

## STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- Eliminate Amtrak’s state of good repair backlog on the Northeast Corridor.

### PERFORMANCE MEASURE: CUMULATIVE PERCENTAGE OF FUNDS OBLIGATED TO COMPLETE THE NORTHEAST CORRIDOR STATE OF GOOD REPAIR PLAN.\*

	2009	2010	2011	2012	2013
Target	N.A.**	N.A.	N.A.	18%	18%
Actual	N.A.	N.A.	N.A.		

\* Amtrak, April 15, 2009

\*\* Not applicable. FRA had not established and did not track this measure before FY 2012.

### PAST PERFORMANCE AND FUTURE MILESTONES

FRA did not track this measure before FY 2012. In its FY 2012 President’s budget request, FRA committed to accelerating the elimination of Amtrak’s Northeast Corridor state of good repair backlog through funding allocated under the National High Performance Rail System. Future milestones include:

- In FY 2013, another \$905 million will be obligated for these activities (for a total of 28 percent).
- Combined with the more than \$950 million in capital grants made through the High-Speed Intercity Passenger Rail (HSIPR) program for passenger rail services on the Northeast Corridor, these activities will result in substantial planning, design and construction activities improving nearly all aspects of the corridor’s infrastructure and operations (including stations, track, bridges, equipment and catenary).
- By accelerating these investments from Amtrak’s original state of good repair plan, FRA plans to obligate funds to fully eliminate the backlog by FY 2022.

### HOW OUTCOMES WILL BE ACHIEVED

#### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- Assisting Amtrak in updating the Northeast Corridor State of Good Repair Spend Plan to reflect the President’s FY 2012 and FY 2013 budget request.
- Granting funds to Amtrak for state of good repair investments on the Northeast Corridor.
- Overseeing funded projects to ensure they are delivered on time and within budget.

### ENABLING LEGISLATION AND REGULATIONS

The Passenger Rail Investment and Improvement Act of 2008 authorizes the state of good repair projects funded under the American Recovery and Reinvestment Act of 2009 and the Consolidated Appropriations Act, 2010.

### RESOURCES, TRAINING AND SKILLS

- IT—FRA utilizes the GrantSolutions and Delphi financial management systems to manage its grant processing activities and obligate funds, respectively.
- Training—FRA staff associated with eliminating the state of good repair backlog on the Northeast Corridor will need training related to project management and oversight, contracting, and capital cost forecasting.
- Skills—FRA relies on the skills of a wide range of professions to obligate funds for eliminating the Northeast Corridor state of good repair backlog, including transportation analysts, engineers, economists, rail system planners, environmental specialists, station planners, financial management specialists and grant management specialists.

### PARTNERS

FRA’s partners in this effort include Amtrak and other railroad operators, states, infrastructure-owning railroads, metropolitan planning organizations, transit agencies, and passenger rail advocates.

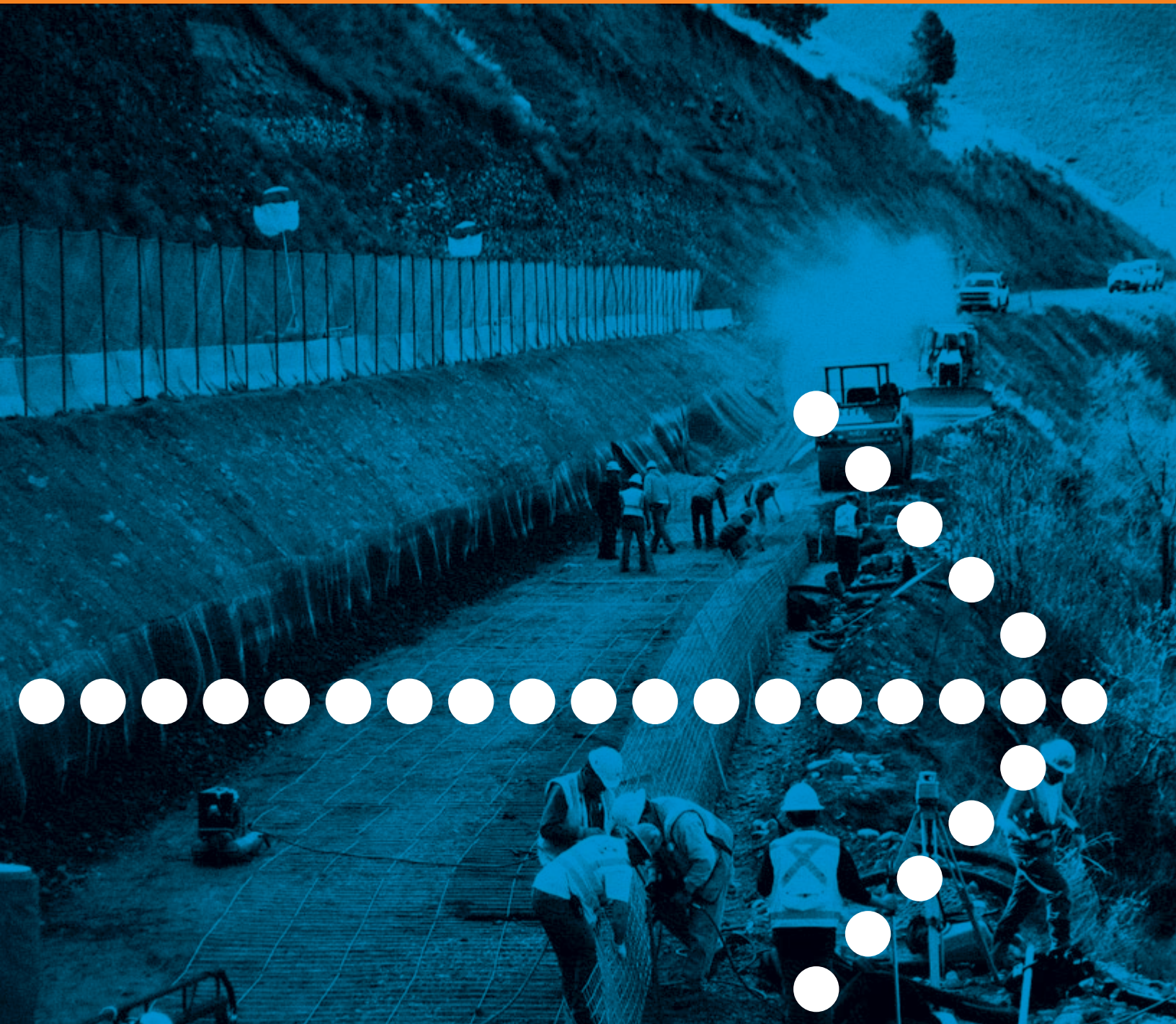
### RESPONSIBLE OFFICIAL

Paul Nissenbaum, Associate Administrator, Railroad Policy and Development, Federal Railroad Administration.

### ASSOCIATED FUNDING

\$364 million

# ECONOMIC COMPETITIVENESS



# ECONOMIC COMPETITIVENESS

Promote transportation policies and investments that bring lasting and equitable economic benefits to the Nation and its citizens

Over the next 40 years the U.S. population is expected to rise by 43 percent (from 307 million to 439 million), and the GDP is expected to almost triple (from \$14 trillion to \$41 trillion). To support this growth, the demand for both passenger and freight transportation is expected to increase by about two-and-a-half times by 2050. Since 1970, exports as a percentage of GDP have almost doubled, and imports have tripled. The U.S. manufacturing base is increasingly shifting to high-value, high-tech products whose manufacture integrates transportation into a just-in-time supply chain requiring efficient performance and consistent reliability.

## MAXIMIZING ECONOMIC RETURNS ON POLICIES AND INVESTMENTS

(Highways)

### WHY IS THIS EFFORT NECESSARY?

Highway congestion adversely affects our economy, our communities, and our quality of life. According to the 2011 *Urban Mobility Report*, produced by the Texas Transportation Institute, traffic congestion continues to worsen in American cities of all sizes, creating a \$101 billion annual drain on the U.S. economy in the form of 4.8 billion lost hours resulting from travel delay and 1.9 billion gallons of wasted fuel during 2010. According to the report, congestion caused the average peak-period traveler to spend an extra 34 hours of travel time and consume an additional 24 gallons of fuel annually, amounting to a cost of \$713 per traveler. While automobile and truck congestion currently imposes a relatively small cost on the overall economy of about 0.6 percent, the cost of congestion is growing faster than gross domestic product (GDP). The cost of congestion has risen at a rate of almost 7 percent per year over the past 25 years, more than double the growth rate of GDP.

Highway congestion may be addressed through operational improvements and/or capacity additions. However, traditional funding sources are often not adequate to support the implementation of major sustainable transportation projects. Innovative financing

and revenue generation options can sometimes offer a way to bridge the gap between the currently available funds and current investment requirements. Federal credit support programs such as the Transportation Infrastructure Finance and Innovation Act provide tremendous leveraging opportunities. In addition, public-private partnerships can attract private sector financial participation in major, costly, complex projects.

### STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- Maximum economic returns on transportation policies and investments.

#### PERFORMANCE MEASURE: TRAVEL TIME RELIABILITY IN URBAN AREAS (I.E., TRAVEL TIME INDEX)

	2009	2010	2011	2012	2013
Target		1.17	1.21	1.21	1.21
Actual	1.19	1.21	1.21		

#### PERFORMANCE MEASURE: TRAVEL TIME RELIABILITY IN FREIGHT SIGNIFICANT CORRIDORS

	2009	2010	2011	2012	2013
Target		15.0	15.0	15.0	14.8
Actual	13.8	13.7	13.8		

### PAST PERFORMANCE AND FUTURE MILESTONES

The Travel Time Index (TTI) is the ratio of the average peak period travel time compared to a free-flow travel time, which is reported for 19 urban areas in the U.S. In FY 2008 and FY 2009, the TTI dropped to 1.21 and 1.19, respectively, lower than the peak TTI in FY 2007 of 1.24. In FY 2010, the TTI increased to 1.21, which may be due to a return to normal levels of traffic after the recent economic recession. The TTI remained steady at 1.21 in FY 2011.

FHWA uses measured speed data on 25 interstates that carry significant freight volumes to calculate a Buffer Index (BI) for each freight significant corridor. The BI, which is expressed as a percentage, is a measure of travel time reliability and variability that represents the extra time, or time cushion, that would have to be added to the average travel time to ensure on-time arrival 95 percent of the time. In FY 2009 and FY 2010, travel time reliability on freight corridors remained steady with a BI of 13.8 percent and 13.7 percent, respectively. In FY 2011, the BI remained at 13.8 percent, despite an increase in traffic volumes in the 25 freight corridors currently being monitored.

Past work in this area has led to: (1) the increased availability of 511 traveler information telephone service for nearly 70 percent of the American public; (2) deployment of surface transportation weather monitoring infrastructure in 38 states, and 5 local agencies, (3) improvements to local and State resources and capabilities through national training, guidance and peer exchanges to rapidly and safely clear traffic incidents, manage traffic during planned special events and perform evacuations and other roadway clearance for major disasters, and (4) a greater emphasis on improving reliability in major freight corridors, international border crossings and intermodal connectors.

Future efforts will support the continued implementation of operations-based congestion reduction strategies in the nation's largest metropolitan areas, increasing the availability of real-time traveler information, and a focus on improving reliability in major freight corridors, international border crossings and intermodal connectors.

Research funds will be used to:

- ❖ Develop models to link population, freight demand, driver behavior and other data to Vehicle Miles Traveled (VMT). The model is now being used by federal, state, and local agencies to forecast VMT and perform a variety of scenario analyses, and aid in planning and decision making. MPOs and other public and private entities have gained valuable insights during the model development and subsequent publication.
- ❖ Develop new methods of managing both traffic and travel demand
- ❖ Conduct Traffic Incident Management workshops, awareness briefings with decision-makers and peer-to-peer exchanges

## HOW OUTCOMES WILL BE ACHIEVED

### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- ❖ Expand the NHS to reflect those highways of national significance. The expanded system will be more objectively defined than currently and will more comprehensively support economic activity and quality of life.
- ❖ Within the Department's reauthorization proposal, the Secretary would be required to establish a National Freight Transportation Policy; designate a National Freight Transportation System that would include the designation of multimodal national

freight corridors, including portions of the enhanced National Highway System (NHS); and issue a triennial National Freight Transportation Strategic Plan.

- ❖ National Highway funds will also be used to:
  - » Continue to expand, preserve, repair and improve the highway network and remove bottlenecks where necessary and cost effective.
  - » Develop and promote techniques to measure the role freight movement plays in congestion, the effects of congestion on interstate commerce, and the effectiveness of strategies for reducing freight operations during congested periods without disrupting the economy.
  - » Develop and promote techniques and tools to proactively manage the transportation system during disruptions such as traffic incidents, work zones, adverse weather, special events and emergency situations.
  - » Explore innovative techniques to better balance transportation supply and demand through ridesharing, parking demand management and congestion pricing.

## ENABLING LEGISLATION AND REGULATIONS

The success of this program is contingent on enactment of transportation authorizing legislation that will establish the National Highway Program and related programs and will make related changes to Title 23.

## RESOURCES, TRAINING AND SKILLS

- ❖ IT—A Freight Performance Measures online tool (FPM Web) has been developed to provide customers with the option to analyze freight data on corridors' in their state or metro area. An online Travel Time Reliability guidebook provides customers and partners with information on how to develop their own measures.
- ❖ Training—FHWA assesses its learning and development needs for operations and freight engineers and specialists within the Agency and among our partners. Training is available through the FHWA Resource Center and the National Highway Institute (NHI), as well as outside trade organizations. FHWA training topics include: Traffic Analysis Tools, Freight Planning, System Engineering, Planning for Operations, Operations and Freight Performance Measures, and targeted training in the areas of traffic incident management and work zone management.
- ❖ Skills—A wide variety of disciplines are needed, including engineering, traffic management and control, freight logistics and management, innovative financing, economic analysis, data collection and management, modeling, and emergency response.

## PARTNERS

FHWA's partners in this effort include State and local DOTs, Metropolitan Planning Organizations, AASHTO, first responder community, freight community, Transportation Research Board, U.S. State Department, U.S. Commerce Department, U.S. Trade and Development Agency, U.S. embassies and the World Road Association.

## RESPONSIBLE OFFICIALS

Jeff Lindley, Associate Administrator, Office of Operations; David Kim, Associate Administrator, Office of Policy and Governmental Affairs.

## ASSOCIATED FUNDING

\$5.9 billion

## MAXIMIZING ECONOMIC RETURN

### (High-Speed Intercity Passenger Rail)

#### WHY IS THIS EFFORT NECESSARY?

High-speed and intercity passenger rail provides the United States with an innovative approach to enhance its position in an increasingly competitive global economy. Due to growing demand both in the United States and abroad, investment in passenger rail can serve to revitalize domestic rail manufacturing and supply industries, while creating a new economic base of highly skilled, well-paying American jobs. Additionally, high-speed rail can play a critical role in maintaining and improving the economic vitality of America's cities and metropolitan regions, where population and economic growth will require new and enhanced mobility options.

FRA's National High Performance Rail System proposes two programs focused on developing high-speed and intercity passenger rail. These programs—Network Development and System Preservation and Renewal—support planning and developing high-speed rail corridors, developing multi-modal stations, facilitating the standardization and procurement of rail equipment, and maintaining critical rail assets and infrastructure. Many of these initiatives, as well as projects currently under way, began under the Capital Assistance for High-Speed Rail Corridors and Intercity Passenger Rail Service program and Amtrak capital and operating grants. Additionally, the Railroad Rehabilitation and Improvement Financing program provides direct loans and loan guarantees for eligible rail projects.

## STRATEGIC OUTCOMES AND SUPPORTING PERFORMANCE MEASURES

**Outcome 1:** Achieve initial construction on all or a portion of 7 corridor programs and 36 individual construction projects by September 2013 (FY 2012–2013 Priority Goal).

### MEASURE: NUMBER OF CORRIDOR PROGRAMS THAT WILL ACHIEVE INITIAL CONSTRUCTION

	2009	2010	2011	2012	2013
Target	N.A.	N.A.	4	2	2
Actual	N.A.	N.A.	3		

*\* Not applicable. FRA had not established and did not track this measure prior to FY 2011.*

### MEASURE: NUMBER OF INDIVIDUAL CONSTRUCTION PROJECTS THAT WILL ACHIEVE INITIAL CONSTRUCTION

	2009	2010	2011	2012	2013
Target	N.A.	N.A.	8	14	14
Actual	N.A.	N.A.	8		

*\* Not applicable. FRA had not established and did not track this measure prior to FY 2011.*

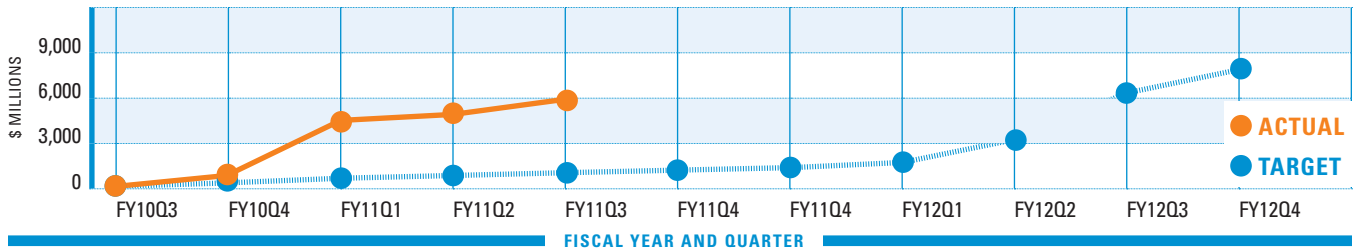
**Outcome 2:** Promote U.S. based manufacturing and technical standardization by procuring new, American-built locomotives and passenger rail cars.

