

U.S. Department of Transportation

DRAFT
Fiscal Year 2013 Report &
Fiscal Year 2015
Annual Performance Plan

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Strategic Goal 1-- Safety

Improve public health and safety by reducing transportation-related fatalities and injuries for all users, working toward no fatalities across all modes of travel.

Strategic Objective 1.1— Improve Safety of System

Improve the safety of the transportation system by addressing behavioral, vehicular, and infrastructure safety issues through prevention, mitigation, and response using innovative and effective partnerships, programs, and resources.

Performance Overview

Our top priority is to make the U.S. transportation system the safest in the world. The Nation has made good progress in reducing overall transportation-related fatalities and injuries during the past two decades even though the U.S. population and travel increased significantly. DOT must continue to promote safer behaviors, vehicle designs, and infrastructure that will further reduce risks and minimize injury for all travelers.

We will work with our stakeholders -including transportation agencies, elected officials, law enforcement, industry representatives, bicycle and pedestrian groups, safety advocates, drivers, the disability and older adult communities, and the public - to keep the transportation system safe. We will use our safety regulatory authority over automobiles, aviation, rail, trucks, motorcoaches, pipelines, and hazardous materials as cost-effectively as possible to reduce crashes and injuries, and implement our expanded regulatory authority for public transit. We will continue to direct federal resources to the highest safety risks and implement program reforms that will advance our safety mission. We will address these challenges through cross-modal as well as mode specific strategies targeted toward identified risks, and work to ensure transportation systems including roads, bicycle and pedestrian facilities, ports, rail, and aviation, are safe for all users.

DOT Operating Administrations: All DOT Operating Administrations contribute to this goal.

DOT Safety Council: The U.S. DOT Safety Council provides a forum for information exchange, discussion and collaboration to enable coordinated, cross-modal approaches to advancing the safety goal. The Safety Council leverages the Departmental expertise and leadership of the Chief Safety Officers, Associate Administrators of Safety and other senior safety leaders to identify, prioritize, and address cross-modal safety challenges and emerging issues with the operating administrations. The Safety Council provides both advice and technical support to the Secretary and Operating Administrations on the most important Departmental safety issues.

PERFORMANCE REPORT

Performance Measure	Actual					2013		2013 Target Met or Not Met
	2008	2009	2010	2011	2012	Target	Actual	
ROADWAY SAFETY (FHWA, FMCSA, NHTSA)								
AGENCY PRIORITY GOAL: Highway fatality rate per 100 million vehicle-miles traveled (VMT). (NHTSA, FHWA, FMCSA)	1.26	1.15	1.11	1.10	1.14	1.03	N/A	Potentially Not Met (2012)
Passenger vehicle occupant fatality rate per 100 million VMT.	1.97	0.89	0.84	0.80	0.83 – 0.89*	0.85	N/A	Potentially Met* (2012)
Motorcyclist rider fatality rate per 100,000 motorcycle registrations.	68.52	56.36	54.82	54.66	56-58*	63	N/A	Potentially Met (2012)
Non-occupant (pedestrian and bicycle) fatality rate per 100 million VMT.	0.18	0.17	0.17	0.18	0.19	0.16	N/A	Not Met (2012)
Large truck and bus fatality rate per 100 million total VMT.	0.153	0.122	0.133	0.137	0.137*	0.114	N/A	Potentially Not Met (2012)
*Statistical projection								
AVIATION SAFETY (FAA)								
AGENCY PRIORITY GOAL: Number of commercial air carrier fatalities per 100 million persons onboard.	0.4	6.7	0.3	0.0*	7.6	7.4	1.1*	Potentially Met
AGENCY PRIORITY GOAL: Number of fatal general aviation accidents per 100,000 flight hours.	N/A	1.17	1.10	1.13*	1.13*	1.057	1.061*	Potentially Not Met
AGENCY PRIORITY GOAL: Category A&B runway incursions per million operations.	0.427	0.227	0.117	0.138	0.356	0.395	0.200	Met

Performance Measure	Actual					2013		2013 Target Met or Not Met
	2008	2009	2010	2011	2012	Target	Actual	
* Preliminary data from NTSB								
RAILROAD SAFETY (FRA)								
Rail-related accidents and incidents per million train-miles.	17.298	16.904	16.874	16.634	15.890	16.300	14.545*	Potentially Met
* Targets and actual results are subject to change and might differ from previous materials to reflect subsequently obtained information.								
TRANSIT SAFETY (FTA)								
Transit fatalities per 100 million passenger-miles traveled. (r)	N/A	N/A	0.533	0.547	0.613	0.543	N/A	Not Met (2012)
(r) This measure was not established until 2010.								
PIPELINE AND HAZARDOUS MATERIALS SAFETY (PHMSA)								
Pipeline incidents involving death or major injury.	39	48	38	36	31	41	28*	Potentially Met
Hazardous materials incidents involving death or major injury.	24	29	23	32	32	33	29*	Potentially Met
TRANSPORTATION SAFETY POLICY (OST)								
Cumulative number of States and localities that adopt roadway designs that accommodate all road users (complete streets).	N/A	N/A	214	246	398	270	N/A	Met (2012)

Progress Update

Roadway Safety (FHWA, NHTSA, FMCSA)

Between 2005 and 2011, the Nation experienced a nearly 26 percent decline in motor vehicle fatalities. However, motor vehicle crashes and fatalities increased in 2012 after six consecutive years of declining numbers. The nation lost 33,561 people in crashes on roadways during 2012, compared to 32,479 in 2011. The increase in crashes, and the resulting fatalities and injuries, can be seen across many crash characteristics—vehicle type, alcohol impairment, location of crash, etc.—and does not seem to be

associated with any one particular issue. In fact, crashes associated with some traditional risk factors, fell in 2012. For example, young drivers involved in fatal crashes continued to decline, as they have since 2005. Despite the general downward trend in overall fatalities in recent years, pedestrian and motorcycle fatalities have shown an upward trend. This was again the case in 2012, as motorcycle and pedestrian fatalities increased by 7 and 6 percent, respectively. This uptick in fatalities may also be linked to increased economic activity as the national economy recovers. In previous economic cycles, when the economy recovered, and discretionary income rose, the number of traffic fatalities also rose.

The Department attributes the overall decline in roadway fatalities over the last several years to a variety of factors including an increase in the spending rate of the Highway Safety Improvement Program (HSIP) and roadway infrastructure improvements such as *Safety Edge*, which is one of the innovative technologies being deployed as part of FHWA's *Every Day Counts* initiative; high visibility enforcement campaigns such as *Click It or Ticket* to increase seatbelt use; drunk driving prevention initiatives such as *Drive Sober or Get Pulled Over*; and better oversight of licensing for young drivers and commercial operators. Safer vehicles also played an important role in reducing crashes, injuries and fatalities. From 2008 – 2010 alone, NHTSA estimates that electronic stability control systems saved more than 2,200 lives. 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 Compliance, Safety, and Accountability (CSA) enforcement model.

In the future, FMCSA expects the fatality rate for large trucks and buses to continue to fall as changes in enforcement processes ensure motor carriers are fit, willing and able to comply with all safety regulations. The Agency is modernizing 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.

Other efforts include better oversight of licensing for young drivers and commercial operators, and upgrading the capacity of emergency response systems to utilize new forms of electronic communication. Research into new vehicle crash avoidance and vehicle-to-vehicle technology is equally important, and offers tremendous promise. It could potentially prevent or reduce the severity of up to 80 percent of crashes involving non-impaired drivers. Additionally, efforts aimed at specifically reducing the number of fatalities in large trucks and buses include New Motor Carrier Applicant Screening, the enhanced New Entrant Safety Assurance Process, improved information technology used to identify high-risk carriers, and implementation of the final phase of the Compliance, Safety, and Accountability (CSA) enforcement model.

Aviation Safety

In FY 2013 with a result of 1.1, we were successful in maintaining the commercial air carrier rate below 7.4 fatalities per 100 million persons on board. The FAA has made progress on several

prominent rulemaking projects designed to reduce the risk of commercial air fatalities, including issuing a final rule to meet pilot certification and qualification requirements appearing in Title 14 Code of Federal Regulations, Part 121, Air Carrier Certification, which establishes the operational rules for air carriers. The FAA continues to work on other projects, including final rules for crewmember training, helicopter air-ambulance operations, and safety management systems as required by Part 121. In response to the Modernization and Reform Act, FAA has begun new rulemaking projects to prohibit the personal use of portable electronic devices on the flight deck, further revise flight and duty regulations, and study the use of cell phones on passenger aircraft. Additionally, FAA started a rulemaking project to enhance simulator qualification standards for stall and upset recovery. Revised guidance was issued on Fatigue Risk Management Systems, Airline Transport Pilot certification training, and autorotation training.

In the area of general aviation, FAA did not achieve fatality rate goal. The result of this measure will not be final until confirmed by the National Transportation Safety Board (NTSB) in March 2015. “Loss of control” continues to be the leading cause of GA fatalities, accounting for approximately 70 percent of all fatal GA accidents. In addition, human factors directly contribute to approximately 80 percent of fatal GA accidents.

In May, 2013, FAA leadership met with leaders from the GA community to agree on actions to enhance safety and reduce accidents. In the short term, the group agreed to raise awareness of the importance of basic airmanship and to promote a positive safety culture. For the longer term, the FAA called upon the GA community to install life-saving equipment in older airplanes, improve general aviation data, and improve airman certification testing and training. In late July, an Aviation Rulemaking Committee (ARC), made up of international industry and government experts, recommended a broad range of GA policy and regulatory changes. The recommendations cover the areas of GA design, production, maintenance, and safety.

Since maintaining the safety of the nation’s runways is critical to ensuring safe operations in the nation’s airspace, reducing the number and severity of runway incursions is one of the FAA’s top priorities. In FY 2013, FAA achieved its goal of reducing Category A & B runway incursions. In recent years, changes have been implemented in cockpit procedures, airport signage and markings, air traffic procedures, and technology implementation to improve runway safety. FAA is committed to mitigating the risks of runway incursions and continuing its ongoing outreach, education, and awareness programs through mass electronic mail communications and training animations.

Railroad Safety

The preliminary FY 2013 rate of rail-related accidents and incidents was the lowest level since FRA began collecting safety data in the 1970s. For the ten-year period FY 2003 to FY 2012, the number of rail-related accidents and incidents declined from 14,295 to 10,788 (25 percent); train accidents fell

from 2,991 to 1,756 (41 percent); grade crossing incidents decreased from 2,934 to 2,020 (31 percent); and casualties dropped from 10,069 to 8,295 (18 percent).

PERFORMANCE PLAN

Roadway Safety (FHWA, NHTSA, FMCSA)

Agency Priority Goal: Reduce the Roadway Fatality Rate Per 100 Million VMT.