**Outcomes and Measures:** As of February 2012, FRA is also developing data and metrics to measure the promotion of U.S. based manufacturing and technical standardization by procuring new, American-built locomotives and passenger rail cars.

## PAST PERFORMANCE AND FUTURE MILESTONES

- ❖ FRA has obligated well over \$7 billion for high-speed and intercity passenger rail projects funded under HSIPR program. Currently, there are 4 corridor programs and 9 individual construction projects underway. FRA expects to have 8 corridor programs and 30 individual projects achieve initial construction status by September 30, 2013. This represents a significant advance in high-speed rail development.

## AMERICAN RECOVERY AND REINVESTMENT ACT FUNDS OBLIGATED FOR HIGH-SPEED AND INTERCITY PASSENGER RAIL



SOURCE: FRA data

❖ The HSIPR program has awarded \$800 million for procurement of state-of-the-art, American-made locomotives and rail cars. Additionally, a \$563 million loan was made to Amtrak for the procurement of 70 high-performance locomotives for use on the Northeast Corridor and Keystone Corridor. Recent and upcoming milestones include:

- » Issuance of a request for information for bi-level cars being procured for California and Midwestern corridors (Fall 2011), followed by a full Request for Proposal in Winter 2012. A request for information and request for proposal for locomotives will follow.
- » Final contracts for these large procurements are anticipated for summer 2012, with delivery of the first vehicles expected to start in mid-2014.

FRA did not track domestic manufacturing prior to FY 2012. Through ARRA and FY 2010 appropriations, FRA has committed close to \$800 million for the purchase of next-generation locomotives and rail cars. These investments will procure over 35 locomotives and 135 rail cars.

### HOW OUTCOMES WILL BE ACHIEVED

#### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- ❖ Soliciting applications and awarding funding for the development of high-speed and intercity passenger rail.
- ❖ Working with the Next Generation Equipment Pool Committee to develop specifications for passenger rail equipment that encourage economies of scale to revitalize the domestic rail manufacturing and supply industries.
- ❖ Developing tools for regional route planning and national- and corridor-level analyses of public benefits and costs of high-speed rail.
- ❖ Providing training and technical assistance to states and other stakeholders.
- ❖ Overseeing funded projects to ensure they are delivered on time and within budget.
- ❖ Coordinating with the Department of Commerce to provide guidance and implement Buy America requirements.

#### ENABLING LEGISLATION AND REGULATIONS

- ❖ *The Passenger Rail Investment and Improvement Act of 2008* authorized the high-speed and intercity passenger rail grants funded under the *American Recovery and Reinvestment Act of 2009* and *Consolidated Appropriations Act, 2010*.
- ❖ *The Transportation Equity Act for the 21st Century (TEA-21)*, as amended, authorized the Railroad Rehabilitation and Improvement Financing Program to provide direct loans and loan guarantees for eligible rail projects.

#### RESOURCES, TRAINING AND SKILLS

- ❖ IT—FRA utilizes the GrantSolutions system to administer the application solicitation, evaluation and award processes for high-speed and intercity passenger rail funding. FRA uses the Grant Solutions and Delphi financial management systems to manage its grant processing activities and obligate and outlay funds respectively.
- ❖ Training—FRA staff associated with the Economic Competitiveness measures will need training related to project management and oversight, capital cost forecasting, the Next Generation Equipment Pool Committee’s new equipment standards, procurement regulations and contracting.
- ❖ Skills—FRA relies on the skills of a wide range of professions to obligate funds and promote domestic manufacturing, including transportation analysts, engineers, economists, rail system planners, environmental specialists, station planners, financial management specialists and grant management specialists.

#### PARTNERS

FRA's partners in this effort include States, Amtrak and other railroad operators, infrastructure-owning railroads, and rail manufacturing and supply entities.

#### RESPONSIBLE OFFICIAL

Paul Nissenbaum, Associate Administrator, Railroad Policy and Development, Federal Railroad Administration.

#### ASSOCIATED FUNDING

\$872 million

## MAXIMIZING ECONOMIC RETURNS

### (Aviation)

#### WHY IS THIS EFFORT NECESSARY?

DOT is committed to meeting new and growing demands for air transportation services through 2025 and beyond by transforming the National Airspace System (NAS) through the NextGen programs. NextGen will change the way the air transportation system operates by reducing congestion, noise and emissions, and by expanding capacity and improving the passenger experience.

Growth in air travel has generally been accomplished by increasing the number of flights. Measuring the growth of airport capacity indicates the limit at which increased service can be accommodated without affecting delay.

Minimizing delays in the air traffic control system can result in better economic returns for aviation. Air traffic delays can be impacted by the availability of the equipment necessary to provide service directly affects the performance of the NAS. Loss of radar or communications equipment will affect the speed and number of aircraft that can be handled in the air traffic control system. The performance for the two economic competitiveness measures is linked. On-Time Arrivals are affected by the airport and en-route capacity, which are directly impacted by the availability of the equipment and facilities supporting that capacity. Collectively, investments in technology enable FAA to move people and goods more efficiently, leading to a more competitive air transportation system.

#### STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- Maximum economic returns on transportation policies and investments.

#### PERFORMANCE MEASURE: ACHIEVE AN AVERAGE DAILY AIRPORT CAPACITY FOR CORE AIRPORTS OF 86,606 ARRIVALS AND DEPARTURES PER DAY BY FY 2011 AND MAINTAIN THROUGH FY 2016

	2009	2010	2011	2012	2013
Target	100,707	101,290	86,606	86,606	86,606
Actual	101,691	101,668	87,338		

#### SUSTAIN ADJUSTED OPERATIONAL AVAILABILITY AT 99.70 PERCENT FOR THE REPORTABLE FACILITIES THAT SUPPORT CORE AIRPORTS THROUGH FY 2016.

	2009	2010	2011	2012	2013
Target	99.70%	99.70%	99.70%	99.70%	99.70%
Actual	99.78%	99.79%	99.72%		

## THE FOLLOWING PERFORMANCE MEASURE IS A PRIORITY GOAL FOR FY 2012–2013

#### PERFORMANCE MEASURE: BY SEPTEMBER 30, 2013, ACHIEVE INITIAL OPERATING CAPABILITY ON ERAM AT ALL 20 CONTINENTAL UNITED STATES EN ROUTE CENTERS

	2009	2010	2011	2012	2013
Target	NA	NA	8	8	7
Actual	NA	NA	5		

#### PAST PERFORMANCE AND FUTURE MILESTONES

The FY 2011 year-end result for daily airport capacity for Core airports is well above the goal. This is due to the impact of runway construction, as well as to more accurate rate-calling on the part of some air traffic facilities. Each of the Core airport facilities in this measure determines the number of arrivals and departures it can handle for each hour of the day, depending on conditions including weather. In FY 2011, FAA revised the Average Daily Airport Capacity measure to include a new set of airports, replacing the original 35 Operational Evolution Partnership airports. The revised list of airports includes the current most congested airports in the country.

FAA has implemented strict policies and procedures for maintaining and restoring navigation and communication equipment in order to minimize downtime. The goal for Adjusted Operational Availability is expected to remain at 99.7 percent.

The En Route Automation modernization (ERAM) System replaces the 40-year-old En Route Host Computer System and backup system used at En Route Air Traffic Control Centers around the country to guide airplanes flying at high altitudes. ERAM enables FAA to maximize its use of airspace, substantially increase the number of flights that can be tracked and displayed, and enhance its back-up capability. The FAA achieved initial operating capability (IOC) at 5 sites at the end of FY 2011. Although originally planned to complete deployment in December 2010, the ERAM program is an estimated four years behind schedule and approximately \$330 million over budget. The revised deployment for ERAM is to complete all site initial operating capability milestones by the end of FY 2013. The agency plans to achieve IOC at 8 sites by the end of FY 2012 and the remaining 7 sites by the end of FY 2013.

#### HOW OUTCOMES WILL BE ACHIEVED

##### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- Develop requirements for existing technology to transition into the NAS for NextGen.
- Research and evaluate future capacity demands.
- ERAM related activities



## ENABLING LEGISLATION AND REGULATIONS

- ❖ HR658: Title III: Air Traffic Control Modernization and FAA Reform:
  - » Section 301, Air Traffic Control Modernization Oversight Board, and
  - » Section 317, Performance metrics
- ❖ HR658: Title VI: Aviation Research:
  - » Section 601, Airport cooperative research program, and
  - » Section 606, Wake turbulence, volcanic ash, and weather research

## RESOURCES, TRAINING AND SKILLS

- ❖ IT—System-Wide Information Management, Traffic Flow Management System.
- ❖ Training—FAA Academy training; internal leadership and professional development program.
- ❖ Skills—Engineers, project managers, air traffic controllers, airway transportation specialist, computer specialist, budget analysts, contracting specialists, logistics specialists and program analysts.

## PARTNERS

FAA's partners in this effort include Air Line Pilots Association, Air Transport Association of America, Aircraft Owners and Pilots Association, ARINC Incorporated, Department of Defense, Stanford University, MIT Lincoln Laboratory, MITRE/CAASD, Harris Corporation, NASA, National Business Aviation Association and Raytheon.

## RESPONSIBLE OFFICIAL

David Grizzle, Chief Operating Officer Air Traffic Organization, Federal Aviation Administration.

## ASSOCIATED FUNDING

\$4.4 billion

# MAXIMIZING ECONOMIC RETURNS

(St. Lawrence Seaway System Availability)

## WHY IS THIS EFFORT NECESSARY?

The binational St. Lawrence Seaway is the international shipping gateway to the Great Lakes, connecting the heartland of North America with the world. Commercial transportation on the Great Lakes St. Lawrence Seaway System serves as competition to other maritime trade routes as well as other transportation modes, which benefits the nation in lowering consumer prices of finished goods and raw materials, and reducing roadway and railway congestion. Each Seaway-size vessel carries roughly 25,000 metric tons, the equivalent of 870 semi-trucks.

The SLSDC is directly responsible, by Federal statute and international agreements, for the operations and maintenance of the U.S. portion of the St. Lawrence Seaway. It is charged with ensuring a safe, reliable, available and efficient commercial maritime transportation system for the movement of trade to and from the Midwest region of North America.

Commercial trade on the Great Lakes Seaway System impacts 150,000 U.S. jobs, \$12 million per day in wages, \$9 million per day in business revenues by firms engaged in trade and provides approximately \$3.6 billion in annual transportation cost savings compared to competing rail and highway routes.

## STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- ❖ Maximum economic returns on transportation policies and investments

### PERFORMANCE MEASURE: MAINTAIN THE U.S. ST. LAWRENCE SEAWAY SYSTEM AND LOCK AVAILABILITY AT 99 PERCENT.

	2009	2010	2011	2012	2013
Target	99.0%	99.0%	99.0%	99.0%	99.0%
Actual	99.4%	99.8%	99.0%	–	–

## PAST PERFORMANCE AND FUTURE MILESTONES

In FY 2011, the SLSDC successfully met this goal with a system availability rate of 99.0 percent. The SLSDC continues to refine and improve its operations and maintenance programs to ensure continued success in providing near-perfect system availability to its global commercial users. To that end, the SLSDC began its Asset Renewal Program in FY 2009 to address the St. Lawrence Seaway's long-term asset renewal needs, which include the two U.S. Seaway locks (Eisenhower and Snell), connecting channels, operational systems and other infrastructure assets. These improvements are expected to help reduce the delay hours associated with lock equipment malfunctions. The SLSDC will continue the policies and practices that have produced the current results.

## HOW OUTCOMES WILL BE ACHIEVED

### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- ❖ Providing safe and efficient vessel traffic control and passage through the U.S. locks and waters.
- ❖ Maintaining and rehabilitating 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 (SLSMC) in all aspects of Seaway operations.
- ❖ Utilizing and enhancing technology to more efficiently manage vessel traffic control and lock transits.

**ENABLING LEGISLATION AND REGULATIONS**

- St. Lawrence Seaway Act, May 13, 1954 (33 U.S.C. 981, et. seq.) (SLSDC enabling legislation).
- Agreements between the United States and Canada concerning the construction and operation of the St. Lawrence Seaway, July 30, 1952, and August 17, 1954.
- Port and Tanker Safety Act of 1978 (33 U.S.C. 1229) (provides SLSDC with jurisdictional authority over the U.S. waters and locks of the St. Lawrence Seaway).
- St. Lawrence Seaway Regulations (jointly updated each year by the two Seaway agencies).

**RESOURCES, TRAINING AND SKILLS**

- IT—Seaway Global Positioning System/Automatic Identification System. The SLSDC shares a Traffic Management System (TMS) with the Canadian SLSMC for vessel traffic control operations.
- Training—The SLSDC provides specific agency training to its operational staff related to emergency response, workplace safety, marine safety, water and wastewater treatment, lock operations, linehandling and vessel traffic control.
- Skills—Vessel traffic controllers, lock and dam operators, linehandlers, engineers, marine specialists, tugmaster, boat operators, crane operators, electric/electronic mechanics, maintenance mechanics, millwrights, machinists, laborers, pipefitters, welders, carpenters, safety and occupational health officer.

**PARTNERS**

The SLSDC operates the St. Lawrence Seaway with its Canadian counterpart. At the U.S. Federal level, the SLSDC coordinates closely with the U.S. Coast Guard on safety, security and environmental programs, as well as the U.S. Army Corps of Engineers on lock operations, maintenance and engineering.

**RESPONSIBLE OFFICIAL**

Salvatore Pisani, Associate Administrator for Seaway Operations, Massena, N.Y.

**ASSOCIATED FUNDING**

\$33.0 million

**MAXIMIZING ECONOMIC RETURNS**

**(Maritime Security Program)**

**WHY IS THIS EFFORT NECESSARY?**

The Maritime Security Program (MSP) works to ensure that the United States will have a fleet of active, commercially viable, militarily useful, privately owned U.S.-flag vessels to maintain a United States presence in international commercial shipping, while also meeting national defense and other security requirements. The program also ensures that the intermodal assets of current U.S.-flag ship operators will be readily available to DOD.

Strategic Outcome and Supporting Performance Measures

- Maximum economic returns on transportation policies and investments.

**PERFORMANCE MEASURE: SHIP AVAILABILITY AS MEASURED BY THE NUMBER OF SHIPS CONTRACTUALLY ENROLLED IN THE MARITIME SECURITY PROGRAM AVAILABLE TO MEET DOD'S REQUIREMENTS FOR COMMERCIAL SEALIFT CAPACITY**

	2009	2010	2011	2012	2013
Target	60	60	60	60	60
Actual	59	60	60		

**PERFORMANCE MEASURE: OPERATING DAYS AS MEASURED BY THE NUMBER OF SHIP OPERATING DAYS THAT SHIPS ENROLLED IN THE MSP WERE ACTUALLY OPERATING IN UNITED STATES FOREIGN COMMERCE AND AVAILABLE TO MEET DOD'S REQUIREMENTS.**

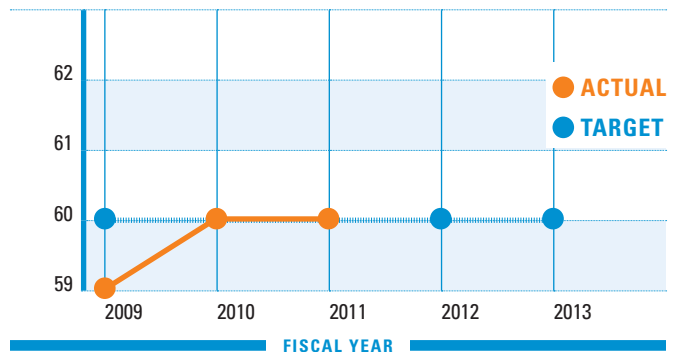
	2009	2010	2011	2012	2013
Target	19,200	19,200	19,200	19,200	19,200
Actual	21,191	21,436	21,557		

**PAST PERFORMANCE AND FUTURE MILESTONES**

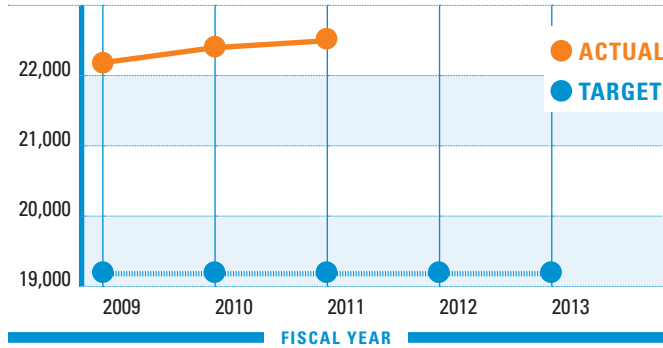
In FY 2013, MARAD will continue to maintain an annual target of 60 U.S.-flag vessels enrolled in the MSP consistent with program authorization. We also anticipate meeting MARAD's performance goal of 19,200 ship operating days for MSP enrolled vessels operating in U.S. foreign commerce during FY 2013.

**HOW OUTCOMES WILL BE ACHIEVED**

**OUTCOME: VESSELS ENROLLED IN MSP**



**OUTCOME: SHIP OPERATING DAYS ENROLLED IN THE MSP AVAILABLE TO MEET DOD NEEDS**



**ASSOCIATED FUNDING**

\$184 million

**MAXIMIZING ECONOMIC RETURN**

(America's Marine Highway System)

**WHY IS THIS EFFORT NECESSARY?**

The America's Marine Highway program helps strengthen the U.S. marine transportation industry through the creation of new jobs, design and construction of new vessels, and development of new services along coastal and inland waterways. This program expands transportation of passengers and freight along the nation's waterways, relieving landside congestion while providing expanded intermodal capacity to our surface transportation system. America's Marine Highway provides and oversees grants supporting the industry, which can be an engine for economic growth. As waterborne transport provides a cost-effective transportation alternative, it impacts congestion in other transportation modes, reduces the cost of goods consumers use every day, and contributes to improving quality of life.

**PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME**

- Monitor the agreements with the ship owners to maintain the 60 ships enrolled in the program.
- Approve changes to MSP contracts that improve the quality of the fleet to help ensure the retention of modern and efficient ships and U.S. citizen crews.
- Authorize payments on MSP operating agreements for 60 ships to provide the Department of Defense with assured access to vessels and mariners.

**ENABLING LEGISLATION AND REGULATIONS**

- 46 U.S.C., Section 53106—Authorization for each of the 60 vessels enrolled in FY 2013 through FY 2015.

**RESOURCES, TRAINING AND SKILLS**

- IT—Systems used to accomplish program activities include the MarView system, Lloyd's Seearcher database to track ship movements, and MARBAT (MARAD'S Budget Analysis Tool), a new software planning tool system to assist with planning and budgetary analysis.
- Training—Training needs in support of MSP include training on identified IT systems for familiarity with and ability to utilize the database systems (i.e., MarView, Lloyd's Seearcher and MARBAT) to ensure the program is being monitored and implemented effectively.
- Skills—Staff have a broad familiarity with the maritime industry, maritime labor issues, DOD transportation functions, and maritime laws and regulations applicable to Maritime Administration programs.

**PARTNERS**

MARAD's partners in this effort include the Department of Defense, U.S. Transportation Command, U.S.-flag ship operators, Ready Reserve Force Ship Managers and Maritime Labor Organizations (e.g., Marine Engineers' Beneficial Association, American Maritime Officers and Seafarers International Union).

**RESPONSIBLE OFFICIAL**

Kevin Tokarski, Associate Administrator for National Security, Maritime Administration.

**STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES**

- Maximum economic returns on transportation policies and investments.

**PERFORMANCE MEASURE: TWENTY FOOT EQUIVALENT (TEU) CONTAINERS TRANSPORTED ACROSS AMERICA'S MARINE HIGHWAY CORRIDORS**

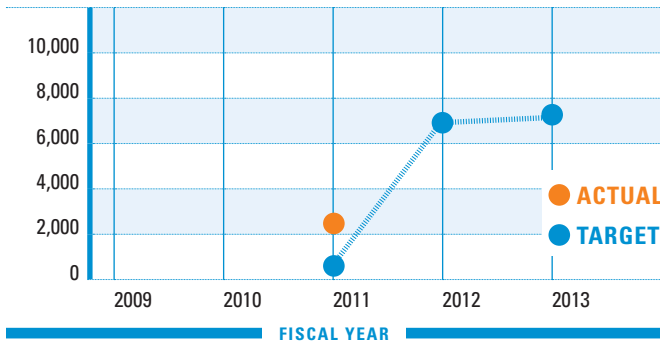
	2009	2010	2011	2012	2013
Target	NA	NA	1,000	3,500	7,350
Actual	NA	NA	1,061		

\* This is a new performance measure for MARAD in FY 2011.

**PAST PERFORMANCE AND FUTURE MILESTONES**

This is a new performance measure identified in reporting for FY 2011. For FY 2013, we anticipate meeting MARAD's performance goal of 7,350 twenty foot equivalent (TEU) containers transported across America's Marine Highway Corridors. The container TEU metric is an indicator of direct grant-related program performance and benefits of grant-program-assisted services on designated waterway transportation routes as extensions of the surface transportation system.

## OUTCOME: CONTAINERS TRANSPORTED ACROSS AMERICA'S MARINE HIGHWAY CORRIDOR



### HOW OUTCOMES WILL BE ACHIEVED

#### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- ❖ Conduct/participate in public outreach sessions to identify and facilitate the development of new Marine Highway services.
- ❖ Explore the expertise gained by the European Union during the past 20 years.
- ❖ Determine how best to apply lessons learned towards our efforts to expand maritime intermodal operations.
- ❖ Quantify public benefits.
- ❖ Establish and manage to performance measures for Marine Highway services.
- ❖ Identify and determine ways to overcome impediments to expanding utilization of America's Marine Highway.
- ❖ Create a tool for public entities that will identify all federal programs that are available to help expand use of our waterways.
- ❖ Complete an analysis of markets for Marine Highway services in the Gulf of Mexico and Great Lakes regions.

#### ENABLING LEGISLATION AND REGULATIONS

- ❖ The Energy Independence and Security Act of 2007
- ❖ Title 46 U.S.C., Section 55601

#### RESOURCES, TRAINING AND SKILLS

- ❖ IT—Systems used to accomplish program activities and assist with planning and budgetary analysis include Geographic Information Systems (GIS), Delphi, and Procurement Information System for Management (PRISM).
- ❖ Training—Training needs identified in support of America's Marine Highway program include grant administration, Contracting Officer's Technical Representative (COTR) and risk management.
- ❖ Skills—Staff have a broad familiarity with efforts supporting grant administration, economics, public outreach, environmental requirements, logistics, and associated laws and regulations applicable to Maritime Administration programs.

#### PARTNERS

MARAD's partners in this effort include the Environmental Protection Agency, Department of Agriculture, Department of Energy, Department of Commerce, Army Corps of Engineers and maritime transportation industry partners.

#### RESPONSIBLE OFFICIAL

Keith Lesnick, Associate Administrator for Intermodal System Development, Maritime Administration.

#### ASSOCIATED FUNDING

The focus of the FY 2013 program will be on the continued administration and oversight of the FY 2010 grant awards. No funding is requested for America's Marine Highway grants in FY 2013.

## MAXIMIZING ECONOMIC RETURN

(United States Merchant Marine Academy)

### WHY IS THIS EFFORT NECESSARY?

Federal support of mariner education helps ensure that highly qualified personnel are trained annually to maintain the Nation's pool of skilled merchant mariners, who are available for service during national emergencies, to support strategic sealift, and to serve the Nation's commercial maritime transportation needs. This program supports the competitiveness of a viable and robust merchant marine and contributes to national defense and homeland security.

The United States Merchant Marine Academy (USMMA) is an accredited federal institution of higher education operated by DOT and MARAD. The USMMA educates and graduates highly qualified merchant marine officers to crew U.S.-flag cargo vessels and work throughout the maritime industry and military and reserve communities. The USMMA offers a four-year program that centers on a rigorous academic and practical maritime-based training program leading to a Bachelor of Science degree in either Marine Transportation or Marine Engineering, a U.S. Coast Guard Merchant Marine Officer's License as 3rd Mate (deck officer) or 3rd Assistant Engineer (engineering officer), and an officer's commission in the U.S. Navy Reserve or other uniformed service.

All USMMA graduates are required by law to fulfill a mandatory service obligation, which includes the provisions to serve in the maritime industry afloat or ashore for at least 5 years, to maintain their U.S. Coast Guard (USCG) license for at least 6 years, and to serve in a reserve branch of the Armed Forces for at least 6 years. The service obligation requires USMMA graduates to be available to crew merchant marine vessels during a national emergency.

### STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- ❖ Maximum economic returns on transportation policies and investments.

## PERFORMANCE MEASURE: NUMBER OF USMMA GRADUATES

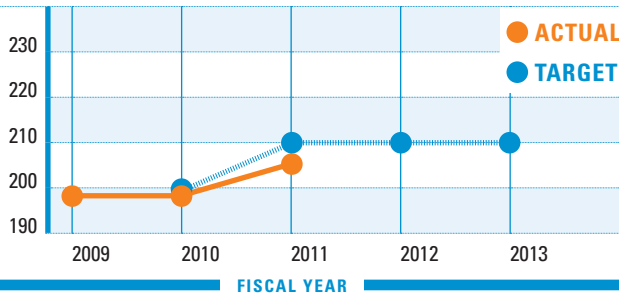
	2009	2010	2011	2012	2013
Target	XXX	200	210	210	210
Actual	198	198	205		

\* This is a new performance measure for MARAD in FY 2009.

## PAST PERFORMANCE AND FUTURE MILESTONES

For FY 2012, the USMMA anticipates exceeding the target of graduating 210 students, each holding a Bachelor of Science degree, a USCG license as a merchant marine officer, and a military officer's commission. USMMA also expects to meet or exceed the FY 2013 target of 210 graduates.

## OUTCOME: USMMA NUMBER OF GRADUATES



## HOW OUTCOMES WILL BE ACHIEVED

### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- Public outreach to support effective recruitment efforts, including increasing the number of inquiries and applications from prospective students of quality.
- Sustained efforts on student retention, including academic support activities, tutoring and use of the Academic Alert system.
- Implementation of comprehensive Capital Asset Management Program, including Capital Repairs and Maintenance, Facility Maintenance and Capital Improvement (recapitalization) efforts.

### ENABLING LEGISLATION AND REGULATIONS

- Federal Law, 46 U.S.C. 50101
- Merchant Marine Act

### RESOURCES, TRAINING AND SKILLS REQUIRED

- IT—The USMMA Department of Information Technology provides services and business process support to the instruction, management and administrative activities of the U.S. Merchant Marine Academy.
- Training—USMMA federal employees must have a broad familiarity with applicable ethics, fiscal, procurement, and human resource law and policy. Specific knowledge is required

for improved job performance and mission execution in particular business areas, in areas such as the Merchant Marine Act of 1936, Maritime Education and Training Act of 1980, and CFR regulations applicable to USMMA operations, USCG licensure, and Navy Reserve programs. Midshipmen must have specific training in areas such as sexual harassment and sexual assault awareness, prevention, and response; alcohol and drug abuse awareness; applicable USCG and USN policies; and other rules and regulations pertinent to their status.

- Skills—USMMA faculty, staff and midshipmen have a broad familiarity with policies and guidelines governing the USMMA, Maritime Administration, and Department of Transportation. They must also have skills necessary to collaborate across the USMMA business enterprise, and work closely with other institutions of higher education and federal entities to execute mission programs efficiently and effectively.

### PARTNERS

MARAD's partners in this effort include the Department of Defense, U.S. Navy, U.S. Coast Guard, other federal agencies, other institutions of higher education, and industry partners across the broad maritime and intermodal transportation enterprise.

### RESPONSIBLE OFFICIAL

Shashi N. Kumar, Interim Superintendent and Academic Dean, U.S. Merchant Marine Academy.

### ASSOCIATED FUNDING

\$77 million

## MAXIMIZING ECONOMIC RETURN

### (State Maritime Academies)

### WHY IS THIS EFFORT NECESSARY?

Federal support of mariner education helps ensure that highly qualified personnel are trained annually to maintain the Nation's pool of skilled merchant mariners. MARAD's State Maritime Academies (SMA) program provides most of the newly skilled U.S. merchant marine officers needed to serve the nation's commercial maritime transportation needs. This program supports the competitiveness of a viable and robust merchant marine and contributes to national defense and homeland security.

MARAD's SMA program provides funding and training vessels to the six SMAs: California Maritime Academy, Great Lakes Maritime Academy, Maine Maritime Academy, Massachusetts Maritime Academy, State University of New York Maritime College and Texas Maritime Academy. Federal funding supplements SMA state government funding. The SMA program comprises three major program components: (1) annual assistance to each of the six state maritime academies for maintenance and support; (2) the Student Incentive Payment (SIP) program (financial assistance to full-time students in the merchant marine officer programs at the SMAs); and (3) training ship maintenance and repair for six federally owned training ships (all part of the National Defense Reserve Fleet) used by the SMA.

Strategic Outcome and Supporting Performance Measures

- Maximum economic returns on transportation policies and investments.

**PERFORMANCE MEASURE: NUMBER OF STATE MARITIME ACADEMY GRADUATES**

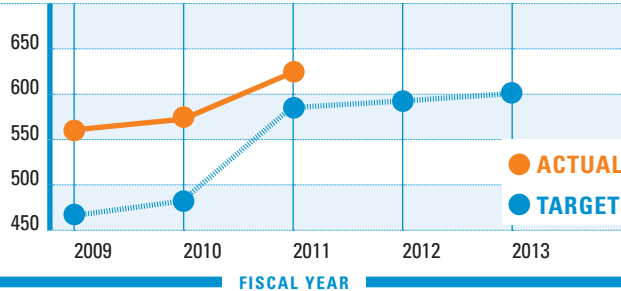
	2009	2010	2011	2012	2013
Target	472	484	520*	592	600
Actual	561	575	545		

\* The target is revised due to a change in the methodology of reporting in order to align the fiscal year with the academic year

**PAST PERFORMANCE AND FUTURE MILESTONES**

The State Maritime Academies program effectively targets Federal resources in a well-defined, cost-shared partnership with the state maritime academies to produce highly qualified officers for the U.S. merchant marine. The program has met performance targets for officer graduates each year. For FY 2013 the number of graduates is expected to continue to increase.

**OUTCOME: SMA FULLY QUALIFIED LICENSED OFFICER GRADUATES**



**HOW OUTCOMES WILL BE ACHIEVED**

**PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME**

- Public outreach to support recruitment efforts.
- Student incentive payments for enrollment of students at the SMAs.
- Direct support assistance to each of the six state academies for maintenance, operations and fuel costs for training vessels.
- Maintain schoolships in a safe and seaworthy condition, and in full compliance with federal laws and regulatory requirements in order to train U.S. Merchant Marine officers.

**ENABLING LEGISLATION AND REGULATIONS**

- Federal Law, 46 U.S.C. 50101, 51501, 51504, 51505, 51509, 51301
- The Merchant Marine Act of 1936, as amended
- Title 46 (Shipping, Subchapter R) Code of Federal Regulations, Parts 167 and 310

- American Bureau of Shipping (ABS) Ship Classification Rules and Regulations

**RESOURCES, TRAINING AND SKILLS**

- IT—IT systems include Maritime Service Compliance System, used to accomplish program activities including monitoring enrollment, separation and graduation of SMA midshipmen/cadets as well as tracking fulfillment of SMA graduate’s service obligation compliance.
- Training—Program staff have a broad familiarity with efforts supporting public outreach and associated laws, Merchant Marine Act, Maritime Education and Training Act, and 46 CFR regulations applicable to Maritime Administration programs, and the skills necessary to work closely with the academies/graduates to resolve issues, complaints or differences of opinion.
- Skills—Staff have a broad familiarity with efforts supporting public outreach and associated laws and regulations applicable to Maritime Administration programs. They must have experience and capability in managing ship maintenance, and unique capability in ship related project management, including large and complex ship repair and conversion projects encompassing various ship design disciplines under various regulatory oversight and stakeholder environments.

**PARTNERS**

MARAD’s partners in this effort include Cadets receiving Student Incentive Payments (SIP), Presidents and Superintendents of the six State Maritime Academies, SIP Coordinators, SMA OICs, Department of Defense, Department of Homeland Security (U.S. Coast Guard), The American Bureau of Shipping and Maritime Transportation industry partners.

**RESPONSIBLE OFFICIAL**

Kevin Tokarski, Associate Administrator for National Security, Maritime Administration; George Zoukee, Associate Administrator for Business and Finance Development, Maritime Administration.

**ASSOCIATED FUNDING**

\$16 million

**A COMPETITIVE AIR TRANSPORTATION SYSTEM RESPONSIVE TO CONSUMER NEEDS**

(Federal Aviation Administration)

**WHY IS THIS EFFORT NECESSARY?**

On-time performance is a measure of the ability of the FAA to deliver services. Reducing delays is one of the biggest challenges facing the FAA. Commercial airline passenger delays in the U.S. amount to approximately \$10 billion in delay costs each year. The problem is exacerbated by increased traffic and congestion concentrated at several major airports. Along with increased congestion, adverse weather conditions are a major contributing factor to airport delays. Approximately 70 percent of flight delays are caused by weather.

FAA employs new technologies that contribute to more efficient arrival and departure performance, which helps decrease congestion and improve on-time arrival rates. For example, the Traffic Management Advisor contributed to more efficient arrival and departure performance at several large airports, including Atlanta, Charlotte and Newark.

### STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- A competitive air transportation system responsive to consumer needs.