Indicator: Roadway Fatalities per 100 Million Vehicle Miles Traveled	2014	2015
Performance Target	1.02	1.02

Supporting Performance Goal: Reduce the Passenger Vehicle Occupant Fatality Rate Per 100 Million Passenger VMT

Indicator: Passenger Vehicle Occupant Fatalities per 100 Million Passenger Vehicle Miles Traveled	2014	2015
Performance Target	0.82	0.82

Supporting Performance Goal: Reduce the Non-Occupant (pedestrian and bicycle) Fatality Rate Per 100 Million VMT.

Indicator: Non-Occupant (pedestrian and bicycle) Fatalities per 100 million VMT.	2014	2015
Performance Target	0.15	TBD*
*This indicator will change in FY 2015 to fatalities per 100,000 population.		

Supporting Performance Goal: Reduce the Large Truck and Bus Fatality Rate Per 100 Million total VMT.

Indicator: Large Truck and Bus Fatalities per 100 Million total VMT.	2014	2015
Performance Target	0.114	0.114

Supporting Performance Goal: Reduce Motorcycle Rider Fatalities per 100,000 Motorcycle Registrations.

Indicator: Motorcycle Rider Fatalities per 100,000 Motorcycle Registrations.	2014	2015
Performance Target	62	62

Aviation Safety (FTA)

Agency Priority Goal: Reduce US commercial aviation air carrier fatalities by 24 percent over a 9-year period (2010-2018), to no more than 6.2 per 100 million persons on board in FY 2018.

Indicator: Number of US commercial aviation air carrier fatalities per 100 million persons on board.	2014	2015
Performance Target	7.2	6.9

Agency Priority Goal: Reduce the general aviation fatal accident rate per 100,000 flight hours to no more than 1 in FY 2018.

Indicator: Number of general aviation fatalities per 100,000 flight hours.	2014	2015
Performance Target	1.05	1.04

Agency Priority Goal: Reduce category A&B runway incursions in all airports to a rate of no more than 0.395 per million operations in FY 2014.

Indicator: Category A&B runway incursions per million operations (takeoffs and landings).	2014	2015
Performance Target	0.395	0.395

Pipeline and Hazardous Materials Safety (PHMSA)

Performance Goal: Reduce natural gas and hazardous materials pipeline incidents involving death or major injury.

Indicator: Pipeline incidents involving death or major injury per year.	2014	2015
Target	27-38	26-36

Performance Goal: Reduce natural gas and hazardous materials pipeline incidents involving death or major injury.

Indicator: Hazardous materials incidents involving death or major injury	2014	2015
Target	22-33	21-33

Transit Safety (FTA)

Performance Goal: Reduce transit fatalities to 0.491 per 100 million passenger miles traveled by FY 2018.

Performance Measure: Transit fatalities per 100 million passenger miles traveled.*	2014	2015
Target	0.530	0.525

*Does not include commuter rail.

Performance Goal: Reduce rail-related accidents and incidents.

Performance Measure: Rail-related accidents and incidents per million train-miles.	2014	2015
Target	16.150	15.900

Roadway Safety (FHWA, FMCSA, NHTSA)

Roadway safety is the top priority of the Department of Transportation (DOT). Within 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. FHWA improves safe mobility and infrastructure of our Nation's roadways through national leadership and innovation; FMCSA aims to reduce commercial motor vehicle (CMV) transportation crashes, injuries and fatalities through education, innovation, regulation, enforcement and partnerships; and NHTSA provides cost-effective behavioral safety campaigns and programs, advanced vehicle safety research, and development and enforcement of vehicle safety standards. These Operating Administrations (OAs) support outreach, education, enforcement, and demonstration programs aimed at the public and specific transportation industries to reduce roadway crashes, injuries, and fatalities. The OAs also 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.

In the first 12 years of the 21st century, more than 468,000 people died and over 30,000,000 were injured on the nation's roadways. Roadway crashes are the leading cause of death for Americans age 4 and 11 through 27 (based on 2009 mortality data from the CDC). Our goal is to reduce roadway fatalities by the end of calendar year (CY) 2015 to 1.02 per 100 million vehicle miles traveled. The financial burden of highway crashes is at least \$230 billion per year, according to [NHTSA estimates](#), which is a sign of the economic magnitude of highway 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.

Key Strategies:

Distracted Driving: With the use of smart phones, navigation systems, and other mobile devices growing rapidly, distracted driving is now a serious safety issue. Distracted driving contributed to 3,328 fatalities in 2012, or 10 percent of all traffic fatalities during that year. [The DOT Blueprint for Ending Distracted Driving](#) is a comprehensive strategy to address the dangerous practice of using handheld cell phones behind the wheel. The plan outlines concrete steps that stakeholders around the country – from lawmakers and safety organizations to families and younger drivers – can take to reduce the risk posed by distracted driving. It also highlights the risk of drivers under the age of 25, who are two to three times more likely than older drivers to send text messages or emails while driving. MAP-21 includes authorization for a new distracted driving grant program to encourage States to enact and enforce laws banning texting by drivers.

Motorcyclists: There were 4,957 motorcycle fatalities in 2012, a 7.1 percent increase over 2011. Since the late 1990s, the number of registered motorcyclists has doubled. As a result, we are seeing an increase in motorcycle crash fatalities, which has partially offset an overall reduction in highway fatalities. During the same time period, three States (FL, PA, and MI) repealed universal helmet laws. In 2011, only 60 percent of motorcyclists nationwide wore motorcycle helmets, a decline 18 percent from 2000 when 71 percent wore helmets. In States with universal motorcycle helmet laws, the use rate was 89 percent compared to 49 percent in other States. We strongly support and encourage all riders to wear DOT-certified motorcycle helmets on every trip. Additionally, we must increase awareness of motorcycle safety risks and identify best practices to improve the safety of motorcycle riding. In order to accomplish this, we need to identify factors that contribute to motorcycle crashes and identify strategies for reducing crash frequency and severity.

Commercial Motor Vehicles: In 2011, commercial motor vehicles (CMV), or large trucks and buses, represented 4.3 percent of all registered vehicles and 9.5 percent of total Vehicle Miles Traveled (VMT) on the Nation's roadways. In 2011, about 12 percent, or 3,568, of all motor vehicle fatalities in the U.S. involved crashes with CMVs. The fatality rate declined from 0.205 to 0.136 fatalities per hundred million VMT between 2000 and 2011.

We attribute some portion of the overall improvement to the steady implementation of the FMCSA Compliance, Safety, Accountability enforcement model, which is modernizing the effectiveness and efficiency of motor carrier enforcement activities through early contact with a greater number of motor carriers. Targeted enforcement interventions, increased oversight of Commercial Driver's License programs, safety audits, and inspections of motor carriers and operators have contributed to reducing the fatality rate. The primary challenge in continuing to improve truck and bus safety is to make certain that a safety culture exists across the industry.

Pedestrians and Bicyclists: While we have achieved many safety gains through traditional roadway safety design practices, there are too many roadways, especially in highly populated areas, that inconsistently provide adequate safety for pedestrians and bicyclists. While the ten-year trend in pedestrian and bicycle fatalities is consistent with the downward trend in overall fatalities, pedestrian fatalities increased 6.4 percent

and bicycle fatalities were up by 6.5 percent, respectively, between 2011 and 2012. Roadway designs that accommodate all users, referred to as complete streets, help to reduce fatalities and injuries. These roadway designs include features such as sidewalks, raised medians, turning access controls, better bus stop placement, better lighting, traffic calming measures, accessible sidewalks, curb cuts, accessible signage for sensory and cognitive disabilities, and other advances for travelers with disabilities. A safety review found that designing streets with these users in mind improves pedestrian, bicyclist, and motorist safety. Instituting policies that accommodate all roadway users ensures that every transportation project becomes a comprehensive safety project. These policies have the added benefit of making walking and biking more attractive options and of enhancing the aesthetic quality and commercial activity on local streets.

Agency Priority Goal: *Reduce roadway fatalities by the end of calendar year 2015 to 1.02 per 100 Million Vehicle Miles Traveled (VMT).*

Overview

Between 2005 and 2011, the nation experienced a nearly 26 percent decline in motor vehicle fatalities. However, in 2012, there was an increase in fatalities for the first time after six consecutive years of declines. More than 33,000 people lost their lives in motor vehicle-related crashes in 2012 – an increase of 3.3 percent compared to 2011. The economic upswing in 2012 may have played a role. Historical analyses show that short-term fluctuations in traffic fatalities can be affected by external influences, such as changes in the economy that impact the amount and type of driving and risk exposure.

A number of challenges could slow down or even reverse positive trends. Some States continue to face budget shortfalls and are under tremendous pressure to reduce services, resulting in cut backs to roadway safety programs. This could negatively impact the upkeep of road repair and maintenance, and programs that improve the roadway safety infrastructure. Cutbacks in State, Tribal, and local law enforcement agency budgets could weaken national enforcement campaigns and local traffic safety enforcement efforts.

Distracted driving has emerged as a new threat over the past few years as the rise of portable electronic devices has swiftly expanded. Moreover, as in-vehicle electronic systems become ever more sophisticated and complex, distracted driving could become an even greater threat if it is not addressed in a manner keeping pace with technological advancements.

Also, as the economy continues to gain momentum, more recreational travel and driving may result in higher crash rates. Finally, the repeal of proven life-saving traffic safety laws at the State level, such as universal motorcycle helmet or primary seat belt laws could also result in higher injuries and fatalities. Nevertheless, significant opportunities remain for continued progress in reducing roadway fatalities. The Department will seek new and innovative ways to serve the American people and keep our roadways safe.

Addressing the challenges of roadway safety requires the collective efforts of many people and organizations working together to significantly reduce crashes, fatalities, and serious injuries on our roadways. DOT works closely with partners at the Federal, State, tribal and local levels to address every facet of transportation safety. The Department provides guidance and technical assistance to State, tribal, and local governments, and Metropolitan Planning Organizations (MPOs) to help in the development of comprehensive safety programs and implementation of infrastructure countermeasures. DOT also develops effective countermeasures and enforcement programs to promote safe roads and safe driving behaviors for passenger and commercial vehicle drivers. Safety partner groups play an important role in disseminating and implementing training and educational efforts. DOT also works with partners in the private sector on the development of safer vehicles and roads and on improved business practices for commercial operators.

Key Strategies and Next Steps

NHTSA, FHWA, and FMCSA are working together to reduce roadway fatalities by the end of CY 2015 to 1.02 fatalities per 100 million vehicle-miles traveled (VMT), down from the 2005 rate of 1.46 fatalities per 100 million VMT.