#### PERFORMANCE MEASURE: ACHIEVE A NAS ON-TIME ARRIVAL RATE OF 88.0 PERCENT AT CORE AIRPORTS AND MAINTAIN THROUGH FY 2016

	2009	2010	2011	2012	2013
Target	88.00%	88.00%	88.00%	88.00%	88.00%
Actual	88.98%	90.55%	90.41%		

### PAST PERFORMANCE AND FUTURE MILESTONES

FAA met the NAS on-time performance level for this metric in FY 2011. Weather, airline scheduling practices, runway construction and maintenance as well as ramp and airport congestion all contributed to the Agency's ability to meet this target. Improved performance is most likely due to the drop in scheduled and unscheduled operations in many major markets in addition to the impact of various FAA initiatives. This has led to less congestion in the NAS, less pressure on the air traffic control system and improved on-time performance.

To continue to meet NAS on-time targets in the future, FAA plans to create efficient routing structures where needed; continue to support the commissioning of nine new runway/taxiway projects; continue implementing the New York Area Program Integration Office delay reduction plan milestones; and continue implementing routes and procedures that leverage emerging technologies to improve aircraft navigation capabilities.

### HOW OUTCOMES WILL BE ACHIEVED

#### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- Demonstrate new Automatic Dependent Surveillance-Broadcast (ADS-B) applications.
- Upgrade terminal automation platforms to interface with Automatic Dependent Surveillance-Broadcast (ADS-B).
- Improve the quality of weather information.
- Begin integrated airspace design and associated activities, including traffic flow analysis and facilitated design and procedures optimization.
- Collaborate with domestic and foreign system stakeholders to plan and regulate the flow of air traffic to minimize delays and congestion while maximizing overall efficiency.

### ENABLING LEGISLATION AND REGULATIONS

HR 658, Title III: Air Traffic Control Modernization and FAA Reform:

- Section 301, Air Traffic Control Modernization Oversight Board
- Section 317, Performance metrics
- Section 315, ADS-B development and implementation

### RESOURCES, TRAINING AND SKILLS

- IT—System-Wide Information Management, Safety Management and Information System (SMIS).
- Training—FAA Academy training; Safety Management and Information System (SMIS), Appropriations Law, Systems Engineering, and internal leadership and professional development program.
- Skills—Engineers, project managers, air traffic controllers, airway transportation specialist, computer specialist, budget analysts, contracting specialists, logistics specialists and program analysts.

### PARTNERS

FAA's partners in this effort include Air Line Pilots Association, Air Transport Association of America, Aircraft Owners and Pilots Association, ARINC Incorporated, the Boeing Company, Department of Defense, GARMIN International, Rockwell International, Stanford University, Lockheed Martin, MIT Lincoln Laboratory, MITRE/CAASD, Harris Corporation, NASA, National Business Aviation Association and Raytheon.

### RESPONSIBLE OFFICIAL

David J. Grizzle, Chief Operating Officer Air Traffic Organization, Federal Aviation Administration.

### ASSOCIATED FUNDING

\$850 million

## A COMPETITIVE AIR TRANSPORTATION SYSTEM RESPONSIVE TO CONSUMER NEEDS

(Office of the Secretary)

### WHY IS THIS EFFORT NECESSARY?

DOT reviews airline companies' economic authority to ensure that newly formed airline companies would place American consumers at serious risk if they could begin operations with inadequate finances, insufficient managerial competencies, or without the proper dispositions to comply with legal requirements. The Department's authority to permit new airlines to operate, or to ensure that existing airlines remain economically "fit" to operate protects American consumers from risk. DOT's efforts to liberalize international aviation relationships, can result in increased air service opportunities and lower fares for consumers. In addition, DOT take necessary action to redress unfair or discriminatory practices by foreign governments or carriers against U.S. airlines, thereby ensuring that the traveling and shipping public enjoys the benefits of a free and fair marketplace.

**STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES**

- A competitive air transportation system responsive to consumer needs

**PERFORMANCE MEASURE: REVIEW AIR CARRIERS TO ENSURE THAT THEY MEET THE REQUISITE STANDARDS FOR OBTAINING OR RETAINING ECONOMIC AUTHORITY TO OPERATE**

	2009	2010	2011	2012	2013
Target	N/A*	N/A	N/A	18	18
Actual	22	20	26		

*\*New performance measure. Future milestones will be established based on 2011 and 2012 actual data.*

**HOW OUTCOMES WILL BE ACHIEVED**

**PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME**

- Review and issue decisions on air carrier requests for economic authority.
- Review operating air carriers to ensure that they meet requisite economic standards.
- Exercise regulatory powers to redress unfair or discriminatory practices by foreign governments or carriers against U.S. airlines.

**ENABLING LEGISLATION AND REGULATIONS**

- 49 U.S.C. sections 40101, 41101 through 41112 and 47138
- 14 Code of Federal Regulations Parts 203 through 206, 215 and 298
- 49 U.S.C. Subtitle VII, Part A
- 14 C.F.R. Part 200 et. seq. and Part 300 et. seq.

**RESOURCES, TRAINING AND SKILLS**

- IT—A variety of databases support these regulatory activities, including databases identifying authorities held by U.S. and foreign airlines, workload databases tracking pending applications, databases on open-skies bilateral agreements, and databases on airline and other stakeholder representatives who deal with regulatory requests.
- Training—Financial management; Airline Consortium Executive Education Program, Mergers and Acquisition.
- Skills—Transportation and financial analytical skills to examine regulatory requests, responsive pleadings, operative precedents, and Department policy applicable to a decision on whether the request should be granted.

**PARTNERS**

The Office of Aviation and International Affairs' partners in this effort include Federal Aviation Administration; the Department of Justice; the Securities and Exchange Commission; the National Transportation Safety Board; law enforcement agencies, the Department of State and the Department of Treasury.

**RESPONSIBLE OFFICIAL**

Polly Trottenberg, Assistant Secretary for Transportation Policy and Susan Kurland, Assistant Secretary for Aviation and International Affairs.

**ASSOCIATED FUNDING**

Information on the associated funding for this outcome is still being gathered.

**U.S. TRANSPORTATION INTERESTS ADVANCED IN TARGETED MARKETS AROUND THE WORLD**

**(Bilateral and Multilateral Agreements)**

**WHY IS THIS EFFORT NECESSARY?**

The operation of international air services is governed by bilateral air services agreements between governments. Traditionally, these agreements have restricted market access by limiting the number of airlines that can serve the market, the cities that can be served, the number of flights that can be operated and the prices that can be charged.

**STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES**

- U.S. transportation interests advanced in targeted markets around the world.

**PERFORMANCE MEASURE: REACH NEW OR EXPANDED BILATERAL AND MULTILATERAL AGREEMENTS TO REMOVE MARKET-DISTORTING BARRIERS TO TRADE IN TRANSPORTATION.**

	2009	2010	2011	2012	2013
Target	3	3	3	2	2
Actual	3	7			

**PAST PERFORMANCE AND FUTURE MILESTONES**

The U.S. achieved Open Skies with over 100 aviation partners and incremental liberalization with others. DOT is continuing its Open Skies outreach to aviation partners around the globe including China, Vietnam, South Africa, Mexico, Russia and the former CIS republics. We are also developing a best practices template for the implementation of Open Skies agreements to enhance the prompt usability of negotiated rights with minimum governmental intervention.

**HOW OUTCOMES WILL BE ACHIEVED**

**PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME**

Transportation interests advanced in targeted markets around the world through:

- Conducting face to face formal negotiations with foreign governments.
- Coordination with the Department of State in developing U.S. negotiating positions.
- Working with U.S. aviation stakeholders to identify liberalization targets and resolve doing business issues.



## ENABLING LEGISLATION AND REGULATIONS

49 USC 40101 and 40105 taken together provide the framework and direction for negotiating international air services agreements.

## RESOURCES, TRAINING AND SKILLS

- Skills—The program needs a mix of skills, with a special focus on expertise in communication (oral and written), analytical economic and negotiating.

## PARTNERS

The Departments of State and Commerce; aviation community industry groups, including Air Transport Association, National Air Carrier Association, Airports Council International North America; individual airlines, airports, communities and labor unions.

## RESPONSIBLE OFFICIAL

Susan Kurland, Assistant Secretary for Aviation and International Affairs.

## ASSOCIATED FUNDING

\$1.9 million

# EXPAND OPPORTUNITIES FOR BUSINESSES IN THE TRANSPORTATION SECTOR

## WHY IS THIS EFFORT NECESSARY?

To ensure that small and disadvantaged businesses are provided maximum practicable opportunity to participate in the agency's contracting process pursuant to the Small Business Act.

## STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- Expanded opportunities for businesses in the transportation sector, especially small, women-owned and disadvantaged businesses.

### PERFORMANCE MEASURE: INCREASE PERCENT OF TOTAL DOLLAR VALUE OF DOT DIRECT CONTRACTS AWARDED TO SMALL, DISADVANTAGED BUSINESSES.

	2009	2010	2011	2012	2013
Target	14.5%	14%	15%	15%	15%
Actual	13%	14%	19.54%		

### PERFORMANCE MEASURE: INCREASE PERCENT OF TOTAL DOLLAR VALUE OF DOT DIRECT CONTRACTS AWARDED TO WOMEN-OWNED BUSINESSES.

	2009	2010	2011	2012	2013
Target	5.1%	5%	6%	6%	6%
Actual	10.9%	8%	11.24%		

## PAST PERFORMANCE AND FUTURE MILESTONES

The Procurement Assistance Division negotiates fair and reasonable small business goals for the Department of Transportation. The division also works closely with DOT program and procurement officials to assist DOT in meeting those goals. In FY 2009 (the latest official data from SBA), DOT received an A rating under the SBA's scorecard criteria. DOT continues to work with each of the Operating Administrations toward small business goal achievement.

The Financial Assistance Division, which administers the Short Term Lending Program (STLP) supports the DOT Economic Competitiveness Strategic Goal by partnering with participating lenders across the country to provide certified small businesses, including disadvantaged business enterprises (DBEs) and women-owned businesses, the opportunity to obtain short-term working capital at a reasonable interest rate in order to increase the number of small and disadvantaged businesses able to compete for and provide goods and services for DOT and DOT-funded transportation-related contracts across the country.

The Regional Partnerships Division, which administers the Small Business Transportation Center Program supports the Economic Competitiveness Strategic Goal by partnering with (1) business-centered community-based organizations, (2) trade associations, (3) colleges and universities, (4) and chambers of commerce to create a delivery system that provides a comprehensive package of business training and counseling, technical assistance, and the dissemination of information to transportation-related DBEs within their regional areas to small and disadvantaged businesses including DBEs and women-owned businesses, to enable them to increase the number of small and disadvantaged businesses able to compete for and provide goods and services for DOT and DOT-funded transportation-related contracts across the country.

## HOW OUTCOMES WILL BE ACHIEVED

### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

Expanded opportunities for business in the transportation section, especially small, women-owned and disadvantaged business will be supported through:

- Providing local outreach through Small Business Vendors Days.
- Providing national outreach through Small Business Summits, matchmaking events, workshops/presentations, etc.
- Coordinating with our resource partners through Small Business Transportation Resource Centers.

## ENABLING LEGISLATION AND REGULATIONS

- Small Business Act (PL 95-507)

**RESOURCES, TRAINING AND SKILLS**

- ❖ IT—Appropriate software is available to support our processes.
- ❖ Training—Staff require training in contract administration and federal small business issues to support the program participants.
- ❖ Skills—The program needs a mix of skills, with a special focus on expertise in contracting and small business needs.

**PARTNERS**

DOT's partners in this effort include State and local governments, Chambers of Commerce, Small Business Centers, Small Business Transportation Resource Centers, banks, local and national small business trade associations, Small Business Administration, Minority Business Development Agency.

**RESPONSIBLE OFFICIAL**

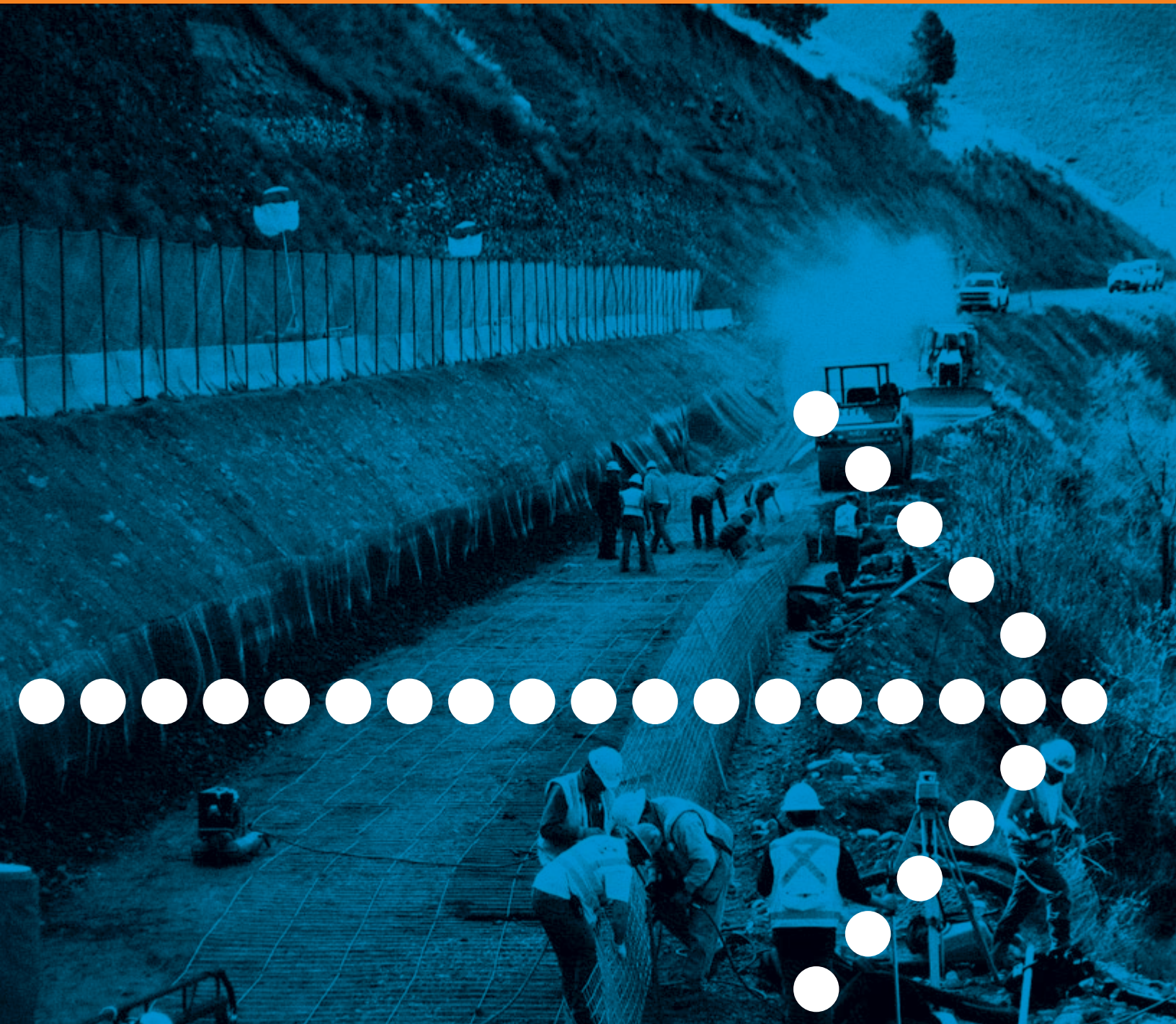
Randall Nossaman, Small Business Specialist.

Brandon Neal, Director, Office of Small and Disadvantaged Business Utilization

**ASSOCIATED FUNDING**

\$6 million

# LIVABLE COMMUNITIES



# LIVABLE COMMUNITIES

Foster livable communities through place-based policies and investments that increase the transportation choices and access to transportation services

President Obama has made place-based policy a key component of his domestic agenda and has challenged all federal agencies to coordinate and innovate around this goal in an unprecedented way. Fostering livable communities—places where transportation, housing and commercial development investments have been coordinated so that people have access to adequate, accessible, affordable and environmentally sustainable travel options—is a transformational policy shift for DOT.

The outcomes we will strive to achieve include increased access to convenient, affordable transportation choices, improvements in the public transit experience, provision of additional pedestrian and bicycle networks, and improved access to transportation for people with disabilities, older adults and lower income populations. Achieving these outcomes is expected to lead to lower household expenditures for transportation, currently 17 percent, and affordable connections to jobs and other necessities.

## IMPROVED NETWORKS AND IMPROVED ACCESS

(Federal Highway Administration)

### WHY IS THIS EFFORT NECESSARY?

The livable communities goal focuses on the critical need to enhance the relationship between transportation and land use while protecting the environment and promoting multimodal choices in rural and urban areas throughout the U.S. These efforts will help improve community transportation choices across all transport modes. By supporting the development or improvement of multimodal transportation networks, this funding program will help improve air quality, reduce congestion, foster affordable transportation and housing, increase program accessibility, improve roadway safety for all road users, and ultimately improve quality of life.

### STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- Improved networks that accommodate pedestrians and bicycles.
- Improved access to transportation for older adults and people with disabilities.

#### PERFORMANCE MEASURE: NUMBER OF STATES WITH POLICIES THAT IMPROVE TRANSPORTATION CHOICES FOR WALKING AND BICYCLING.

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Target	NA	NA	22	26	27
Actual	NA	21	24		

#### PERFORMANCE MEASURE: NUMBER OF STATES THAT HAVE DEVELOPED AN AMERICANS WITH DISABILITIES ACT (ADA) TRANSITION PLAN THAT IS CURRENT AND INCLUDES THE PUBLIC RIGHTS-OF-WAY.

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Target	NA	9	11	14	15
Actual	NA	9	13		

### PAST PERFORMANCE AND FUTURE MILESTONES

Both performance measures were recently adopted by the DOT and FHWA. The DOT issued a policy statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations in March 2010. This statement signaled an increased commitment at the DOT and FHWA to support safe and convenient transportation choices, including walking and bicycling. FHWA has provided funding support for reports, technical assistance and training related to walking and bicycling. A significant future milestone would be having policies and plans that support improved transportation choices in half

of the States. A future milestone for the ADA performance measure would be having current transition plans that include the public rights-of-way in half of the States.

### HOW OUTCOMES WILL BE ACHIEVED

#### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- Provide funds for surface transportation planning, pedestrian and bicycle transportation, and sidewalk modifications to comply with the *Americans with Disabilities Act of 1990* (ADA),
- Continue to develop and support a multimodal livability program for urban and rural areas; and
- Continue outreach and the provision of technical assistance and training to increase State compliance with the ADA for transportation facilities.
- Continue to document and provide outreach on applications of context sensitive solutions principles to transportation decisionmaking.

#### ENABLING LEGISLATION AND REGULATIONS

The success of this program is contingent on enactment of transportation authorizing legislation that advances multimodal transportation considerations and funding options and makes related changes to Title 23.

- *Americans with Disabilities Act.*
- State and MPO planning regulations describe how walking and bicycling are to be accommodated throughout the planning process (e.g., see 23 CFR 450.200, 23 CFR 450.300, 23 U.S.C. 134(h), and 135(d)). Key statutes are described in the March 2010 *Policy Statement*

#### RESOURCES, TRAINING AND SKILLS

#### PARTNERS

FHWA's partners in this effort include State Departments of Transportation, State and federal agencies, interested parties, and the public.

#### RESPONSIBLE OFFICIALS

Gloria Shepherd, Associate Administrator, FHWA Office of Planning, Environment, and Realty; Warren Whitlock, Associate Administrator, Office of Civil Rights; and Amy Lucero, Acting Associate Administrator, Office of Federal Lands Highway.

#### ASSOCIATED FUNDING

\$3.9 billion

## INCREASED ACCESS TO CONVENIENT AND AFFORDABLE TRANSPORTATION CHOICES

(Federal Transit Administration)

### WHY IS THIS EFFORT NECESSARY?

In many communities, people cannot reach affordable housing, work, health care, educational, social and other important opportunities and services essential to a quality way of life. In these communities—both urban and rural—public transportation is often the key to providing access and enhancing a community’s measure of “livability.” FTA will continue to provide leadership for the U.S. Department of Transportation’s (DOT) Livability Initiative.

### STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- Increased access to convenient and affordable transportation choices.

#### PERFORMANCE MEASURE: NUMBER OF TRANSIT BOARDINGS REPORTED BY URBANIZED AREA TRANSIT PROVIDERS

	2009	2010	2011	2012	2013
Target	NA	NA	10.0B	10.1B	10.2B
Actual	10.1B	10.0B	10.0B		

\*Preliminary.

#### PERFORMANCE MEASURE: NUMBER OF TRANSIT BOARDINGS REPORTED BY RURAL AREA TRANSIT PROVIDERS

	2009	2010	2011	2012	2013
Target	NA	NA	140M	144M	148M
Actual	131.2M	138.0M	141M		

\*Preliminary.

#### PERFORMANCE MEASURE: TRANSIT “MARKET SHARE” AMONG COMMUTERS TO WORK IN AT LEAST 10 OF THE 50 MOST-POPULOUS URBANIZED AREAS BY A STATISTICALLY SIGNIFICANT AMOUNT FROM THE 2010 BASELINE.

	2009	2010	2011	2012	2013
Target	NA	NA	2 urbanized areas with a statistically-significant increase	4 urbanized areas with a statistically-significant increase	5 urbanized areas with a statistically-significant increase
Actual	NA	NA	NA		

Note: Census will be publishing a new list of Urbanized Areas based on the 2010 Census in early 2012, creating a new baseline for this data through the next decennial Census

## PAST PERFORMANCE AND FUTURE MILESTONES

Total annual transit boardings reported by agencies in urbanized areas first surpassed ten billion in 2008 and have remained approximately the same despite the effects of the recession. Monthly reports in 2011 indicate signs of improvement over 2010.

FTA started data collection on rural (non-urbanized) service in 2007 and the initial data show increased ridership. FTA expects to see annual gains of some four million trips per year.

FTA is targeting a statistically significant increase in the percentage of commuters who use transit to ride to work in at least ten of the largest 50 urbanized areas by 2016. The current average mode share for transit across these areas is now 5.2 percent.

Future milestones include:

- ❖ Develop data sources and maintain a public database of transit access points and service levels.
- ❖ Work with other federal agencies to identify specific policies or programs to reinforce common agency development efforts.
- ❖ Establish a new grant program to demonstrate different approaches to making communities more livable.
- ❖ Award grants to support construction of new and extended transit services.
- ❖ Use research to improve the understanding and performance in livability and environmentally sustainable outcomes.
- ❖ Assist the transit industry in reducing greenhouse gas emissions, improving energy efficiency and adapting to the impacts of climate change.

## STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- ❖ Improved access to transportation for people with disabilities and older adults

### PERFORMANCE MEASURE: NUMBER OF KEY RAIL STATIONS VERIFIED AS ACCESSIBLE AND FULLY COMPLIANT FROM 522 TO 560 BY 2016

	2009	2010	2011	2012	2013
Target	NA	NA	NA	525	530
Actual	522	522	522	NA	NA

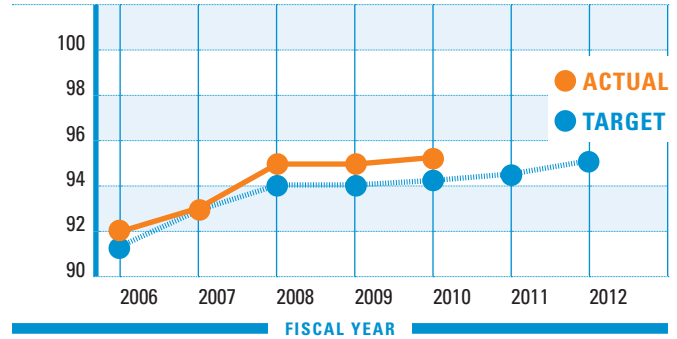
## PAST PERFORMANCE AND FUTURE MILESTONES

FTA has tracked ADA compliance at key rail stations for some time. FTA has set a goal of improving the number of key rail stations that are accessible and fully compliant to 560 by 2016.

Future milestones include:

- ❖ Perform compliance assessments at 10 stations per year and work to address any deficiencies.

## PERCENT OF KEY RAIL STATIONS COMPLIANT WITH THE ADA



## HOW OUTCOMES WILL BE ACHIEVED

### PRIMARY ACTIVITIES SUPPORTING THIS OBJECTIVE

- ❖ Grants to urban and rural areas;
- ❖ Provide and disseminate information to states, localities, and others;
- ❖ Training; for FTA staff
- ❖ Promote access for veterans and persons covered under the ADA;
- ❖ Research and development;
- ❖ Evaluate performance measures;
- ❖ Develop data sources;
- ❖ Collect and analyze data;
- ❖ Develop policies and seek public comment in partnership with other federal agencies; and
- ❖ Provide technical assistance.

### ENABLING LEGISLATION AND REGULATIONS

- ❖ 49 U.S.C. 5301 states that it is in the interest of the United States to foster the development and revitalization of public transportation systems that maximize the safe, secure, and efficient mobility of individuals
- ❖ Under 49 U.S.C. 5301 (d), it is the policy of the United States to ensure that the elderly and those with disabilities have the same access to public transportation as all other individuals, and requires all government programs to carry out this policy.
- ❖ Section 5319 of Title 49, U.S.C., provides formula funding to states for the purpose of meeting the transportation needs of the elderly and persons with disabilities.
- ❖ 49 U.S.C. 5316-5317 addresses the unique transportation challenges faced by welfare recipients and low-income persons and aims to provide additional tools to overcome existing barriers facing Americans with disabilities seeking integration into the work force and full participation in society.
- ❖ Funds available through various formula grant programs authorized through 49 U.S.C. 5309 and 5311 may also support the goal of livable communities.

See 49 C.F.R. Part 27 for the Departments' policy prohibiting discrimination on the basis of disability for programs receiving federal funding.

**RESOURCES, TRAINING AND SKILLS**

- IT—FTA maintains information as part of the National Transit Database and also on the agency's grants management systems.
- Training—Introduce engineering and public policy experts to new livability concepts.
- Skills—Engineering, planning, economics and policy skills.

**PARTNERS**

FTA's partners in this effort include State and local governments, transit agencies, metropolitan planning organizations, transit industry trade organizations, members of the disability community, local decision makers, and the U.S. Architectural and Transportation Barriers Compliance Board.

**RESPONSIBLE OFFICIAL**

Robert Tuccillo, Associate Administrator for Budget and Policy/  
Chief Financial Officer

**ASSOCIATED FUNDING**

\$2.8 billion

## INCREASED ACCESS TO CONVENIENT AND AFFORDABLE TRANSPORTATION CHOICES

**(High Speed Intercity Passenger Rail)**

**WHY IS THIS EFFORT NECESSARY?**

The U.S. Census Bureau projects that an additional 100 million people will reside in the United States by 2050, most of whom will be concentrated in a relatively small number of "mega-regions." Additionally, highway and aviation congestion have risen in recent years, which coupled with increasing energy costs, has spurred millions of Americans to seek out new transportation options. High-speed and intercity passenger rail is well-suited to provide a cost-effective and time-competitive alternative to provide needed relief to America's constrained aviation and highway networks and help meet the mobility needs of the growing population.

FRA's National High Performance Rail System contains the two primary programs focused on developing high-speed and intercity passenger rail. These programs—Network Development and System Preservation and Renewal—support a number of initiatives aimed at planning and developing high-speed rail corridors, developing multi-modal stations, facilitating the standardization and procurement of rail equipment, and maintaining critical rail assets and infrastructure. Many of these initiatives, as well as projects currently underway, began under the previous Capital Assistance for High Speed Rail Corridors and Intercity Passenger Rail Service program, as well as Amtrak's capital and operating grants. Additionally, the Railroad Rehabilitation and Improvement Financing

Program provides direct loans and loan guarantees for eligible rail projects.

**STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES**

- Increased intercity passenger rail ridership.

**PERFORMANCE MEASURE: INCREASE IN THE NUMBER OF INTERCITY RAIL PASSENGER-MILES TRAVELED (FROM 2010 BASELINE).**

	2009	2010	2011	2012	2013
Target	N.A.	N.A.	6.4M	+150M	+150M
Actual	N.A.	N.A.	230M		

*n.a. Not applicable—FRA had not established and did not track this measure before FY 2012.*

As of February 2012, FRA was also exploring data, measures, and targets to assess progress toward providing 80 percent of Americans convenient access to a passenger rail system, featuring high-speed service, within 25 years. Moreover, FRA is planning to adopt measures and targets related to achieving an improved rail transportation experience, such as the increase in the number of passenger rail corridors and passenger rail stations that meet performance and service quality standards.

**PAST PERFORMANCE AND FUTURE MILESTONES**

Through grants funded under the Initial Transportation Investments in FY 2012, and previous investments from ARRA and FY 2010 appropriations, FRA began laying the groundwork to achieving the President's goal of providing 80 percent of Americans convenient access to high-speed rail within 25 years. Major milestones over the next two years include:

- Initiation or continuation of construction activities on six major corridor programs (California, Seattle-Portland, Chicago-St. Louis, Chicago-Detroit, Boston-Washington, D.C., and Charlotte-Washington, D.C.) which will result in substantial reliability, speed, or frequency improvements to these services.
- Initiation or continuation of construction activities on three smaller corridor programs (Chicago-Iowa City, New Haven-Springfield, and Portland, ME-Brunswick, ME), resulting in new service to communities not previously connected to the nation's rail network (Iowa City and Brunswick) and improved operations on the New Haven-Hartford corridor.
- Initiation or completion of construction projects on passenger rail corridors that cumulatively connect 135 million Americans (44 percent of the U.S. population).

- Initiation or completion of new construction or improvements at nearly 50 intercity passenger rail stations.
- Completion of at least 30 state rail plans and service development plans, which are the critical first steps to defining future corridor services.
- Issuance of additional technical guidance documents to support high-quality, effective project development and delivery and ensure greater consistency in project sponsor approaches.
- Implementation of a long term monitoring plan to ensure the continued effective oversight of current and future projects.
- Implementation of merit-based application review and selection processes to award the discretionary, competitive funding requested for high-speed rail activities funded by the Initial Transportation Investments and FY 2013 budget. The outcome of these grant selection activities will be a broadened portfolio of corridor improvement projects, planning activities, and equipment procurements.

## HOW OUTCOMES WILL BE ACHIEVED

### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- Soliciting applications and awarding funding for the development of high-speed and intercity passenger rail.
- Providing training and technical assistance to states and other stakeholders to aid in the successful development and implementation of high-speed rail proposals.
- Developing tools for use in regional route planning and national- and corridor-level analyses of public benefits and costs of high-speed rail.

### ENABLING LEGISLATION AND REGULATIONS:

- *The Passenger Rail Investment and Improvement Act of 2008* authorized the high-speed and intercity passenger rail grants funded under the American Recovery and Reinvestment Act of 2009 and FY 2010 appropriations.
- *The Transportation Equity Act for the 21st Century (TEA-21)*, as amended, authorized the Railroad Rehabilitation and Improvement Financing Program to provide direct loans and loan guarantees for eligible rail projects.

### RESOURCES, TRAINING, AND SKILLS

- FRA utilizes the GrantSolutions system to administer the application solicitation, evaluation, and award processes for high-speed and intercity passenger rail funding. The Delphi financial management system is used to administer the obligation and outlay processes.
- FRA staff associated with the aforementioned Livable Communities measures will need training related to project management and oversight, capital cost forecasting, travel demand forecasting, transportation systems planning, land use development and integration, environmental analysis related to the National Environmental Policy Act, procurement standards, and contracting.

- FRA relies on the skills of a wide range of professions to increase access to convenient and affordable transportation choices, including transportation analysts, engineers, economists, rail system planners, environmental specialists, station planners, financial management specialists, and grant management specialists.

### PARTNERS

FRA's partners in this effort include States, Amtrak and other railroad operators, infrastructure-owning railroads, metropolitan planning organizations, transit agencies, and passenger rail advocates.

### RESPONSIBLE OFFICIAL

Paul Nissenbaum, Associate Administrator, Railroad Policy and Development, Federal Railroad Administration

### ASSOCIATED FUNDING

\$411 million

## IMPROVED ACCESS TO TRANSPORTATION FOR PEOPLE WITH DISABILITIES AND OLDER ADULTS (Federal Rail Administration)

### WHY IS THIS EFFORT NECESSARY?

*The Americans with Disabilities Act of 1990 (ADA)* required that "all stations in the intercity rail transportation system shall be made readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs, as soon as practicable," but no later than July 26, 2010. The President's FY 2013 budget request contains funding to bring Amtrak-served stations into compliance with ADA Standards.

FRA, through the System Preservation and Renewal Program, provides dedicated funding to bring all intercity passenger rail stations into ADA compliance. Additionally, ADA compliance projects were funded under the previous Amtrak capital grants program and the Capital Assistance for High Speed Rail Corridors and Intercity Passenger Rail Service program.

Strategic Outcome and Supporting Performance Measures

- Improved access to transportation for people with disabilities and older adults.

### PERFORMANCE MEASURE: INCREASE IN THE PERCENTAGE OF INTERCITY PASSENGER RAIL STATIONS THAT COMPLY WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT.

	2009	2010	2011	2012	2013
Target	N.A.*	N.A.	N.A.	15%	26%
Actual	N.A.	N.A.	N.A.		

\* Not applicable. FRA had not established and did not track this measure before FY 2012.



## PAST PERFORMANCE AND FUTURE MILESTONES

Forty-eight Amtrak-served stations (approximately 10 percent) are currently ADA-compliant. Amtrak estimates that by the end of calendar year 2011, 90 percent of Amtrak stations will have barrier-free access between platforms and trains and ADA-related design and construction work will be proceeding at 110 stations. Amtrak expects that by the end of:

- FY 2012, 72 stations will be fully compliant;
- FY 2013, 126 stations will be fully compliant, and;
- FY 2015, all Amtrak-served stations will be fully compliant.

## HOW OUTCOMES WILL BE ACHIEVED

### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- Assisting Amtrak in prioritizing its ADA compliance plan and coordinating with third parties that share with Amtrak responsibility for ADA compliance.
- Granting funds to Amtrak to bring all stations into compliance with ADA by the end of FY 2015.
- Overseeing Amtrak's implementation and compliance with ADA requirements.

### ENABLING LEGISLATION AND REGULATIONS

- *The Passenger Rail Investment and Improvement Act of 2008* authorized the station improvements funded under the American Recovery and Reinvestment Act of 2009 and FY 2010 and FY 2011 appropriations.
- *The Americans with Disabilities Act of 1990* mandated that all intercity passenger rail stations be made readily accessible by individuals with disabilities by July 26, 2010.

## RESOURCES, TRAINING AND SKILLS

- IT—FRA utilizes the Delphi financial management system to manage obligations and outlays to Amtrak.
- Training - FRA staff associated with increasing the percentage of intercity passenger rail stations that comply with ADA will need training related to project management and oversight, capital cost forecasting, mobility management, disability community technical support, and contracting.
- Skills—FRA relies on the skills of a wide range of professions to implement and monitor stations' compliance with ADA requirements, including transportation analysts, engineers, environmental specialists, station planners, financial management specialists, grant management specialists and civil rights specialists.

## PARTNERS

FRA's partners in this effort include States, Amtrak and other railroad operators, infrastructure-owning railroads, and members of the disability community.

## RESPONSIBLE OFFICIAL

Paul Nissenbaum, Associate Administrator, Railroad Policy and Development, Federal Railroad Administration.

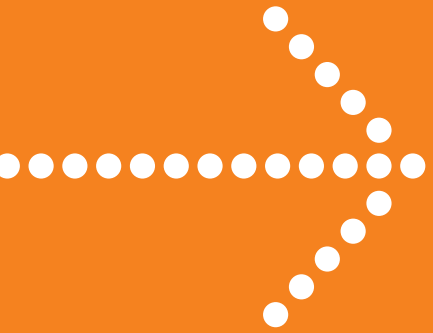
## ASSOCIATED FUNDING

\$175 million

# ENVIRONMENTAL SUSTAINABILITY



# ENVIRONMENTAL SUSTAINABILITY



Advance environmentally sustainable policies and investments that reduce carbon and other harmful emissions from transportation sources.

Transportation is crucial to our economy and our quality of life, but building, operating and maintaining transportation systems clearly have extensive environmental consequences. And today we face a new set of transportation challenges—reducing carbon and other harmful emissions, promoting energy independence and addressing global climate change. Our goal is to foster more sustainable approaches to transportation so that future generations will be able to enjoy the same standards of living and mobility that we enjoy today.

## REDUCED CARBON EMISSIONS, IMPROVED ENERGY EFFICIENCY AND REDUCED DEPENDENCE ON OIL

(Aviation)

### WHY IS THIS EFFORT NECESSARY?

Today's aircraft are up to 70 percent more fuel efficient than early commercial jet aircraft. However, there is growing concern over aviation's impact on the environment and public health. Aviation is currently viewed as a relatively small contributor to those emissions that have the potential to influence air quality and global climate. Carbon dioxide (CO<sub>2</sub>) emissions are a primary greenhouse gas and are directly related to the fuel burned during the aircraft's operation. As air traffic grows, this contribution will increase unless there are offsetting improvements in aircraft/engine technology, renewable fuels, operational procedures, and traffic management.

Measuring and tracking fuel efficiency from commercial aircraft operations allows FAA to monitor improvements in aircraft/engine technology, renewable fuels, operational procedures and air traffic management enhancements in the airspace transportation system. This information provides an assessment of the combined influence on improving fuel efficiency and reducing aviation's emissions contribution.

### STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- Reduced carbon emissions, improved fuel (energy) efficiency and reduced dependence on imported fossil fuels.

#### PERFORMANCE MEASURE: IMPROVE NAS ENERGY EFFICIENCY (FUEL BURNED PER MILES FLOWN) BY AT LEAST 2 PERCENT ANNUALLY.

	2009	2010	2011	2012	2013
Target	-9.00%	-10.00%	-12.00%	-14.00%	-16.00%
Actual	-14.03%	-15.25%	-14.50%		

### PAST PERFORMANCE AND FUTURE MILESTONES

The FY 2009 through FY 2011 results demonstrate continued progress in maintaining fuel efficiency of commercial aircraft operations within the airspace system, thereby minimizing environmental impact. The current economic climate and its impact on commercial airline operations will affect this outcome; however, recovery is anticipated in the coming years. While the number of flights decreased relative to FY 2008, there was a slight increase in flights with stage lengths (takeoff to landing distance in a single leg) less than 1,000 nautical miles. Aircraft that serve these stage lengths typically have slightly better fuel efficiencies.

We may see smaller efficiency gains that do not keep pace with the more stringent target in the future years of this performance measure. We anticipate that aircraft and engine technology improvements and air traffic management improvements may not sufficiently offset traffic growth, congestion and delays. Paramount to addressing fuel efficiency will be a continued focus by commercial airlines on modernizing their fleets, and by the FAA on NextGen and research and development of advanced engine, airframe and fuels technologies. Transitioning to more fuel efficient aircraft models, implementing NextGen improvements, and developing technologies under FAA's Continuous Lower Energy, Emissions and Noise

technology program (CLEEN) and the National Aeronautics and Space Administration (NASA) supported research programs will contribute greatly toward continued improvements.

## HOW OUTCOMES WILL BE ACHIEVED

### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- Deploy sustainable jet fuel;
- Develop NextGen technologies, model and metrics—Develop clean and quiet technologies and advance alternative fuels to mitigate NextGen environmental impacts through FAA's the CLEEN technology program; and
- Foster improvements to mitigate noise and emission impacts—Leverage a broad cross section of stakeholders through FAA's Partnership for Air Transportation Noise and Emissions Reductions Center of Excellence and the Airports Cooperative Research Program to foster breakthrough scientific, operations, policy and work advances to mitigate noise and emissions impacts.

### ENABLING LEGISLATION AND REGULATIONS

- Title 49 CFR, Transportation—Aligns the NAS-wide fuel efficiency metric with the environmental goals and targets for the Next Generation Air Transportation System.
- Title 42, United States Code, The Public Health and Welfare; Chapter 85, Air Pollution Prevention and Control (*The Clean Air Act*)—Establishes the monitoring and control strategies for reducing the emissions impacts from all sources in the U.S.

### RESOURCES, TRAINING AND SKILLS

- IT—Provide support in the computer systems and software used to analyze NAS-wide fuel efficiency analyses. The Aviation Environmental Design Tool is a FAA-developed software program that dynamically flies aircraft and simultaneously generates the fuel burn, emissions and noise consequences from commercial aviation.
- Training—Internal professional and leadership development program.
- Skills—The broad mix of skills needed to address the NAS-wide fuel efficiency efforts are engineers, physical scientists, support staff, contract administrators and grant administrators.

### PARTNERS

FAA's partners in this effort include NASA, the International Civil Aviation Organization, the National Aeronautics and Space Administration, the Aerospace Industries Association, and the Air Transport Association.

### RESPONSIBLE OFFICIAL

Julie Oettinger, Assistant Administrator for Policy, International Affairs and Environment, Federal Aviation Administration.

### ASSOCIATED FUNDING

\$22 million

## REDUCED CARBON EMISSIONS, IMPROVED ENERGY EFFICIENCY AND REDUCED DEPENDENCE ON OIL AND INCREASED USE OF ENVIRONMENTALLY SUSTAINABLE PRACTICES

### (Roadways)

#### WHY IS THIS EFFORT NECESSARY?

Transportation services consume 29 percent of total energy use in the U.S., and almost all of the energy consumed for transportation is in the form of petroleum. In addition, the transportation sector is a significant source of greenhouse gas (GHG) emissions, accounting for 29 percent of total U.S. GHG emissions in 2007. As of 2007, some 158.5 million Americans lived in counties or regions that exceeded health-based national ambient air quality standards for at least one regulated air pollutant. Significant challenges remain, particularly as new national ambient air quality standards are revised to be more protective of public health.

The DOT's recent emphasis on ecosystem approaches has promoted broader mitigation and ecosystem conservation strategies, and wetland acreage has been replaced at a rate exceeding impacts. However, DOT's investments in transportation systems and infrastructure will be more sustainable by broadly considering the secondary effects of construction and land use consequences. Although transportation projects comply with requirements for management of stormwater runoff, more must be done to meet the challenge of reducing transportation's contribution to water quality problems.

### STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- Reduced carbon emissions, improved energy efficiency and reduced dependence on oil.
- Increased use of environmentally sustainable practices in the transportation sector.

**Performance measure under development:** Decreased fuel consumption per vehicle-mile traveled, per passenger-mile traveled, and per (net) freight ton-mile.

**Performance measure under development:** Number of States in which a transportation plan, project or program has been evaluated by INVEST or other sustainability evaluation tool.

### PAST PERFORMANCE AND FUTURE MILESTONES

The U.S. transportation sector presently accounts for over 70 percent of U.S. petroleum consumption. On-road energy consumption rose by almost 30 percent between 1990 and 2008, as increases in light- and heavy-duty vehicle movement significantly outweighed marginal improvement in the fuel economy of these vehicles. However, rising energy costs have contributed to a steady increase in on-road vehicles' energy efficiency since 2005, and the economic downturn of 2008 caused total fuel consumption to decline on an absolute basis. The implementation of new fuel economy regula-

tions is expected to further increase the fuel economy of new light-duty vehicles beginning in 2012 and heavy-duty vehicles beginning in 2014.

To assess sustainability in highway programs, FHWA is developing a voluntary sustainable highways self-evaluation tool called INVEST. The tool contains a comprehensive rating system for sustainable aspects of highways, including energy consumption and environmental impacts; and includes other aspects of sustainability such as economic and social benefits. INVEST applies to all phases of highway development and use including highway planning, design, construction, operation, and maintenance. A pilot version of INVEST is currently being tested in several locations, and the feedback from these pilots will be incorporated into the first official release later this year. A baseline and targets for the use of INVEST, and any similar evaluation tools, will be prepared following the release of the initial version.

## HOW OUTCOMES WILL BE ACHIEVED

### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- Update light-duty vehicle fuel economy standards and implement medium- and heavy-duty program;
- Administer Congestion Mitigation and Air Quality program;
- Evaluate the fuel savings and emissions reduction potential of mitigation strategies, including highway operations;
- Continue targeted Eco-Logical and watershed funding, and peer exchanges among State DOTs and Resources Agencies;
- Expand the use of the Endangered Species Act (ESA) web tool to streamline processing of ESA biological assessments;
- Conduct research on stormwater performance measures and best practices peer exchanges;
- Continue Context Sensitive Solutions webinars and outreach;
- Continue *Structured, Transparent, Accountable, Reproducible, Sustainable* workshops;
- Test and release Version 1, then refine and promote among stakeholders and partners the *Infrastructure Voluntary Evaluation Sustainability* tool for rating the sustainability of transportation projects;
- Assist states, MPOs and Local Public Agencies in planning and delivering environmentally sound surface transportation projects; and
- Conduct research to develop climate change mitigation, adaptation and livability strategies.

### ENABLING LEGISLATION AND REGULATIONS

The success of this program is contingent on enactment of transportation authorizing legislation that will establish the Livable Communities and related program and will make related changes to Title 23. In addition, fuel economy regulations are authorized by the Energy Independence and Security Act (Light-Duty vehicle fuel economy and Heavy-Duty vehicle national program).

### RESOURCES, TRAINING AND SKILLS

- IT—Possible installation of emissions and travel modeling software on a small number of computers; sustainability evaluation tool is a web-based tool that will be supported by agency IT resources to meet functional and accessibility requirements.
- Training—Emissions modeling, travel modeling (i.e., microsimulation and travel demand forecasting), transportation systems analysis (data focused); training in the use of the evaluation tool is expected to be offered by FHWA or others via webinars, conference presentations and other outreach efforts; SHRP-2-TCAPP and application of the integrated Ecological Framework.
- Skills—Transportation planning, environmental studies, transportation engineering, environmental sciences and engineering.

### PARTNERS

FHWA's partners in this effort include State DOTs, MPOs, and State air quality agencies, American Association of State Highways and Transportation Officials (AASHTO), U.S. EPA, the Association of Metropolitan Planning Organizations (AMPO), the National Association of Regional Councils, Resources and Regulatory Agencies, and TRB.

### RESPONSIBLE OFFICIAL

Gloria Shepherd, Associate Administrator, FHWA Office of Planning, Environment and Realty.

### ASSOCIATED FUNDING

\$5 billion

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## REDUCED TRANSPORTATION-RELATED AIR, WATER AND NOISE POLLUTION AND IMPACTS ON ECOSYSTEMS

(Aviation)

### WHY IS THIS EFFORT NECESSARY?

Mitigating noise directly impacts our ability to increase capacity. Although building new runways is the best way to increase capacity, communities and local governments are reluctant to build them if they impose increased aircraft noise exposure. By mitigating and reducing exposure to significant noise, FAA can help communities accept more runways in their areas. The number of people exposed to significant noise levels was reduced by about 90 percent between 1975 and 2000. This is due primarily to the legislatively mandated transition of airplane fleets to newer generation aircraft that produce less noise. Most of the gains from quieter aircraft were achieved by FY 2000. Since then there have been only incremental improvements. Absent further advances in noise reduction technologies and procedures and fleet evolution, the remaining problem must be addressed primarily through airport-specific noise compatibility programs.

The FAA pursues a program of aircraft noise control in cooperation with the aviation community. Noise control measures include noise reduction at the source, i.e., development and adoption of quieter aircraft, soundproofing and buyouts of buildings near airports, operational flight control measures, and land use planning strategies. The FAA is authorized to provide funds for soundproofing and residential relocation, but each project must be locally sponsored and be part of a noise compatibility program prepared by the airport sponsor and approved by the FAA.

### STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- Reduce transportation-related air, water and noise pollution and impacts on ecosystems.

**PERFORMANCE MEASURE: THE U.S. POPULATION EXPOSED TO SIGNIFICANT AIRCRAFT NOISE AROUND AIRPORTS HAS BEEN REDUCED TO FEWER THAN 300,000 PERSONS.**

	2009	2010	2011	2012	2013
Target	436,000	419,000	402,000	386,000	371,000
Actual	296,527	323,039	307,420		

### PAST PERFORMANCE AND FUTURE MILESTONES

The reduction in noise exposure since 2005 has been driven by air carrier fleet and operational changes as carriers continue to retire older, less fuel efficient aircraft that tend to produce more noise. In addition, passenger demand fell due to a deepening recession and growing unemployment, which contributed to a decrease in air traffic. Consequently, the actual number of residents exposed to significant noise remains well below the current target. As air traffic begins to recover and grow over time, noise exposure is likely to increase. The target will continue to be reassessed as FAA takes a more integrated approach to environmental regulation by assessing the relative costs and benefits of noise, local air quality, greenhouse gas emissions and the tradeoff in achieving reductions in each. For FY 2012, targets and results for this metric were changed from percent of population exposed to the number of persons exposed. The prior years' targets and results have been recalculated from the original percentages.

### HOW OUTCOMES WILL BE ACHIEVED

#### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- Develop NextGen technologies: Develop clean and quiet technologies and advance alternative fuels to mitigate NextGen environmental impacts through FAA's Continuous Lower Energy, Emissions and Noise technology program (CLEEN).
- Foster improvements to mitigate noise and emission impacts: Leverage a broad cross section of stakeholders through FAA's Partnership for AiR Transportation Noise and Emissions Reductions Center of Excellence and the Airports Cooperative Research Program to foster breakthrough scientific, operations, policy and work advances to mitigate noise and emissions impacts.

- Pursue a program of aircraft noise control: The FAA continues to pursue a program of aircraft noise control, in cooperation with the aviation community and local governments, through aircraft source noise reduction, soundproofing, buyouts of homes and other noise-sensitive buildings near airports, operational flight control measures, and land use planning strategies. While FAA is authorized to provide funds for airport noise compatibility projects, each project must be locally sponsored by the airport responsible for the noise and approved by FAA.

### ENABLING LEGISLATION AND REGULATIONS

- Airport Noise and Capacity Act of 1990—Prohibits the operations of Stage 2 civil subsonic turbojet airplanes with a maximum weight of more than 75,000 pounds in the contiguous United States after December 1999.
- Title 49 CFR, Transportation; Subtitle VII, Aviation programs; Part A, Air Commerce and Safety; Subpart III, Safety; Section 44715, Safety Regulation—Controlling aircraft noise and sonic boom, the FAA is charged with prescribing regulations to measure and abate aircraft noise.
- Title 14 CFR, Aeronautics and Space:
  - » Part 36, Noise Standards: Aircraft and Airworthiness Certification; and
  - » Part 150, Airport Noise Compatibility.

### RESOURCES, TRAINING AND SKILLS

- IT—The Aviation Environmental Design Tool (AEDT) and Model for Assessing Global Exposure to the Noise of Transport Airplanes (MAGENTA) are used to track airport noise exposure. FAA plans to replace MAGENTA with AEDT. The data source for airport traffic is the FAA Enhanced Traffic Management System (ETMS).
- Training—Internal professional and leadership training program.
- Skills—The broad mix of skills needed to address the mitigation and reduction of significant aircraft noise efforts are engineers, physical scientists, environmental specialists, operations research analysts, support staff, contract administrators and grant administrators.