DOT emphasizes a data-driven approach to prioritize and determine the most effective ways to reduce crashes and fatalities. Data collection provides the foundation to better understand and quantify the nature of the problem and to develop evidence-based countermeasures as well as develop safer vehicles. Recognizing its importance, DOT will pursue data improvement initiatives in FY 2015 to further enhance and link existing systems. Modernizing and consolidating data programs enables not only DOT to make better traffic safety programming decisions, but allows state and local communities to do the same.

Continuing advances in automotive technology and vehicle innovation have created completely new possibilities for improving highway safety and offer enormous safety potential. NHTSA has developed an ambitious Significant and Seamless Initiative to further promote advances in crash avoidance technology, along with ongoing research on vehicle-to-vehicle (V2V) communication systems. The potential of these new safety systems, such as advanced braking or lane departure warning systems, along with V2V, could potentially prevent or reduce the severity of up to 80 percent of crashes involving non-impaired drivers.

FHWA provides Federal, State, and local partners the tools, resources, and information necessary to make sound safety investment decisions and coordinates with States to develop Strategic Highway Safety Plans (SHSP) and implement and improve the safety of roadway infrastructure on all public roads. FHWA continues to oversee the Highway Safety Improvement Program (HSIP), a core Federal-aid program under MAP-21. The goal of the program is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads by using a data-driven, strategic approach that focuses on performance. FHWA provides technical assistance and expertise to research, design, and implement roadway infrastructure countermeasures and improvements; and to modernize highway geometric features and safety hardware as part of road

and bridge construction, reconstruction, replacement, restoration, rehabilitation, and system preservation projects. FHWA also manages the Focused Approach to Safety in order to better address the most critical safety challenges using infrastructure-oriented improvements, specifically for roadway departure, intersection-related, and pedestrian crashes.

In the future, FMCSA expects the fatality rate for large trucks and buses to continue to fall as changes in enforcement processes ensure motor carriers are fit, willing and able to comply with all safety regulations. The Agency is modernizing 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.

Other efforts include better oversight of licensing for young drivers and commercial operators, and upgrading the capacity of emergency response systems to utilize new forms of electronic communication. Research into new vehicle crash avoidance and vehicle-to-vehicle technology is equally important, and offers tremendous promise. It could potentially prevent or reduce the severity of up to 80 percent of crashes involving non-impaired drivers. Additionally, efforts aimed at specifically reducing the number of fatalities in large trucks and buses include New Motor Carrier Applicant Screening, the enhanced New Entrant Safety Assurance Process, improved information technology used to identify high-risk carriers, and implementation of the final phase of the Compliance, Safety, and Accountability (CSA) enforcement model.

Specific Strategies

- Conduct vehicle safety research on the entire spectrum of advanced pre-crash, crash, and post-crash vehicle safety issues and technologies, and on the reliability and security of complex safety-critical electronic control systems; and emerging technologies that can help drivers avoid crashes.
- Expand efforts to increase seat belt use through high-visibility enforcement campaigns;
- Conduct research on strategies to improve pedestrian and bicyclist safety, older driver safety, and motorcyclist safety; reinforce partnerships with Federal agencies, States, localities, and Tribal governments to address problems associated with alcohol-impaired driving, and continue to explore the potential for widespread use of in-vehicle technologies to prevent alcohol-impaired driving;
- Improve the roadway infrastructure through system-wide implementation of proven safety countermeasures, traffic calming measures such as roundabouts and innovative intersection design;
- Implement the performance-based safety programs in the MAP-21 legislation;
- Provide funding to States to implement the Highway Safety Improvement Program (HSIP);

- Promote and provide guidance, training, and technical assistance to support effective implementation and use of HSIP-related programs, processes, and tools;
- Build professional capacity with and promote the use of data-driven approaches to roadway safety problem identification, program implementation, and evaluation;
- Implement the Focused Approach to Safety which provides a more targeted delivery of technical assistance and resources to eligible high priority States to address the most critical safety challenges using infrastructure-oriented improvements, specifically for roadway departure, intersection-related, and pedestrian crashes;
- Promote upgrades in State and local data systems and analytical capacity to further advance performance-based investment decisions and grant allocations;
- Complete and implement NHTSA's Data Modernization, to enhance the quality of crash data collection and improve the IT systems, thereby ensuring that regulatory and safety program decisions continue to be based on sound data;
- Implement the DOT Blueprint for Ending Distracted Driving and conduct vehicle and behavioral safety research on reducing distracted driving;
- Encourage the deployment of effective advanced vehicle technologies to enhance safety, including crash avoidance technologies;
- Continue research and implementation of vehicle-to-vehicle and vehicle-to-infrastructure technologies that enable vehicles to communicate and potentially avoid collisions and offer additional mobility and environmental benefits;
- Continue strong enforcement of vehicle safety laws to ensure defective and noncompliant vehicles and equipment are identified and remedied;
- Carry out research and demonstration projects in operator safety to reduce fatalities and injuries in rail and commercial vehicle operations;
- Provide national leadership in promoting and developing effective emergency medical services and Next Generation 911 systems to enhance survival of motor vehicle crash patients by improving post-crash care.

Scientific Basis for Strategies-

DOT conducts extensive research, development, testing, crash investigation, and data collection and analysis to provide the scientific strength needed to support motor vehicle and traffic safety goals, and rulemaking initiatives. NHTSA's Office of Research and Program Development, <http://www.nhtsa.gov/Driving+Safety/Research+&+Evaluation>, seeks to identify and measure behaviors involved in crashes, and develop and refine countermeasures to deter unsafe behaviors and promote safe alternatives. Key areas of focus include: occupant protection, impaired driving, distracted driving, motorcycle safety, pedestrian and bicycle safety, older drivers, and teen

drivers. *A Compendium of Traffic Safety Research Projects 1985-2013* (DOT HS 811 847) provides an overview and brief summary of its research reports dating back to 1985. NHTSA's *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices, Seventh Edition* 2013 (DOT HS 811 727), is a compendium of evidence-based strategies for its State partners to provide guidance for developing effective traffic safety programs. NHTSA also has an extensive vehicle safety research program at <http://www.nhtsa.gov/Research> that serves as the foundation for all of its rulemaking and vehicle-related initiatives.

FHWA promotes a data- and performance-driven, strategic approach to researching cost-effective and effective infrastructure-related safety investments. FHWA's Crash Modification Factors (CMF) Clearinghouse, <http://www.cmfclearinghouse.org>, is a web-based database of crash modification factors along with supporting documentation. Transportation engineers use the CMF Clearinghouse to identify the most appropriate countermeasure for their safety needs. FHWA also supports implementation of the *Highway Safety Manual*, which provides information and tools to facilitate roadway planning, design, operations, and maintenance decisions based on precise consideration of their safety consequences. Further, FHWA has developed a *Corporate Master Plan for Research and Development of Technology and Innovation Plan* (FHWA-RD-03-77). The Plan provides a blueprint to continue to improve the effectiveness and efficiency of research and technology, including implementing technologies and innovations that improve the quality, cost-effectiveness, and timeliness of products, procedures, processes, and practices.

Goal Leaders

Greg Nadeau, Deputy Administrator, FHWA
Anne Ferro, Administrator, FMCSA
David Friedman, Acting Administrator, NHTSA

Aviation Safety (FAA)

The FAA has an imperative to be smarter about how it ensures aviation safety because the aviation industry is growing more complex. We have more safety data than we have ever had before. This provides us with the opportunity to be more proactive about safety and use Safety Management System (SMS) principles to make smarter, risk-based decisions. We constantly need to raise the bar on safety, and this approach will help do that.

The FAA focuses on three areas of aviation safety: Commercial Aviation, General Aviation and Runway.

Commercial Aviation Safety: In 2012, there were over 790 million persons on board United States commercial air carriers, with zero fatalities (www.nts.gov/data/aviation_stats.html, preliminary statistics). Our commercial safety record indicates the agency has successfully addressed the majority of known system hazards contributing to accidents or incidents. As we

develop and deploy NextGen systems, the increased degree of complexity will require improved analytical methods and tools for evaluating the safety risks of proposed changes.

The FAA works with aviation industry stakeholders to establish safety management systems within their operations. With these systems in place, the FAA and the aviation industry will work together to address risks. Additionally, we have undertaken several prominent rulemaking projects that address risks identified during the investigation of the fatal Colgan Air accident in 2009. These include Pilot Certification and Qualification Requirements for Air Carrier Operations (July 2013) and Qualification, Service and Use of Crewmembers and Aircraft Dispatchers (November 2013). We revised requirements for air ambulance operations (February, 2014).

General Aviation Safety: In 2012, there were 23,851,000 flight hours with 442 fatalities (www.nts.gov/data/aviation_stats.html, preliminary statistics). The FAA works with industry to help reduce the GA accident rate. The General Aviation Joint Steering Committee (GAJSC) continues to take a data-driven approach to understand fatal accident causes and contributing factors. This government-industry group meets to review GA accident trends, establish areas for special emphasis, and share information. The GAJSC has developed 23 safety interventions to address the number one cause of fatal accidents, which is loss of control during approach and landing. In addition to the GAJSC, the FAA Administrator made a call to action at the FY 2013 GA Summit for leaders from the general aviation community to agree on actions to enhance safety and reduce accidents. This meeting was used to increase the awareness of the accident rate and request that the industry carry the safety message during the summer flying season.

Our Flight Standards organization is spearheading several initiatives to improve the rate at which general aviation fatal accidents are occurring. One initiative focuses on our efforts related to GA outreach and education. Another initiative involves addressing the operating limitations for amateur-built aircraft to include support and training of not only the builder of an amateur-built aircraft, but transition-training requirements for second owners since that is where data reveals a disproportionate number of accidents occur. To aid in GA safety outreach, a major overhaul, equipment upgrade and transition of the FAA.safety.gov website will occur over the next few years as the website and all its safety outreach features will transition from contractor development and maintenance to FAA development, oversight and ongoing maintenance.

Our Aircraft Certification Service has streamlined the approval of angle of attack indicators for general aviation aircraft and is working with Flight Standards to streamline the retrofit of the existing GA fleet with this indicator. Angle of attack indicators provide a pilot with a visual aid to prevent the loss of control of the aircraft in the critical phases of flight. Previously, because of cost and complexity, these indicators were primarily limited to military and transport aircraft.

Additionally, the Aircraft Certification Service has been working to streamline the certification and installations of inflatable restraints (air bags) with the goal of making all GA aircraft eligible

to install the safety enhancement device that all modern cars have today. The Aircraft Certification Service has been providing incentives for the installation of Non-Required Safety Enhancing Equipment in rotorcraft through a streamlined certification process in an effort to drive safety innovation and adoption of key safety technology.

Runway Safety: A runway incursion is any unauthorized intrusion onto a runway, regardless of whether or not an aircraft presents a potential conflict. This includes the incorrect presence of an aircraft, vehicle, or person on the protected area of a surface designated for the landing and takeoff of aircraft. Such an event can create dangerous situations that can lead to serious accidents that potentially involve fatalities, injuries, and significant property damage.

Since the Administrator's Call to Action on runway safety in August 2007, the FAA and the industry have worked together to implement improvements, raise awareness, and educate pilots, drivers and controllers about the risks of runway incursions.

Agency Priority Goals:

- *Reduce US commercial aviation air carrier fatalities by 24 percent over a 9-year period (2010-2018), to no more than 6.2 per 100 million persons on board in FY 2018.*
- *Reduce the general aviation fatal accident rate per 100,000 flight hours to no more than 1 in FY 2018.*
- *Reduce category A&B runway incursions in all airports to a rate of no more than 0.395 per million operations in FY 2014.*

Overview

Aviation fatality rates are at historic lows and continue to drop over time. However, FAA recognizes the need to continue addressing precursors to accidents in order to continue to improve the current level of safety in the national airspace.

In the past, the FAA focused on actual incidents and accidents to identify risk within the aviation system. The number of accidents has now dropped to a level in which this is a more difficult activity to measure. FAA is developing alternate methods to identify and address risk and accident precursors to reduce the likelihood of such events.

Key Strategies

Safety Management System: The FAA Safety Management System (SMS) integrates the management of safety risk into business planning, operations, and decision making. The overarching goal of the SMS is to improve safety by helping to ensure that the outcomes of any management or system activity incorporate safety considerations. The FAA SMS builds on

existing processes, procedures, and tools and introduces new capabilities as necessary to meet the requirements in [FAA Order 8000.369A, Safety Management System](#).

An SMS is a standardized approach to managing safety that incorporates organizational structures, accountabilities, policies, and procedures. An SMS establishes a formalized, safety risk-based approach to the management of an organization, whereby every process, decision, activity, acquisition, procedural change, or program modification is examined from a safety risk perspective in order to ensure that all of the potential associated hazards are uncovered, examined, and mitigated.

An SMS is composed of four components:

- [Safety Policy](#) establishes senior management commitment to safety and places safety accountability at the top levels of the organization.
- [Safety Risk Management \(SRM\)](#) consists of establishing formal methods of hazard identification, risk assessment, risk analysis, and risk mitigation.
- [Safety Assurance](#) provides a means to: verify the safety design and performance of the organization with respect to its own policy and objectives; assess performance of the system after safety risk controls are implemented; and identify potential new hazards. SRM and Safety Assurance are the operating functions of SMS. SRM provides a sound basis for safety decision making and Safety Assurance provides the activities that will monitor and re-assess operational systems to ensure continued operational safety.
- [Safety Promotion](#) includes establishment and maintenance of a positive safety culture within an organization, the organization's safety training programs, and the means by which the organization communicates regarding safety.

SMS has been adopted as a standard for managing safety activities throughout the aviation community. It is recognized by the International Civil Aviation Organization (ICAO); FAA's NextGen Office (ANG) ; and other Civil Aviation Authorities (CAAs), Air Navigation Service Providers (ANSPs), and product/service providers as the next step in the evolution of air transportation safety.

Safety is the FAA's top priority. We recognize that we must be a leader in the design and implementation of SMS. We will not only maintain safety as the aerospace system evolves, but actually increase it by transforming the way we assure safety through implementation of our SMS. Our FAA SMS will meet most of the tenets of both the International Civil Aviation Organization (ICAO) [State Safety Program \(SSP\) and SMS frameworks](#).

We have made significant strides in instituting the FAA SMS. We have established the necessary policy foundation. We have identified areas where we fully meet SMS requirements and other areas where we have additional work to do in building the necessary processes and tools. We have created training for our employees on SMS principles, and we have increased safety awareness

for all employees through improved safety communications. . We are also collaborating with service providers through voluntary pilot programs to help us determine the appropriate scope and detail of future service provider SMS guidance. We plan to continue the development of the FAA SMS to enable process integration and establish supporting tools/information technology systems and training.

Next Steps

Ongoing Air Traffic System Modernization: FAA will continue to develop and deploy technologies to use U.S. airspace in safer, more efficient, and more environmentally sound ways. The Next Generation Air Transportation System (NextGen) is a comprehensive overhaul of our National Airspace System to make air travel more convenient and dependable, while ensuring flights are as safe, secure and hassle-free as possible. NextGen is providing air traffic managers and pilots with the tools to proactively identify and mitigate weather and other potential flight conflicts. It will enable us to better meet our national security needs and ensure that travelers benefit from the highest levels of safety. Automatic Dependent Surveillance-Broadcast (ADS-B), moves air traffic control from ground-based radar surveillance to point-to-point broadcast surveillance. Users in the NAS have already begun benefiting from the weather and traffic information it transmits directly into the cockpit, increasing pilot awareness and enhancing decision-making. FAA also has increased its ability to provide radar-like tactical services. The ADS-B ground network should be completed nationwide in 2014.

Also, through Aviation Safety Information Analysis and Sharing (ASIAS), NextGen more proactively approaches safety with a system that monitors known risk, evaluates the effectiveness of deployed mitigations and detects emerging hazards.

Risk-based Decision Making: The aviation landscape has changed dramatically over the last decade. Several factors are increasing the complexity of the industry and introducing different types of safety risk into the aerospace system. These factors include new aerospace designs and technologies (e.g., Unmanned Aircraft Systems), changes in the FAA's surveillance and oversight model (e.g., designee management programs), and different business models for the design and manufacture of aircraft and products (e.g., supply chains).

The FAA has built the foundation to address these challenges by developing and implementing a Safety Management System (SMS). Thus, the Risk Based Decision Making (RBDM) initiative flows from SMS principles by proactively addressing emerging safety risks using consistent, data-informed approaches to support system-level, risk-based decisions.

The RBDM initiative, when fully implemented, will enable the FAA to make smarter, risk-based decisions to improve safety in the aviation system. Safety data will be shared among FAA organizations, industry, and international peers, leading to a broader spectrum of available data. The data will be analyzed using SMS principles to identify emerging hazards and predict the associated safety risk. The resulting

information will be coordinated and shared with the decision-makers—those people who are in the best position to manage the safety risk and make the aviation system even safer.

In order to do this, the RBDM initiative will establish data taxonomies that will allow better sharing of safety data across the agency and with industry constituents and international peers. This will enhance cross organizational communication and collaboration and prevent duplication of efforts, as well as allow the FAA to expand its sources of safety data. By working together across the FAA, combined safety data will be analyzed to identify emerging cross-cutting hazards and predict the risk associated with those hazards. The focus will be to look across the system rather than in individual segments in order to get a more comprehensive view. Decisions will be based on safety risk information and responses will be in a measured and coordinated manner focused on reducing safety risk. The FAA will continue to regulate, but will be much more efficient and effective by targeting our resources to those areas of greatest safety risk.

The FAA's current processes and systems have created a safe and efficient aviation system. Using Safety Management System (SMS) principles, the FAA will make smarter, risk-based decisions both throughout the agency and with industry and global stakeholders. This will result in reduced risk in the system, making the National Airspace System even safer than it is today.

General Aviation Initiatives: The FAA will continue to focus on supporting the development and implementation of General Aviation Joint Steering Committee (GAJSC) safety enhancements in coordination with industry stakeholders. This process is based on a targeted approach using data analysis to identify those causal factors that are most likely to contribute to a fatal accident. In 2012, the GAJSC identified the top ten causal factors in fatal general aviation accidents. As work continues on mitigating the primary causal factor, loss of control, the GAJSC will now begin analyzing accidents and developing safety enhancements related to system component and power plant failure accidents. This working group will hold its first meeting in early 2014 and continue into FY 2015.

The FAA has also refocused coordinated efforts to reduce general aviation helicopter accidents. In coordination with industry stakeholders, the International Helicopter Safety Team (IHST) and newly formed U.S. Helicopter Safety Team (USHST) are working to enhance safety through international cooperation, outreach, and awareness. Both groups follow the successful model established by the Commercial Aviation Safety Team (CAST), which has been noted as a major contributor to improving commercial aviation safety.

The FAA is also implementing changes to the way general aviation pilots are trained and tested. To keep pace with advances in technology and educational training methods, the FAA chartered the Airman Testing Standards and Training Aviation Rulemaking Committee (ARC) in September 2011 to engage stakeholders to recommend ways to improve the quality of general aviation airman knowledge, computer testing supplements, guides, practical test standards, and training handbooks. The ARC also considered how to develop test questions that incorporate expert input and review while balancing the need to safeguard test integrity. The ARC's report is available at www.faa.gov/aircraft/draft_docs. To implement key ARC recommendations, the FAA tasked an Aviation Rulemaking Advisory Committee Working Group in

August 2012 to develop integrated airman certification standards documents, guidance, and test materials for the private pilot and instructor certificates and instrument ratings. The working group has begun publishing some of these changes for public comment and will continue this critical work throughout FY 2014 and into FY 2015.

The FAA Administrator has demonstrated a firm commitment to improving the general aviation accident rate. In May 2013, Administrator Huerta met with prominent leaders of the general aviation community to agree on actions to enhance safety and reduce accidents. The group agreed to raise awareness on the importance of basic airmanship and to promote a positive safety culture. In addition, they committed to several long term initiatives including the installation of life-saving equipment in general aviation airplanes, improving general aviation data, and improving pilot testing and training standards. Another meeting with industry is planned for late January 2014.

Runway Safety: Numerous initiatives have been implemented resulting in the reduced risk of a serious runway incursion. These 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, continued efforts of the Runway Safety Council, and ongoing emphasis on education and awareness. Specifically, FAA updated the Pilot's Handbook of Aeronautical Knowledge with an appendix entitled "Runway Incursion Avoidance" in April 2012. This appendix helps pilots understand the risks associated with surface navigation and provides basic information regarding the safe operation of aircraft at towered and non-towered airports. The written and practical test standards for pilots have been updated to include surface safety topic requirements. Designated Pilot Examiners have completed a first training session on the new material and requirements. Advisory Circulars for single pilot and multi-crew surface operations have been updated and published to provide pilots best practices and guidance. Additional efforts are underway to standardize procedures, guidance, and policy across all FAA Lines of Business in regard to surface operations. Given that many foreign air carriers operate within the United States, we also continue to support the International Civil Aviation Organization (ICAO) runway safety programs. All of these efforts result in a reduced risk to the flying public.

The Call to Action initiative also identified several mid-term and long-term efforts to reduce the risk of runway incursions. These include additional air traffic control procedural changes, deployment of Runway Status Lights, development of low-cost ground surveillance, and enhanced cockpit systems to improve pilot situational awareness. Combined with the Runway Safety Council's effort to identify and mitigate the root causes of runway incursions, Call to Action is expected to help reduce the rate of serious runway incursions once fully implemented.