### PARTNERS

Partners include government agencies worldwide and the aviation industry through the International Civil Aviation Organization, who periodically update standards and recommended practices concerning control of aircraft noise. The FAA has also partnered with NASA in the development of CLEEN technologies for civil subsonic jet airplanes to help achieve NextGen goals to increase airspace system capacity by reducing significant community noise and air quality emissions impacts in absolute terms and limiting or reducing aviation greenhouse gas emissions impacts on the global climate.

**RESPONSIBLE OFFICIAL**

Julie Oettinger, Assistant Administrator for Policy, International Affairs and Environment, Federal Aviation Administration.

**ASSOCIATED FUNDING**

\$439 million

## REDUCED TRANSPORTATION-RELATED AIR, WATER AND NOISE POLLUTION AND IMPACTS ON ECOSYSTEMS

(Pipelines)

**WHY IS THIS EFFORT NECESSARY?**

Hazardous liquid pipelines supply most of the energy for transportation, as well as crude oil that is used in many other ways, through a nationwide network of about 175,000 miles of pipelines. While this is the safest mode of transportation for hazardous liquids, the volume and nature of the cargo can present a significant environmental risk, particularly in high-consequence areas.

**STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES**

- Reduction in pollution from transportation sources.

**PERFORMANCE MEASURE: HAZARDOUS LIQUID PIPELINE SPILLS WITH ENVIRONMENTAL CONSEQUENCES.**

	2009	2010	2011	2012	2013
Target	N/A	89-108	84-104	80-99	76-94
Actual	111	88	99		

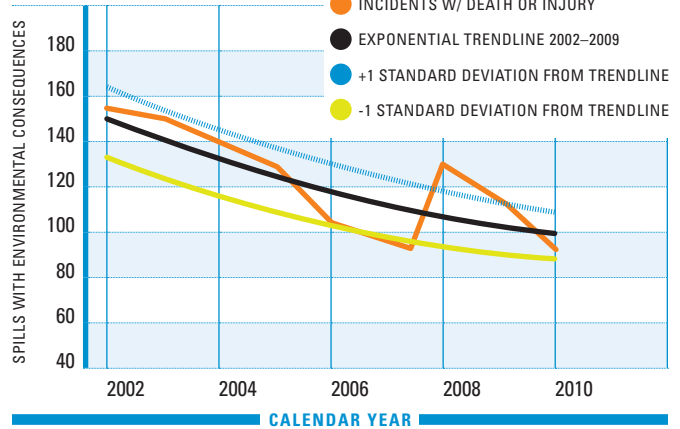
**PAST PERFORMANCE AND FUTURE MILESTONES**

Liquid pipeline spills with environmental consequences (impacting water, soil, fish, birds or other wildlife) have declined an average of 5 percent per year since 2002.

The risk of environmental consequences is focused on products that are liquid at atmospheric pressure. So even though carbon dioxide and some other highly volatile liquids are transported by pipeline, they vaporize when released.

Future targets are set to continue this long-term trend of performance, using a range to account for normal, annual variation in the numbers.

**LIQUID PIPELINE SPILLS W/ ENVIRONMENTAL CONSEQUENCES (1988–2010)**



Exponential regression to show longterm trend  
Data sources: PHMSA incident data—as of March 1, 2011.

**HOW OUTCOMES WILL BE ACHIEVED**

**PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME**

PHMSA oversees the safety, security and environmental protection of pipelines through:

- data analysis;
- damage prevention;
- education and training;
- rulemaking;
- enforcement of regulations and standards;
- research and development;
- grants for state pipeline safety programs;
- community assistance and outreach; and
- emergency planning for response to accidents.

**ENABLING LEGISLATION AND REGULATIONS**

- 49 USC 60101-60134 pipeline safety legislation
- Pipeline Safety, REgulatory Certainty, and Job Creation Act of 2011, P.L. 112-90

Pipeline safety regulations in 49 CFR 190-199 govern the design, construction, operation and maintenance of pipelines, as well as administrative procedures for enforcement and management of state grants. 49 CFR 195 addresses specific requirements for hazardous liquid pipelines.

**RESOURCES, TRAINING AND SKILLS REQUIRED**

- IT—SMART provides a central repository for pipeline safety information; FedStar provides information and tools for state programs; and the National Pipeline Mapping System provides geospatial information on the national pipeline infrastructure.

- Training—PHMSA provides a comprehensive training and qualification program for federal and state inspectors, including a three-year core program for new inspectors.
- Skills—The program needs a mix of skills, with special focus on expertise in engineering, analysis, communications and grant administration.

#### PARTNERS

State pipeline safety agencies inspect many of the hazardous liquid pipelines in 15 states. State and local emergency responders play an important role in mitigating the consequences of incidents that do occur.

#### RESPONSIBLE OFFICIAL

Jeffrey Wiese, Associate Administrator for Pipeline Safety.

#### ASSOCIATED FUNDING

There is no set-aside funding for Environmental Sustainability. The improvement in pipeline spills is an added benefit of the \$188,850,000 dedicated to Safety issues.

## INCREASED USE OF ENVIRONMENTALLY SUSTAINABLE PRACTICES

(Office of the Secretary)

#### WHY IS THIS EFFORT NECESSARY?

Building, operating and maintaining transportation systems have environmental consequences, and we face many challenges for reducing carbon and other harmful green house gas emissions, promoting energy independence and addressing global climate change for the Department’s buildings and fleet. Under Executive Order 13514, the Department of Transportation is required to increase efficiency; measure, report and reduce greenhouse gas emissions; conserve and protect water resources; eliminate waste, increase recycling, and prevent pollution; acquire environmentally preferable materials, products, and services; design, construct, maintain and operate high performance sustainable buildings; and strengthen the vitality and livability of local communities.

The Department of Transportation has prepared and is implementing a 10 year strategic plan which requires annual progress in each of these areas. The DOT Strategic Sustainability Performance Plan identifies the far reaching programs and activities that must be instituted to meet the 2010-2020 energy, environmental and sustainability requirements. In addition, these are incorporated in the DOT Strategic Plan.

## STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- Increased use of environmentally sustainable practices and a reduction in pollution and other adverse environmental effects from DOT-owned or -controlled transportation services and facilities.

#### PERFORMANCE MEASURE: 30 PERCENT REDUCTION IN VEHICLE FLEET PETROLEUM USE BY 2020 FROM A FY 2005 BASELINE.

	2009	2010	2011	2012	2013
Target	N/A	10%	12%	14%	16%
Actual	N/A	5%	4.8%		

In FY 2011, DOT fleet petroleum use had decreased 4.8% from a FY 2005 baseline.

DOT found inconsistencies and flaws in the GSA fuels capturing/reporting systems. DOT is now capturing and reporting alternative fuel usage manually to better track alternative fuel usage.

The Department has identified a large number of medium/large SUVs, sedans and trucks that are not fuel efficient within the Department Fleet program.

The Deputy Assistant Secretary for Administration has directed all DOT operating administrations to replace medium/large SUVs, sedans and trucks with energy efficient vehicles that meet federal standards for reduction of petroleum and emissions.

The Deputy Assistant Secretary for Administration has directed that semi-annual reviews be conducted to remove any underutilized vehicles and consolidate fleet requirements when applicable.

#### PERFORMANCE MEASURE: 26 PERCENT IMPROVEMENT IN WATER EFFICIENCY BY 2020 FROM A FY 2005 BASELINE.

	2009	2010	2011	2012	2013
Target	N/A	6%	8%	12%	15%
Actual	N/A	(1.2%)*	(9.7%)		

\*Water consumption as measured by intensity has increased 1.2%

In FY 2011, DOT water consumption as measured by intensity has increased 9.7%. In order to meet these requirements, DOT will emphasize the implementation of water conservation activities in its buildings, such as improved operation and maintenance practices and devices. Currently DOT is monitoring water consumption at a few facilities but it is still extremely difficult to develop an accurate water consumption baseline using the minimal information that is available.



**PERFORMANCE MEASURE: 50 PERCENT RECYCLING AND WASTE DIVERSION BY 2015 FROM A FY 2010 BASELINE.**

	2009	2010	2011	2012	2013
Target	N/A	2%	4%	6%	8%
Actual	N/A	*	*		

*\*Actual data is not available for FY 2010 or FY 2011*

Actual data is not available for FY 2011. Information regarding waste disposal and recycling is very decentralized in approximately 1000 buildings across the nation. DOT has no practical method for collecting this data at present. Waste definitions and calculation methodologies pertaining to EO 13514 have not yet been issued. However, DOT is working to develop centralized waste data collection for when the official methodology becomes available.

**PERFORMANCE MEASURE: 95 PERCENT OF ALL APPLICABLE CONTRACTS WILL MEET SUSTAINABILITY REQUIREMENTS BY 2020.**

	2009	2010	2011	2012	2013
Target	N/A	95%	95%	95%	95%
Actual	N/A	*	95%		

*\*Actual data is not available for FY 2010*

**PERFORMANCE MEASURE: 12.3 PERCENT REDUCTION IN GREENHOUSE GAS EMISSIONS FROM FACILITIES AND FLEETS BY 2020 FROM A FY 2008 BASELINE.**

	2009	2010	2011	2012	2013
Target	N/A	0%	2%	4%	6%
Actual	N/A	7.9%	12.2%		

**PERFORMANCE MEASURE: 10.9 PERCENT REDUCTION IN GREENHOUSE GAS EMISSIONS FROM EMPLOYEE BUSINESS TRAVEL AND COMMUTING BY 2020 FROM A FY 2008 BASELINE.**

	2009	2010	2011	2012	2013
Target	N/A	0%	0%	2%	4%
Actual	N/A	(4.7%)*	1%		

*\*Greenhouse gas emissions from employee business and travel and commuting has increased 4.7%*

**PAST PERFORMANCE AND FUTURE MILESTONES**

- In FY 2010, DOT consumed 3,474,329 gallons of petroleum fuel and achieved a reduction of 5% from its FY 2005 baseline. DOT also consumed 34,895 gasoline gallon equivalents of alternative fuel.
- The Department is currently on track to meet its target of 12.3% for agency-wide GHG emissions by 2020.

- Conducted employee commuter survey that was used to establish initial baseline of employee commuting characteristics including mode of transportation, distance traveled, and frequency of commute. It will be used to survey employees in future to monitor progress in reducing commuter trips through telework, alternative work schedules and other programs.
- Starting in the second quarter of FY 2011, targets for reduced employee commuting, renewable energy, water efficiency, high performance sustainable buildings and sustainable acquisition were included on the new Sustainability Scorecard that is part of every DOT's modes' performance review with the Deputy Secretary.

**ENABLING LEGISLATION AND REGULATIONS**

- Executive Orders 13423 (now statute) and 13514,
- Energy Independence and Security Act of 2007, and
- Energy Policy Act of 2005.

**RESOURCES, TRAINING AND SKILLS**

- IT—A reporting system using the electronic timekeeping system to track telework and alternative work schedule programs; FAA Real Estate Management System to monitor and manage building energy and water intensity performance. Fuel tracking and monitoring information system that allows near real-time monitoring of petroleum and alternative fuel usage in OST and all OAs.
- Training—“Green” procurement training for contracting officers, contracting officers technical representatives, and purchase card holders is an ongoing need to meet sustainable acquisition requirements.
- Skills—The program needs a mix of skills, with a special focus on expertise in environmental management/policy/science, real estate/facility management, fleet management professional, contracting officers, IT professionals, HR systems professionals.

**PARTNERS**

The Office of the Secretary partners in this effort include FAA Real Estate Management System (REMS) managers, the Environmental Protection Agency, the Office of the Federal Environmental Executive (OFEE), the Council on Environmental Quality (CEQ), the Office of Management and Budget (OMB), the General Services Administration (GSA), and the Department of Energy.

**RESPONSIBLE OFFICIAL**

Marguerite Downey, Supervisory Energy Policy Manager, OST Office of Administration.

**ASSOCIATED FUNDING**

\$4 million (total funding available across the Department for this initiative)

## REDUCED POLLUTION OR OTHER ADVERSE ENVIRONMENTAL EFFECTS FROM DOT-OWNED OR CONTROLLED SERVICES AND FACILITIES

### (Ship Disposal)

#### WHY IS THIS EFFORT NECESSARY?

MARAD is the U.S. government’s disposal agent for Federal Government-owned merchant type vessels that are 1,500 gross tons or more. The Ship Disposal Program provides resources to safely remove and dispose of obsolete government-owned merchant ships moored in National Defense Reserve Fleet (NDRF) sites in an environmentally sound manner.

In October of 2010, the Deputy Secretary announced that the Department was taking vigorous action to resolve the longstanding environmental challenges that have adversely affected the Suisun Bay Reserve Fleet (SBRF) and the surrounding community over the last several years. The SBRF is one of three NDRF sites operated by MARAD. The settlement agreement was filed with the Circuit Court of California against MARAD in 2007 for Clean Water Act violations, which resulted in a consent decree that specifies the number of ships to be permanently removed annually from the Suisun Bay Reserve Fleet (SBRF) through FY 2017.

#### STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

- Increased use of environmentally sustainable practices and a reduction in pollution and other adverse environmental effects from DOT-owned or controlled transportation services and facilities.

#### PERFORMANCE MEASURE: MARAD’S TARGET FOR COMPLIANCE WITH THE APRIL 2010 COURT-ORDERED CONSENT DECREE FOR REMOVAL OF SUISUN BAY RESERVE FLEET NON-RETENTION SHIPS ON AN ANNUAL BASIS.\*

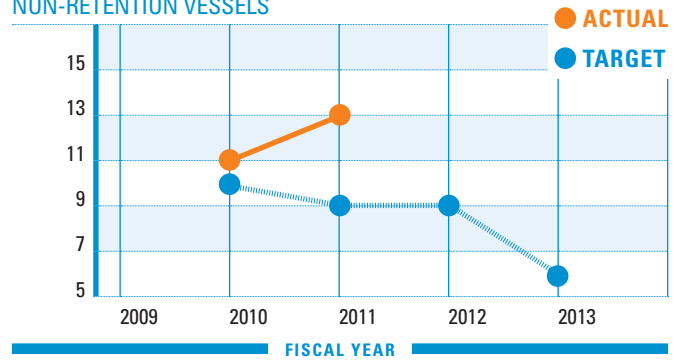
	2009	2010	2011	2012	2013
Target	XXX	10	9	9	6
Actual	NA	11	15		

\* This is a new measure for MARAD in FY 2010.

#### PAST PERFORMANCE AND FUTURE MILESTONES

MARAD has exceeded its target for removal of vessels from SBRF for FY 2010 and 2011. For 2013, MARAD has established a target of removing 6 SBRF vessels from the NDRF, which exceeds the number of vessels required by the consent decree.

#### OUTPUT: REMOVAL OF SUISUN BAY RESERVE FLEET NON-RETENTION VESSELS



#### HOW OUTCOMES WILL BE ACHIEVED

##### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- Conduct ship recycling for obsolete, federally owned, merchant-type vessels in an environmentally responsible manner that further reduces the risk of environmental contamination.
- With only one ship recycler located on the West Coast, the majority of SBRF vessels will be disposed of by Gulf and East Coast recyclers in FY 2013. This includes towing the ships through the Panama Canal and into other ecosystems.
- To prevent the spread of invasive species, the SBRF ships are cleaned of marine growth on drydock, and then towed out of the area.

##### ENABLING LEGISLATION AND REGULATIONS

- Section 4.0 U.S.C. 548 (2007)—Establishes MARAD as the U.S. government’s disposal agent for federal government owned merchant-type vessels 1,500 gross tons or more.
- Section 3502 of the National Heritage Act—Authorizes MARAD to dispose of obsolete vessels through a program that utilizes qualified facilities and disposes of vessels on a best value basis in a timely manner and giving consideration to the environment of water safety and health.
- The consent decree commits MARAD to the drydocking and removal of obsolete vessels in the SBRF by the end of FY 2017.

##### RESOURCES, TRAINING AND SKILLS REQUIRED

- IT—Systems used to accomplish program activities and assist with planning and budgetary analysis include Delphi for financial management, Procurement Information System for Management (PRISM), and Microsoft Project.
- Training—Needs identified in support of ship disposal activities include training for Contracting Officer’s Technical Representative, marine engineering and project management.
- Skills—The skills needed to support program activities and outcomes include environmental regulation compliance, legal analysis and support, contract administration and project management.

**PARTNERS**

MARAD's partners in this effort include Department of Defense, State of California, Occupational Safety and Health Administration, and Environmental Protection Agency.

**RESPONSIBLE OFFICIAL**

Kevin Tokarski, Associate Administrator for National Security Maritime Administration.