Goal Leaders

Michael P. Huerta, Administrator, Federal Aviation Administration

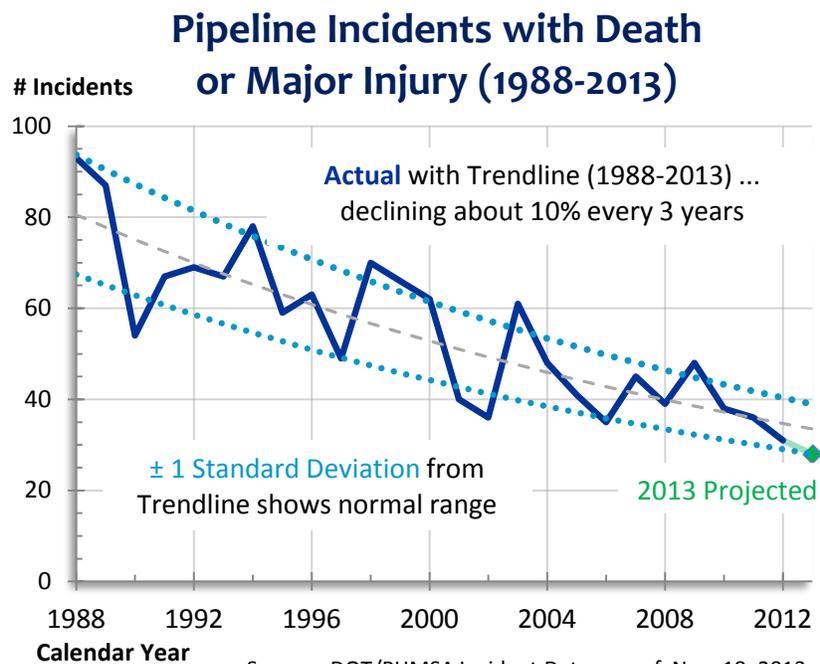
Margaret Gilligan, Associate Administrator for Aviation Safety, Federal Aviation Administration

Pipeline Safety (PHMSA)

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.

Pipeline incidents with death or major injury (serious incidents) have declined an average of 10 percent every three years between 1988 and 2012. At the same time, most measures of risk exposure—U.S. population, energy consumption, pipeline mileage, and pipeline ton-miles—have increased.

Most of the risk (about 80 percent of the incidents with death or major injury) occurs on natural gas distribution systems, which provide direct services to households and businesses (about 66 million). Since 1988, this risk has dropped from about 1.5 serious incidents per million services to 0.5 per million services.



Key Strategies and Next Steps

Aging/obsolete pipeline infrastructure: Nearly 450,000 miles of pipelines are over 50 years old or of unknown vintage. Many of these pipelines were built with bare steel, iron, copper, or “other” materials that are more vulnerable to deterioration and failure than the materials commonly used today. Our strategy for dealing with this challenge is to:

- Work with State pipeline safety programs and pipeline operators to assure that the identification, repair, rehabilitation, requalification, or replacement of the highest risk pipelines are accelerated;
- Extend the pipeline integrity management program to gas distribution pipeline systems where 80 percent of the most serious safety incidents occur; and
- Investigate new technologies for improving the assessment, detection and control of pipeline risks.

Excavation and other outside force damage that compromise pipeline integrity remain one of the leading causes of incidents resulting in death or major injury. Our strategy for dealing with this challenge is to:

- Enhance the “811—Call Before You Dig” program at the State and local levels to prevent pipeline damage from excavation; and
- Promote awareness and use of recommended practices for land use planning and development near transmission pipelines.

Pipeline corrosion and material failure are the two leading causes of pipeline incidents overall, particularly for hazardous liquid and gas transmission lines. Our strategy for dealing with this challenge is to:

- Integrate, target, and expand safety inspections based on the most serious risks; and
- Focus pipeline safety research on methods that might be used to improve identification of defects.

PHMSA oversees the safety 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.

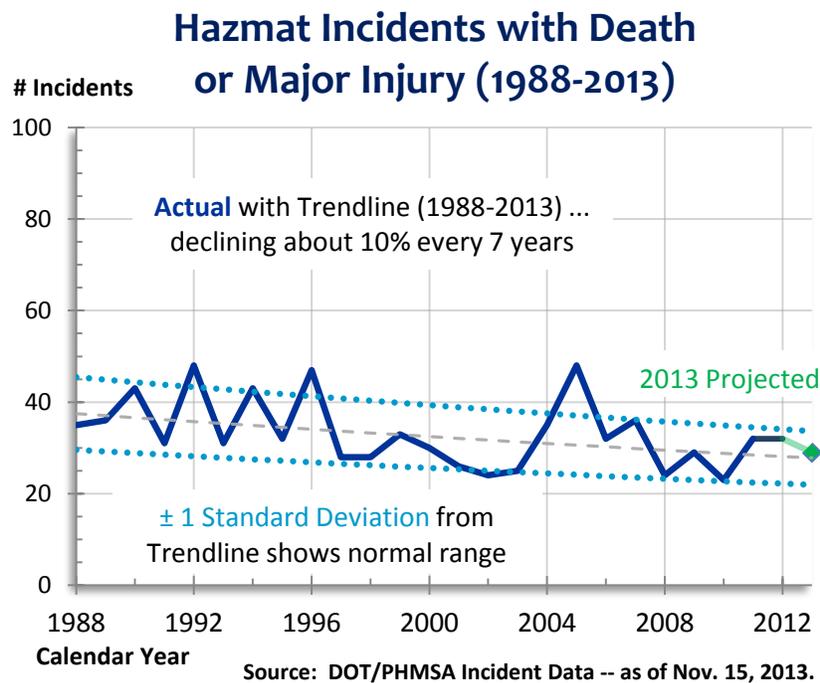
Goal Leaders

Jeff Wiese, Associate Administrator for Pipeline Safety (PHMSA)

Hazardous Materials Safety (PHMSA)

On a typical day, more than 6 million tons of hazardous materials (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, paints, etc. A variety of chemicals are used to purify water, fertilize crops, create medicines, and manufacture clothing. While these chemicals and energy products are essential to Americans' quality of life, they also introduce some inherent risk.

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. 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).



Key Strategies and Next Steps

Bulk transportation of hazardous materials that are toxic by inhalation (TIH) present a very low- probability, very high-consequence risk in many modes of transportation. Our strategy for addressing these changes is to:

- Develop standards for loading and unloading of bulk hazardous materials, including TIH;
- Advance rail tank car design; and
- Assess the risks associated with railroad transportation of hazardous chemicals through urban centers.

Hazmat that presents a risk of fire aboard aircraft: An aircraft in flight is particularly vulnerable to the risk of fire, and the consequences can be catastrophic. Our strategy for dealing with this challenge is to:

- Publish new rules for transporting flammable and combustible liquids aboard aircraft and (where possible) harmonizing U.S. regulations with UN standards;
- Strengthen rules/standards for transporting lithium batteries by air; and
- Stay in touch with advances in technology, through outreach, research, and applications for permits and approvals.

Rollover crashes involving tank trucks carrying gasoline and other flammable liquids are the leading cause of injuries and deaths from hazardous materials transportation incidents.

Our strategy for dealing with this challenge is to:

- Develop new standards for electronic stability control for trucks;
- Develop rules for reducing the hazard associated with tank truck wet lines; and
- Work with other DOT operating administrations to improve driver training and to reduce driver fatigue.

Goal Leaders

Magdy el-Sibaie, Associate Administrator for Hazardous Materials Safety (PHMSA)

Transit Safety (FTA)

According to the National Safety Council, passengers on the Nation's bus, rail, and commuter rail systems are 40 times less likely to be involved in a fatal accident than passengers in cars and trucks. Nevertheless, each year there are more than 200 fatalities related to public transportation. There were 262 transit fatalities in 2012, an increase from when total fatalities had been between 220 and 230 each year from 2009 to 2011.

Under laws in effect through June 2012, FTA established regulations for a State-managed safety oversight program for the Nation's heavy rail and light rail systems with the goal of reducing fatalities on these systems. In addition, FTA established a program of voluntary oversight for transit bus systems, including on-site reviews for selected systems, and developed the requirement

for drug and alcohol testing for transit operators. Finally, FTA awards research grants that identify new technologies and best practices to enhance transit safety.

Key Strategies and Next Steps

Transit, which provides more than 10 billion passenger trips each year, is one of the safest modes of travel. Despite this safe record, several significant transit accidents in recent years have raised important concerns about the safety practices at some of our Nation's largest transit agencies. The challenge confronting the transit sector is how to improve on the current transit safety record, even as the number of people using transit increases and as infrastructure and equipment age.

FTA will continue implementing its safety oversight authorities for transit rail systems established in MAP-21, including issuance of transit safety rulemakings.

FTA will oversee the safety of transit systems through the following activities:

- Establishment and enforcement of safety policy and regulations.
- Continuing to build the Office of Safety and Oversight staff to capacity.
- Research and development.
- Technical assistance and workforce development.

Goal Leaders

Thomas Littleton, Associate Administrator for Safety & Oversight, Federal Transit Administration

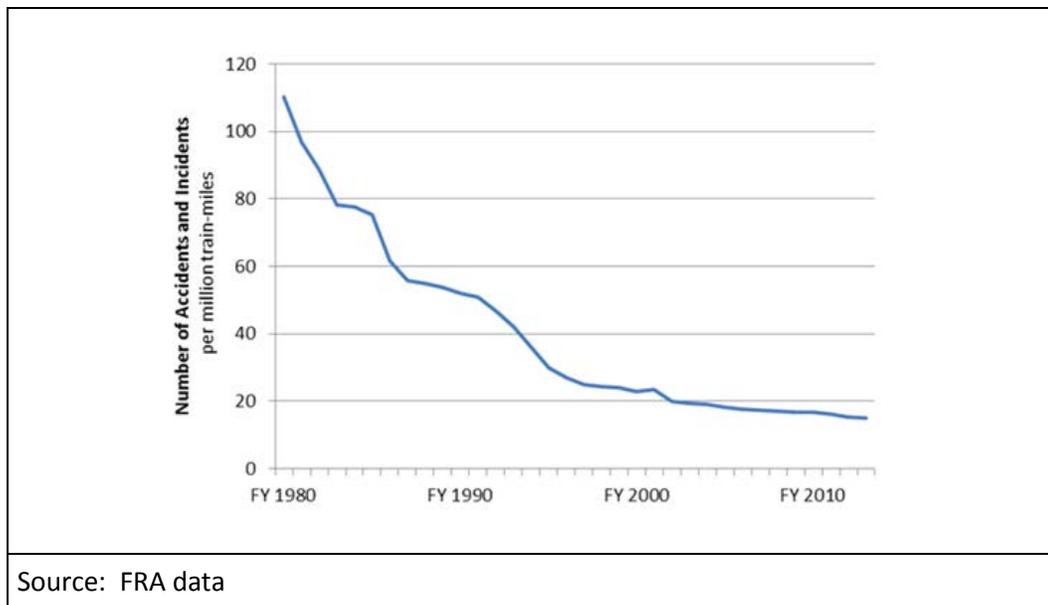
Railroad Safety (FRA)

To ensure the safety of the Nation's rail operations and infrastructure, the Federal Railroad Administration (FRA) develops and enforces safety regulations, administers selective investments in passenger and freight rail services and infrastructure, and conducts research and technology development. FRA's activities, and those of its rail industry partners, have resulted in one of the safest decades ever—the number of rail-related accidents and incidents declined by 24 percent since fiscal year (FY) 2004; train accidents dropped by 47 percent; fatalities dropped 13 percent, injuries fell by 16 percent; and highway-rail grade crossing incidents decreased by 35 percent. Nevertheless, rail-related incidents contributed to 685 deaths and 7,773 injuries in FY 2012. Consequently, FRA's focus is on continuous safety improvement now and in the future to address this public safety threat.

The Nation's railroad industry consists of more than 780 railroads (including about 30 passenger, 8 switching and terminal yard railroads, approximately 130 tourist/excursion/historical railroads, and 620 freight railroads). It serves as a major U.S. economic driving force. In 2013 rail:

- Hauled the Nation's freight over 741 million train-miles.
- Carried more than 655 million passengers over 21 billion miles.
- Employed approximately 233,000 workers who logged more than 463 million employee-hours.

Number of Rail-Related Accidents and Incidents
Fiscal Years 1980 to 2012, per Million Train-Miles



Key Strategies and Next Steps

Safety and Operations—FRA's regulatory and compliance program is the foundation of rail safety promotion. FRA's field inspectors and specialists have driven the unprecedented safety performance, using sophisticated data-driven, risk-based targeting. To achieve higher levels of safety performance, railroads must assimilate system safety and risk reduction programs and new technologies, such as positive train control. FRA oversees technology grants, analyzes deployment strategies, and provides technical support.

Railroad Research and Development—This program provides the scientific and engineering basis for safety rulemaking and conducts research and development that leads to reductions in railroad accidents and incidents in the medium and long-term. Through the program, FRA collaborates with the railroad industry to develop and implement new technology to improve overall safety.

Current Passenger Rail Service—The Administration proposes this program to make grants that ensure passenger rail assets are maintained to provide safe and reliable life-cycle service, as well as to continue operating long-distance train services.

Rail Service Improvement Program—The Administration proposes this program to make grants to develop the infrastructure, stations, equipment, and capacity needed to initiate new passenger rail services and substantially upgrade existing corridors, and to boost the market share of intermodal freight rail.

Goal Leaders

Federal Railroad Administration:

Robert Lauby, Associate Administrator for Railroad Safety and Chief Safety Officer

Paul Nissenbaum, Associate Administrator for Railroad Policy and Development

John Tunna, Director of Research and Development

Strategic Goal 2--

State of Good Repair

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

Strategic Objective 2.1—Maintain or Improve Operating Conditions

Maintain or improve the availability, reliability, and performance of the Nation’s transportation infrastructure, equipment, and facilities by ensuring that they are functioning as designed within their useful lives.

Performance Overview

Recent reports on the condition of our highways, bridges, transit assets, and passenger rail facilities reveal that many fall short of state of good repair, and as a result, they compromise the safety, capacity, and efficiency of the U.S. transportation network. DOT’s role in achieving state of good repair varies from mode to mode. We can influence the condition of Federally-funded highway, transit and airport infrastructure through program guidance and technical assistance provided to State departments of transportation, transit agencies, and airport authorities, and through research and development to produce the knowledge, guidance and innovations needed to more effectively address the Nation’s infrastructure challenges. We also help protect and preserve commercial service airports through safety regulations for airport safety certification, oversight and safety data programs, and supporting financial assistance programs. While we have some influence on state of good repair through our safety regulations in other modes like railroads, seaports, and pipelines, our influence over the level of state of good repair investment is limited because much of the infrastructure is funded and maintained by the private sector.

DOT Operating Administrations: The following DOT Operating Administrations contribute to DOT’s strategic objective of maintaining the Nation’s transportation infrastructure: Federal Highways Administration, Federal Transit Administration, Federal Aviation Administration, Pipelines and Hazardous Material Safety Administration, and Federal Rail Administration.

PERFORMANCE REPORT

Performance Measure	Actual					2013		2013 Target Met or Not Met
	2008	2009	2010	2011	2012	Target	Actual	
Roadway Conditions (FHWA)								
Percent of travel on the National Highway System (NHS) roads with pavement performance standards rated “good”.	N/A	N/A	55.0%	54.3%	57.1%	57.0 (r)	58.3*	Potentially Met

Performance Measure	Actual					2013		2013 Target Met or Not Met
	2008	2009	2010	2011	2012	Target	Actual	
Percent of deck area (i.e., the roadway surface of a bridge) on NHS bridges rated structurally deficient. (FHWA)	8.2(r)	8.2(r)	8.3(r)	7.8(r)	7.1	7.7	6.7%	Met
Transit Conditions (FTA)								
Backlog of transit capital assets in need of replacement or refurbishment (as defined by an estimated condition rating of 2.5 or lower).	N/A	N/A	\$77.7 billion	TBD [^]	TBD [^]	\$77.6 billion	N/A [^]	Not Met (2010)
Runway Conditions (FAA)								
Percent of runway pavement in excellent, good, or fair condition for paved runways in the National Plan of Integrated Airport Systems.	96.6%	97.0%	97.2%	97.4%	97.5%	93.0%	97.5%	Met
<u>Notes:</u> (r) Revised * Preliminary Estimate [^] 2011 and 2012 Actuals Available Following Release of Conditions and Performance Report								

PERFORMANCE PLAN

Roadway Conditions (FHWA)

Performance Goal: Increase the percent of travel on the National Highway System (NHS) meeting pavement performance standards for good rated ride quality to 64.3 percent or higher by 2018.

Indicator: Percentage of travel on the NHS and Interstate meeting pavement performance standards for good rated ride quality.	2014	2015
Performance Target	59.5%	60.7%

Performance Goal: Decrease the percentage of deck area of structurally deficient bridges on the NHS to less than 6.0% by 2018.

Indicator: Percent of deck area (i.e., roadway surface of a bridge) on NHS structurally deficient bridges.	2014	2015
Performance Target	6.6%	6.4%

Transit Conditions (FTA)

Performance Goal: Maintain the nation's state of good repair transit system backlog to less than \$100 billion (current-year dollars) in 2018.

Indicator: Current-year dollar amount of backlog (dollars in billions)	2014	2015
Performance Target	\$94	\$96

Runway Conditions (FAA)

Performance Goal: Maintain runway pavement in excellent, good, or fair condition for at least 93 percent of the open, paved runways in the NPIAS.

Indicator: Percentage of NPIAS airports with runway pavement in excellent, good, or fair condition.	2014	2015
Performance Target	93%	93%

Railroad Conditions (FRA)

NEW Performance Goal: Eliminate Amtrak state of good repair backlog by obligating at least 25 percent of funds needed for the Northeast Corridor State of Good Repair Plan by 2018.

Indicator: Cumulative percentage of funds obligated to complete the Northeast Corridor State of Good Repair Plan	2014	2015
Target*	N/A	6%

* FRA will develop targets for FYs 2015 to 2017 based on the availability of funds.

Roadway Conditions

Key Strategies:

Improve the condition of highway infrastructure through strategic investment.

The condition of pavement and bridges across the country varies considerably, with many States struggling to maintain current conditions. Over the past five years, more than half of the States reported an increase in the number of bridges on the National Highway System (NHS) that are

candidates for rehabilitation. At the same time, pavement condition declined for about one-third of all travel on the NHS. DOT will continue to make the State of Good Repair goal a top priority in its ongoing commitment to advance strategies and initiatives to improve the safety and condition of the Nation's roads and bridges.

Working with the States, we monitor and report the condition of pavement on the NHS through measures of ride quality; and the condition of bridges across the Nation by tracking the percentage of deck area on deficient bridges. Ride quality condition affects the wear-and-tear on vehicles, the comfort of travelers, fuel consumption, and traffic congestion. In the last decade, the percentage of VMT on NHS roads classified as having good ride quality increased from 46 percent in 2000 to 57 percent in 2012. With an increase in funding through the National Highway Performance Program (NHPP), it is expected that ride quality on the NHS will continue to improve to 64.3 percent by 2018.

Deficient bridge conditions can impact the movement of people and goods through reduced load carrying capacity and geometric constraints. During the past decade, the percentage of deck area on all publicly-owned deficient bridges was reduced from 30.9 percent in 2002 to 28.3 percent in 2012; an improvement due in part, to the investments made as a result of the American Recovery and Reinvestment Act (Recovery Act). We are now reporting conditions on structurally deficient bridges on the NHS, on a subset of all publicly-owned deficient bridges that are most critical to efforts to move the overall number. In 2001, it is estimated that the deck area on 9,700 structurally deficient bridges on the enhanced NHS was 8.9 percent. At the end of 2013, the total deck area on approximately 7,500 structurally deficient bridges on the enhanced NHS was estimated at 6.8 percent. The net change, or decrease in deck area from 2012 to 2013, was approximately 819,000 square meters of deck area, which is equivalent to a bridge some 33 miles long and 50 feet wide.

Next Steps:

Properly maintained roads that meet the standard of a good rated ride tend to stay smoother for longer periods of time, are safer because drivers are less likely to lose control of the vehicle and save money for both the user and taxpayers. A large increase in Federal highway capital investment under the Recovery Act, combined with a decrease in construction materials prices, resulted in a significant improvement in the smoothness of pavements between 2010 and 2012. Despite the positive trends in bridge condition, the challenge of continuing the improvement trends and preserving existing assets remains.

In addition, there are more than 3,800 lane-miles of roads that provide access to our national parks, forests, recreation sites, and Federal and tribal lands. In FY 2015, FHWA anticipates that the condition of approximately 70 bridges and 2,000 lane-miles of road will be improved using Federal Lands and Tribal Transportation Program (FLTTP) funds.