**ASSOCIATED FUNDING**

\$10 million

## REDUCED CARBON EMISSIONS, IMPROVED ENERGY EFFICIENCY AND REDUCED DEPENDENCE ON OIL

(Federal Transit Administration)

**WHY IS THIS EFFORT NECESSARY?**

The extent of the Intergovernmental Panel on Climate Change’s projections for climate change are dependent on the level of greenhouse gas emissions. The transportation sector contributes 29 percent of total U.S. greenhouse gas emissions. Transit passenger-mile emissions are around half of personal vehicle emissions. Therefore, greater transit mode-share can help reduce these emissions. FTA is committed to promoting transit use and to the integration of environmental sustainability principles into grantees’ projects and activities. FTA strives to provide guidance and assistance to achieve a more efficient and less costly environmental process for all FTA-funded proposals that may substantially affect environmental quality.

**STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES**

- Reduced carbon emissions, improved energy efficiency and reduced dependence on oil.

**PERFORMANCE MEASURE: PERCENTAGE OF ALTERNATIVE-FUEL AND HYBRID VEHICLES IN THE TRANSIT REVENUE SERVICE FLEET**

	2009	2010	2011	2012	2013
Target	NA	NA	NA	47	48
Actual	44	46	NA		

Future milestones include:

- Develop University Transportation Centers (UTC) that have the expertise in sustainability partnership goals and develop cooperative activities to provide technical assistance to stakeholders; and
- Promote research, development, demonstration, and deployment of clean and energy-efficient technology for bus and rail systems.

**PRIMARY ACTIVITIES SUPPORTING THIS OBJECTIVE**

- Research and development;
- Data collection;
- Grantee training;
- Revise review processes to include climate change;
- Promote awareness of climate change and its impact on transit operations and facilities;
- Provide technical assistance; and
- Provide grants to reduce emissions and energy use.

**ENABLING LEGISLATION AND REGULATIONS**

- 49 U.S.C. 5301 provides that it is in the interest of the nation to support development of transportation systems that “minimize environmental impacts.”
- 49 U.S.C. 5308, 49 U.S.C. 5314, and 49 U.S.C. 5320 authorize FTA to support activities to achieve or maintain the National Ambient Air Quality Standards for ozone and carbon monoxide, support the development of innovative transit products and services, and support alternative transportation systems in and around our national parks.
- The Alternative Analysis program under 49 U.S.C. 5340 allows grant recipients to choose the most environmentally friendly actions for preferred project implementation.
- The Metropolitan Transportation Planning and Statewide Transportation Planning provisions under 49 U.S.C. 5303 and 5304, respectively, also advance the objective of environmental sustainability.

Environmental sustainability is also promoted through FTA’s Livability initiative.

**RESOURCES, TRAINING AND SKILLS**

- IT—The full suite of FTA IT systems is involved in achieving this objective.
- Training—Environmental assessments.
- Skills—Engineers, grant managers, environmental specialists, policy analysts. The entire range of FTA staff are involved in these activities.

**PARTNERS**

FTA's partners in this effort include Transit providers, state Departments of Transportation, state and federal resource agencies, interested parties and the public.

**RESPONSIBLE OFFICIAL**

Robert Tuccillo, Associate Administrator/Chief Financial Officer.

**ASSOCIATED FUNDING**

\$94 million

# REDUCED DEPENDENCE ON OIL

(Federal Railroad Administration)

## WHY IS THIS EFFORT NECESSARY?

The U.S. consumes 19 million barrels of oil every day, of which nearly 14 million barrels are consumed for transportation uses. Overall, Americans use twice as much oil per capita as European Union residents, and even though oil consumption is growing quickly in emerging economies, China still only uses 0.26 gallons per person, versus 2.5 gallons per person per day in the U.S. If the rest of the Earth's population consumed oil at the same rate as Americans, more than 425 million barrels of oil would be used every day—nearly five times the daily amount currently produced, and a consumption rate that would deplete the world's proven oil reserves within nine years.

In addition to these high consumption rates, there is also the challenge of supply. The United States has less than 2 percent of the world's proven oil reserves, but uses nearly one-quarter (22 percent) of the world's daily oil production. As a result, the U.S. currently imports about 49 percent of its oil—twice as much as in 1975. This heavy reliance on oil to move America's people and goods presents risks and has substantial consequences for our environment, economy and national security, as well as consequences for household budgets.

Rail travel is more energy-efficient than flying or driving, which means that as rail becomes a more viable and practical alternative, the nation would be less reliant on oil to meet its transportation demands. Reducing fuel consumption also helps reduce carbon dioxide, particulate matter, nitrogen oxides, sulfur dioxides and other harmful emissions, thus contributing to the achievement of other environmental sustainability objectives.

## STRATEGIC OUTCOME AND SUPPORTING PERFORMANCE MEASURES

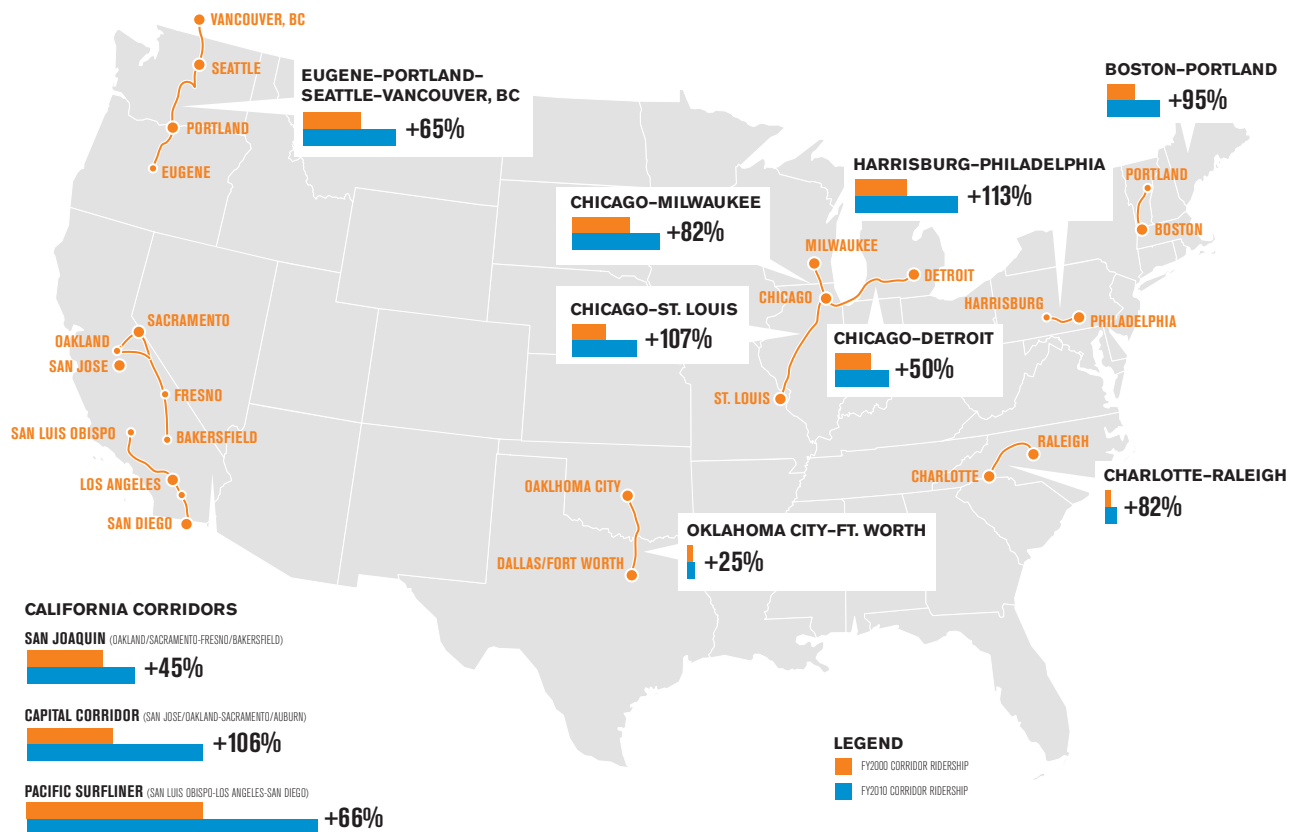
- Reduce fuel consumption.

No performance measures developed as of February 2012. FRA expects to establish measures later in FY 2012.

## PAST PERFORMANCE AND FUTURE MILESTONES

Over the past decade, passenger rail has seen dramatic and sustained ridership growth in corridors across the country, leading to a reduction in fuel that would have been consumed by these trips. America's busiest corridor, the Northeast Corridor, saw 33 percent growth over this period, and similar ridership gains have occurred on other corridors throughout the nation, as summarized in the graphic below.

RIDERSHIP GROWTH ON SELECTED PASSENGER RAIL CORRIDORS (2000–2010)



In FY 2011 Amtrak set its eight annual ridership record in the past nine years, expecting to top 30 million passengers for the first time.

Through grants funded under the National High Performance Rail System through the Initial Transportation Investments and FY 2013 budget request, FRA has initiated projects across the country that will continue making rail a viable transportation alternative in a greater number of communities. By improving reliability, increasing the number of daily trains (frequencies), and improving travel times, these projects will increase rail ridership by attracting more travelers from driving or flying, thus increasing the rail market share and reducing fuel consumption. Major milestones over the next two years include:

- ❖ Initiation or continuation of construction activities to add new passenger rail services on three corridors: Los Angeles-San Francisco, Chicago-Iowa City, and Portland-Brunswick. Additionally, construction will soon begin on a rerouting of the Knowledge Corridor in Massachusetts, reconnecting additional communities to the rail network.
- ❖ Initiation or continuation of construction activities to substantially improve speed, frequencies, and reliability (and thus substantially increasing ridership) on six corridors: Seattle-Portland, Chicago-St. Louis, Chicago-Detroit, Charlotte-Washington, D.C., Washington, D.C.-Boston and New York City-Buffalo.
- ❖ Initiation or completion of construction projects on five corridors that will also lead to service improvements and ridership gains: St. Louis-Kansas City, Dallas-Oklahoma City, Philadelphia-Harrisburg, Albany-Montreal and Springfield-St. Albans (VT).

## HOW OUTCOMES WILL BE ACHIEVED

### PRIMARY ACTIVITIES SUPPORTING THIS OUTCOME

- ❖ Soliciting applications and awarding funding for the development of high-speed and intercity passenger rail.
- ❖ Providing training and technical assistance to states and other stakeholders to aid in the successful development and implementation of high-speed rail proposals.
- ❖ Developing tools for use in regional route planning and national- and corridor-level analyses of public benefits and costs of high-speed rail.

## ENABLING LEGISLATION AND REGULATIONS

The *Passenger Rail Investment and Improvement Act of 2008* authorized the improvements funded under the *American Recovery and Reinvestment Act of 2009* and FY 2010 and FY 2013 appropriations.

## RESOURCES, TRAINING AND SKILLS

- ❖ IT—FRA utilizes the GrantSolutions system to administer the application solicitation, evaluation and award processes for high-speed and intercity passenger rail funding. The Agency uses the Delphi financial management system to obligate and outlay funds.
- ❖ Training—FRA staff associated with this measure will need training related to project management and oversight, capital cost forecasting, travel demand forecasting, transportation systems planning, land use development and integration, environmental analysis related to the National Environmental Policy Act, procurement standards, and contracting.
- ❖ Skills—FRA relies on a wide range of professional skills to increase rail ridership in the U.S., including transportation analysts, engineers, economists, rail system planners, environmental specialists, station planners, financial management specialists and grant management specialists.

## PARTNERS

FRA's partners in this effort include Amtrak and other railroad operators, states, and infrastructure-owning railroads.

## RESPONSIBLE OFFICIAL

Paul Nissenbaum, Associate Administrator, Railroad Policy and Development, Federal Railroad Administration.

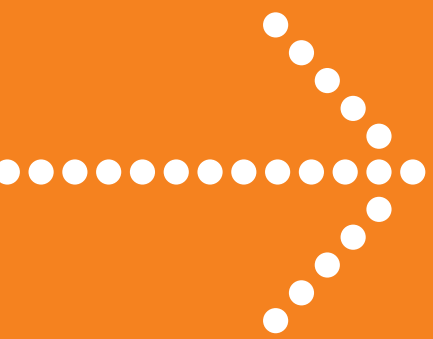
## ASSOCIATED FUNDING

\$471 million

# LOW PRIORITY PROGRAMS



# LOW PRIORITY PROGRAMS



The Department of Transportation proposes to replace dozens of programs with core programs that invest in the roads most critical to the national interest, improve highway safety, and enhance the livability of communities

## JUSTIFICATION

DOT proposes to replace dozens of Federal-Aid Highway programs with 5 core programs that invest in the roads most critical to the national interest, improve highway safety, and enhance the livability of communities. In addition, DOT proposes to discontinue 15 stand-alone programs totaling \$4.7 billion. The new program structure also contains several performance management features and implements this approach in the areas of safety and asset preservation.

The proposed National Highway Program will streamline and consolidate the Interstate Maintenance, Highway Bridge Program, National Highway System, Surface Transportation Program, Ferry Boat Program, Appalachian Development Highway System, and Puerto Rico Highway & Territorial Highway Program into a new program that would target investment to maintain a state of good repair on roads critical to the national interest.

The revamped performance-based Safety Program would provide greater flexibility to the States to address a broad range of safety issues.

The Federal Allocation Program consolidates several existing programs with inherently Federal responsibilities into one program with four components: Federal Lands Transportation Program, Tribal Transportation Program, Emergency Relief Program and Workforce Development.

The new Livable Communities Program establishes place-based planning, policies, and investments to help communities increase transportation choices and access to transportation services. This program would maintain project eligibility from the following programs: Transportation Enhancement, Congestion Mitigation and Air Quality Program (CMAQ), National Scenic Byways Program, Bicycle Transportation and Pedestrian Walkways and Safe Routes to School.

DOT proposes to discontinue 15 stand-alone programs totaling \$4.7 billion.

## DISCONTINUED-EARMARKED PROGRAM

DOT proposes to discontinue operating and capital grants for Amtrak, totaling \$1.4 billion. High Speed and Intercity Passenger Rail funding will be through a new proposed National Rail System account including amounts to support existing Amtrak operations and capital needs.

DOT proposes to discontinue Section 406 Safety Belt Performance Grants. The program's success in incentivizing states to adopt seat belt laws has rendered it obsolete.

## NAME OF PROGRAM ACTIVITY

Interstate Maintenance (IM)	Indian reservation Road Bridges
Highway Bridge Program (Bridge)	Add'l CA for States w/Indian Reservations
National Highway System (NHS)	Park Roads and Parkways (PRP)
Surface Transportation Program (STP)	Refuge Roads (RR)
Ferry Boat Program	Public Lands Highways Discretionary (PLH)
Appalachian Development Highway System	Public Lands Highways, Forest Highways (PLH)
Equity Bonus (EB)	Lake Tahoe Region MPO (deductions from IRR, PLH, PRP, RR)
Revenue Aligned Budget Authority	Alaska Highway Takedown (deduction from NHS)
Statewide Planning & Research (deductions: IM, NHS, Bridge, STP, CMAQ, HSIP, EB)	Denali Access System Program
Historic Covered Bridge Preservation	Going-to-the-Sun Road, Glacier National Park, Montana
Puerto Rico Highway Program	Highway Use Tax Evasion
Metropolitan Planning (deductions from IM, NHS, Bridge, STP, CMAQ)	On-The-Job Training & Supportive Services (deduction from STP)
Hazard Elimination & Rail Highway Crossings	DBE Training (deduction from STP)
Railway-Highway Crossings (deduction from HSIP)	Grant Program to Prohibit Racial Profiling
High Risk Rural Roads Program	Transportation Innovation and Finance:
Operation Lifesaver	National Corridor Infrastructure Program*
Work Zone Safety Grants	Coordinated Border Infrastructure Program*
National Work Zone Safety Clearinghouse	Projects of Regional and National Significance*
Road Safety (Delta and Public Awareness)	High Priority Projects*
Congestion Mitigation & Air Quality (CMAQ)	Transportation Projects*
STP, Transportation Enhancements	Interstate Maintenance Discretionary (deduction from IM)*
Recreational Trails	Bridge Set-Aside (deduction from IM)*
Scenic Byways	Magnetic Levitation Program*
America's Byways Resource Center	Truck Parking Facilities*
Safe Routes to School	Freight Intermodal Distribution Pilot Grants*
Transportation, Community, and System Preservation	Delta Region Transportation Development Program*
Non-Motorized Pilot Program	Value Pricing Pilot Program*
Bicycle and Pedestrian Grants (Clearinghouse)	Pavement Marking Systems Demonstration Projects* in Alaska & Tenn.*
Highways for LIFE	Road User Fees Field Test - Public Policy Center of Univ. of Iowa*
Surface Transportation Research Program	Multimodal Facility Improvements*
Future Strategic Highway Research (deductions: IM, NHS, Bridge, STP, CMAQ, HSIP)	FHWA—Surface Transportation Priorities
Great Lakes ITS Implementation	Section 406 Safety Belt Performance Grants
Territorial Highway Program (deduction from NHS)	Grants to Amtrak
Indian Reservation Roads (IRR)	Rail Line Relocation Grants
	<i>*eliminated programs</i>





U.S. Department  
of Transportation

Office of the Secretary of Transportation

Assistant Secretary for Budget &  
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