Past research efforts have provided a wide array of tools, technologies, guidance and specifications to support effective management of highway infrastructure. FHWA-sponsored research has done the following:

- Enabled the development of the American Association of State Highway and Transportation Officials (AASHTO) Mechanistic Empirical Pavement Design Guide and accompanying AASHTOWARE Pavement ME™ software. Without the data collected through the Long Term Pavement Performance (LTPP) Program, AASHTO would not have been able to develop this landmark pavement design guide. Continued monitoring of LTPP test sections will provide the data to support future improvements that more accurately predict the performance of modern paving materials.
- Provided improved standards for design and structural evaluation of bridges. In the wake of the I-35W bridge collapse, FHWA undertook and completed research to provide more complete guidance for design and evaluation of gusset plates. This research resulted in newly revised specifications being adopted by the AASHTO. FHWA research is addressing the need to improve connection technologies for prefabricated bridge systems. Research is also being conducted to update cost-effective geosynthetic reinforced soil design and construction methods that integrate bridge spans with roadway approaches.
- Developed a Robotic-Assisted Bridge Inspection Tool (RABIT™) to improve data collection for concrete bridge deck data. This tool provides an accurate, detailed and quantitative assessment of concrete bridge decks in support of sound maintenance and management decisions.
- Improved specifications and test methods for paving materials to achieve greater durability and sustainability. Past accomplishments include improvements to the SuperPave specifications and a test method for coefficient of thermal expansion, a parameter key to concrete pavement performance. FHWA also continues to research and develop guidelines for the expanded use of reclaimed asphalt pavement and fly ash in infrastructure materials.
- Provided analytical tools such as the RealCost and CA4PRS software to support agency pavement design and construction sequencing decisions.

In FY 2015, NHPP Program funds will support important activities associated with implementing MAP-21 including:

- Dedicated funding for maintaining and improving the condition and performance of the expanded NHS;
- Inspection and evaluation of bridges, tunnels, and other highway assets, as well as the provision of training for bridge and tunnel inspectors; and,
- Support for State and local transportation agencies as they work to apply innovative revenue generation, procurement, and project finance strategies to support major infrastructure enhancements.

Surface Transportation Program funds will be used to:

- Improve highway infrastructure condition and performance;
- Demonstrate innovative practices to extend life, improve performance, speed construction; and

- Construct, reconstruct, rehabilitate, resurface, restore, and preserve improvements to highways, including designated routes of the Appalachian Development Highway System and local access roads.

Research, Technology, and Education Program (RTEP) funds will be used to improve knowledge, specifications, design methods, guidance, tools, technologies, and other products that will enable:

- Improvement in the safety-related attributes and characteristics of highway infrastructure;
- Demonstrate innovative practices to extend life, improve performance, speed construction;
- Construction of more durable highway infrastructure that minimizes: i) the duration and frequency of lane closures for both initial construction and future maintenance and rehabilitation measures; and ii) the life-cycle costs of the infrastructure from both an economic and environmental perspective.

Federal Lands Tribal Transportation Program (FLTTP) funds will be used to:

- Complete construction and engineering projects that will improve multimodal access, support increasing visitation, and improve visitor experiences at recreational areas on public lands; and expand economic development in and around Federal lands, while preserving the environment and reducing congestion at our national treasures.
- Support transportation planning, research, maintenance, engineering, rehabilitation, and construction of transportation facilities that provide access to, are within, or are adjacent to tribal lands.

Goal Leaders

Federal Highways Administration:

Walter Waidelich, AA for Infrastructure

Joyce Curtis, AA for Federal Lands Highway

Michael Trentacoste, AA for Research, Development and Technology

Transit Assets (FTA)

Overview

As a Nation, we need to meet an increasing demand for public transportation and bring transit infrastructure into a state of good repair. More than one-quarter of the Nation's bus and rail assets are in marginal or poor condition. The proportion of assets in marginal or poor condition jumps to one-third in the largest and oldest rail transit agencies, many of which suffer from chronic under-investment and less than optimal application of asset management practices. According to the FY 2023 Performance and Accountability Report, the Nation's transit systems maintenance backlog now exceeds \$86 billion. Just to

keep this backlog from growing, an additional \$2.5 billion in spending from Federal and non-Federal sources would be needed each year.

Next Steps

To bring our transit systems into a state of good repair, FTA will do the following:

- FTA will provide financial assistance, policy direction, technical expertise, and grant compliance oversight aimed at improving transit assets. Disability-related transit elements that ensure accessibility, such as elevators, escalators, lifts, boarding, and communications technology, are integral to a well maintained system and need to be appropriately prioritized.
- Require our grant recipients, especially the largest systems, to develop transit asset management plans, including an asset inventory with condition assessments and investment prioritization.
- Conduct outreach to the transit industry through roundtable meetings, technical assistance products, research reports, and training sessions to encourage knowledge-sharing of best practices in transit asset management.
- Administer the State of Good Repair Formula Grants program to fund capital projects to maintain transit systems.

Goal Leader

Robert J. Tuccillo, Associate Administrator for Budget and Policy

Runway Conditions (FAA)

Overview

We face a number of challenges as FAA takes steps to ensure that runway conditions at our airports are maintained in a state of good repair. We fund infrastructure development at eligible public-use airports. Funding for routine maintenance is limited to those airports that do not have sufficient revenue sources for periodic repairs, usually the smaller non-hub primary and non-primary airports. Airports of all sizes rely on our financial assistance for significant rehabilitation, resurfacing, and reconstruction of runways and major taxiways.

Periodic maintenance of runways, particularly resurfacing, is a cost effective way to delay the need for major runway rehabilitation. We fund a broad range of capital infrastructure development at most airports in the National Plan of Integrated Airports System (NPIAS). However, airports are generally responsible for funding periodic and ongoing maintenance. More significant rehabilitation, resurfacing

or reconstruction projects may be funded through a variety of funding sources, including Airport Improvement Program (AIP) grants, passenger facility charge revenues, airport revenues and other funding sources. Deferred or delayed maintenance creates an increased 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. Our goal is to maintain at least 93 percent of the Nation's runways in excellent, good, or fair condition. This level is important because it is intended to limit the number of runways undergoing significant reconstruction at the same time.

Next Steps

- Update priorities for infrastructure investments including runway capabilities, in order to maintain and enhance existing airport capacity across all types of airports; and
- Update standards and action plans through the Airport Obstruction Standards Committee for runway infrastructure and procedures such as end-around taxiways.

Rail Conditions (FRA)

Overview

The Amtrak Northeast Corridor from Boston, Massachusetts to Washington, D.C., is the backbone of the rail transportation network in the Northeastern U.S. It provides high-speed passenger rail service that links four of the ten largest metropolitan areas in the country. When combined with connecting regional corridors and commuter services, the Northeast Corridor region serves nearly 50 million people. Amtrak is faced with an approximately \$5.8 billion backlog of state of good repair projects that must be addressed to ensure the safety and reliability of these services.

Key Strategies and Next Steps

- Assist Amtrak in updating the Northeast Corridor State of Good Repair Spend Plan to reflect recent investments in the Corridor;
- Work with Congress to pass a long-term reauthorization bill that provides financial assistance to eliminate the backlog of state of good repair projects by FY 2022; and
- Oversee federally funded projects to ensure delivery on time and within budget.

Goal Leader

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

Strategic Objective 2.2—Sustain Assets

Reduce the costs of sustaining the Nation’s transportation infrastructure, equipment, facilities, and technology by instilling proven asset management practices through partnerships with other governmental agencies and infrastructure owners.

Performance Overview

Moving Ahead for Progress in the Twenty-first Century (MAP-21) requires States to develop and implement asset management plans and performance plans specifically for highways and bridge infrastructure. MAP-21 expands the National Highway System (NHS), an approximate 223,000-mile network composed of the Interstate Highway System, all principal arterial routes including border crossings, intermodal connectors including toll facilities, and a strategic highway network and its connectors that are important to national defense. The NHS provides mobility to the vast majority of the Nation’s population and to almost all of its commerce, supports national defense, and promotes intermodal connectivity. MAP-21 also establishes a new National Transit Asset Management System, requiring a strategic approach to asset management by grantees. We will encourage our partners to adopt and use asset management practices through training and technical assistance, research and demonstration projects, and by adopting common performance measures and reporting systems.

DOT Operating Administrations: Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and Office of the Transportation Secretary (OST).

PERFORMANCE PLAN

Highway Infrastructure (FHWA)

Performance Goal: Complete a Final Rule to establish a process for development of a Transportation Asset Management Plan by 2016; and all States in compliance by the end of 2018

Process Indicator: Percentage of travel on the NHS and Interstate meeting pavement performance standards for good rated ride quality.

Highway Infrastructure

Key Strategies:

Under MAP-21, the NHS was redefined to reflect highways of national significance and national measures of condition and performance on the NHS will be developed. States will be required to set targets for each of the national measures, and it is anticipated that States will make significant progress toward the achievement of their targets. In addition, minimum condition levels will be

established for Interstate pavements before allowing National Highway Performance Program (NHPP) funds to be spent to meet other needs. States are also required to maintain their NHS bridge conditions so that the deck area on bridges categorized as structurally deficient does not exceed 10 percent for three consecutive years. In 2016, a determination of compliance will be made for bridges using these new minimum condition requirements.

States select bridge projects and exercise considerable flexibility in prioritizing how funds are used. FHWA's role in programming projects is limited. FHWA is working collaboratively with American Association of State Highway Transportation Officials (AASHTO), metropolitan planning organizations (MPOs), and other stakeholders to identify performance measures for pavements and bridges including some activities and processes that will involve a rulemaking. FHWA initiated rulemakings for both requirements in 2013 with an implementation horizon of 2015. For pavements, a similar determination will be made after a rulemaking is completed that establishes the appropriate performance measures.

MAP-21 also requires the development of pavement and bridge condition performance measures and targets that support the FLTP. Before allocations are made, Federal participants will be required to submit program proposals that describe how the national goals, as well as the goals of Federal Land Management Agencies, are supported by the use of the funds.

Next Steps

MAP-21 requires States to develop and implement asset management plans and performance measures for the IHS and NHS after a rulemaking that will be conducted by FHWA is completed. Efforts are underway to engage with stakeholders to better understand how the processes and measures can be established and implemented. It is estimated that FHWA will invest \$6 million to \$10 million to help States standardize the collection and analysis of the pavement and bridge data within the asset management plan, as well as develop risk and investment strategies. Most states use their pavement and bridge management systems to allocate the assigned dollars. This funding will help States establish standards for data collection and analysis. Also, a portion of the funds will be used to improve the Highway Performance Monitoring System (HPMS) and performance data quality assurance and control processes.

MAP-21 requires an assessment of those efforts approximately every two years after the rule is published. Achieving performance levels beyond the current pavement condition targets initially set by the States after measures are determined will require project prioritization and additional funding at Federal, State and Local levels. Even when project investments are optimized to maximize returns, they are only expected, at best, to maintain existing performance forecasts.

With the baseline reviews completed under the new NBIP oversight process, FHWA will continue to monitor actions under established plans of corrective actions and improvement plans and continue monitoring compliance with the new metrics.

Current asset management initiatives include:

- Improved organization and reporting of infrastructure inventory and condition information;
- Evaluation of performance along a single Interstate corridor through several States; and
- Evaluation of approaches to measure infrastructure performance.

The implementation of a performance-based federal program will allow for a better understanding of how investments have led to the achievement of performance outcomes. This information will be used to develop improved predictive models that, when applied, will increase the successful return from transportation investments made to improve performance.

Responsible Officials:

Federal Highways Administration:

Walter Waidelich, AA for Infrastructure

Joyce Curtis, AA for Federal Lands Highway

Michael Trentacoste, AA for Research, Development and Technology

Transit Partnerships

Public transportation systems, especially in our Nation's largest metropolitan areas, some of which are over one hundred years old, suffer from chronic under-investment and less than optimal application of asset management practices. More than one-quarter of the Nation's bus and rail assets are in marginal or poor condition. The proportion of assets in marginal or poor condition jumps to one-third in the largest and oldest rail transit agencies. More widespread adoption of best practices in transit asset management will assist the industry in developing an inventory of the assets they need to manage, and prioritizing investments for the greatest state of good repair impact.

Key Strategies and Next Steps

- FTA will establish a definition of state of good repair through rulemaking, including objective standards for measuring the condition of transit assets, and establish a framework for transit agencies to set individual targets for their systems;
- Require our grant recipients, especially the largest systems, to develop transit asset management plans, including an asset inventory with condition assessments and investment prioritization;

- Conduct outreach to the transit industry through roundtable meetings and training sessions to encourage knowledge-sharing of best practices in transit asset management.

Strategic Goal:

Economic Competitiveness

Promote transportation policies and investments that create ladders of opportunity, support strong communities, and bring lasting and equitable economic benefits to the Nation and its citizens.

Strategic Objective 3.1—Enhance Productivity and Growth

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

Performance Overview

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

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

PERFORMANCE REPORT

Performance Measure	Actual					2013		2013 Target Met or Not Met
	2008	2009	2010	2011	2012	Target	Actual	
High Performance Passenger Rail (FRA)								
Agency Priority Goal: Number of corridor programs that will achieve initial construction.	N/A	N/A	N/A	N/A	3	1	1	Met

Performance Measure	Actual					2013		2013 Target Met or Not Met
	2008	2009	2010	2011	2012	Target	Actual	
Agency Priority Goal: Number of individual construction projects that will achieve initial construction.	N/A	N/A	N/A	N/A	8	14	19	Met
Modernizing the Automation Platform at the ARTCCs (FAA)								
Agency Performance Goal: Number of ARTCCs achieving Initial Operating Capability for ERAM	N/A	N/A	N/A	2	7	11	8	Not Met
Roadway Congestion (FHWA)								
Maintain Travel Time Reliability in urban areas as measured by a reduction in the Travel Time Index to No More Than 1.20 in 2018.	1.21(r)	1.19(r)	1.21	1.21	1.20	1.21	1.21*	Potentially Met
Travel time reliability in freight significant corridors as measured by the buffer index. - Discontinued	14.4	13.8	13.7	13.8	13.9	15.0	15.0	Met
Maintain Travel Time Reliability in Top 25 Domestic Trade Corridors at or below 17.0 through 2018. - New	n/a	n/a	n/a	n/a	n/a	17.0	16.3	Met
Notes: (r) Revised; * Preliminary Estimate; ^ 2011 and 2012 Actuals Available Following Release of Conditions and Performance Report								
Domestic and International Commerce (MARAD)								
Total Operating Days U.S.-flagged, foreign commercial ships enrolled in the Maritime Security Program are available to meet DOD requirements.	N/A	N/A	21,436	21,557	21,593	19,200	21,794	Met

Performance Measure	Actual					2013		2013 Target Met or Not Met
	2008	2009	2010	2011	2012	Target	Actual	
Number of Twenty Foot Equivalent (TEU) containers transported across America's Marine Highway routes.	N/A	N/A	N/A	1,061	8,221	15,000	9,498	Not Met

High-Performance Rail (FRA)

Initial Investment Decisions. Between August 2009 and April 2011, FRA evaluated nearly 500 applications submitted by 39 states, the District of Columbia, and Amtrak, requesting more than \$75 billion. The Government Accountability Office commended FRA's review and selection process, stating, "FRA established a fair and objective approach for distributing [Recovery Act] funds and substantially followed recommended discretionary grant award practices used throughout the government." The table below highlights the key corridors in which Federal investments have been made.

Federal High-Speed And Intercity Passenger Rail Program Investments, through FY 2013						
Type of Corridor	Miles Under Development		Federal Investment		Population Served	
	Number of Miles	Percentage of Total	Millions of Dollars	Percentage of Total	Millions of People	Percentage of U.S. Population
Core Express	1,250	20%	\$ 4,919	48.8%	74	24%
Regional	3,127	50%	\$ 4,578	45.4%	102	33%
Feeder	1,911	30%	\$ 555	5.5%	39	8%
Other	<i>n.a.</i>	<i>n.a.</i>	\$ 25	0.2%	<i>n.a.</i>	<i>n.a.</i>
TOTAL	6,288	100%	\$10,077	100.0%	135	44%*

* Cumulative figure excludes double counting of populations served by more than one corridor type.

n.a. Not applicable.

Projects Completed and Rail Services Improved. Project sponsors in 16 States have substantially completed 25 projects, resulting in upgraded stations, improved operational efficiency, and enhanced services. Passenger rail service has been extended to Freeport and Brunswick, Maine, and track, signal, and bridge improvements are now in-service on Amtrak's

Vermont, reducing travel times by nearly 30 minutes. Initial reliability and travel time improvements have also been achieved on the Chicago-St. Louis, Chicago-Detroit, Los Angeles-San Diego, and Philadelphia-Harrisburg corridors. Four State rail plans, seven corridor plans, and two sets of engineering designs have also been completed.

Construction Underway throughout the United States. Construction is underway on 27 projects for nearly \$1.7 billion in Federal investments.¹ An additional 17 construction projects began work in summer 2013, the biggest season to-date for the High-Speed and Intercity Passenger Rail program. FRA's partners are also investing several million dollars to compliment these Federal investments; the freight rail industry in 2013 is investing \$24.5 billion of private capital in the Nation's rail network, which in some cases will benefit passenger rail operators that utilize freight rail tracks and infrastructure.²

Future Projects. Seventy-three planning, environmental analysis, and engineering projects are underway or nearing completion across the country. The products that result from these efforts will lay the foundation for future construction projects and service improvements.

Modernizing the Automation Platform at the ARTCCs (FAA)

Progress Update

The En Route Automation Modernization (ERAM) System is central to our ability to transform our nation's airspace from radar-based to satellite-based operations. ERAM replaces the 1970s era "Central Computer Complex HOST" used at Air Route Traffic Control Centers (ARTCCs) around the country to guide airplanes flying at high altitudes. The FAA uses site milestones to measure progress toward this goal. As of September 30, 2013, the FAA has achieved IOC at 8 of the sites planned for FY 2013. The total number of sites that have achieved IOC on ERAM is now 17. By the end of the 4th quarter, the ERAM program achieved an additional IOC at Dallas-Fort Worth air route traffic control center.

Additional detail on the current status of ERAM program milestones appears below:

- First (Key) site Operational Readiness Date (ORD) by end of 2nd quarter FY 2012. (Status: This was achieved on March 23, 2012 when Salt Lake City declared ORD)

¹ As of March 5, 2013.

² American Association of Railroads, "[Freight Railroad Plan to Invest \\$24.5 Billion in Private Dollars in 2013](#)," 6 February 2013.

- First site ORD on Release 3 by end of 1st quarter FY 2013. (Status: This was achieved as of August 2012).

The three remaining ERAM IOC events are planned for FY 2014. In addition, by the end of FY 14, the program is planning to achieve 5 ORDs.

Due to FY 2013 sequestration, FAA was unable to achieve its target. Immediately prior to sequestration, the controllers who serve as subject matter experts on ERAM implementation teams were recalled to their home facilities to ensure their readiness to resume their controller duties prior to the initiation of employee furloughs. During this time, many of the ongoing implementation activities at remaining sites came to a halt as the FAA focused on ensuring the safe and efficient operation of the air traffic control system at facilities around the country.

After Congress enacted legislation allowing FAA to transfer funds from its Airport account to its Operations account, the agency was able to quickly end all employee furloughs. A high priority after employee furloughs ended was to reengage the ERAM implementation teams, which FAA accomplished in coordination with the controller's union. However, due to other budget reductions, training was not available and a decision was made to defer initial operations at remaining sites until after the busy summer months. As such, three of the IOCs were not completed in FY 2013 as planned. The program will continue until all sites are fully operational. The delay will cause an increase in the cost of the program.

Highway Congestion (FHWA)

After peaking in urban areas at 1.24 in FY 2007, the Travel Time Index (TTI) declined during the period in which travel nationwide also declined following the economic recession. In FY 2010, the TTI increased to 1.21 due to a return to normal levels of traffic flow and remained at this level during FY 2011. In FY 2012, the TTI declined slightly to 1.20, but preliminary FY 2013 results show the TTI increasing back to its recent figure of 1.21. The recent trends in TTI suggest that traffic congestion has improved slightly overall in these urban areas, even though significant delay from non-recurring events such as traffic crashes still occur.

In FY 2013, FHWA provided technical assistance and guidance to States in implementing the *Real-Time System Management Information Final Rule*; conducted traffic incident management workshops in 14 urban areas; and conducted decision-maker meetings in 14 urban areas and States. FHWA also conducted 31 Strategic Highway Research Program 2 (SHRP2) Traffic Incident Management Responder Train-the-Trainer sessions in urban areas in 22 States, preparing nearly 2,000 individuals to serve as instructors, and reaching over 16,500 students through post-classroom sessions led by the new instructors; and began providing direct technical assistance to 27 States and large metropolitan areas to help them better focus on improving operation of the transportation system.

In FY 2013, FHWA implemented a robust awareness, capacity building, and technical assistance program that included webinars that reached over 3,000 participants; individually tailored technical assistance events for five States; a National Project Oversight Managers conference that provided 25 technical training sessions for more than 90 attendees; project management training for over 25 FHWA employees; and publication of resource materials. Additionally, a Public-Private Partnership toolkit was developed and tested. The toolkit will help to ensure that Public-Private Partnership procurements are executed in a manner that serves the public.

In FY 2013, reliability on freight corridors declined as the buffer index increased to an average of 15.0. This is commensurate with an increase in economic activity, which requires an increase in freight movement and traffic. FHWA provides significant policy, program delivery, research and analytical efforts to work with States, MPOs, and private sector partners for the improvement of performance of the freight system. For example, FHWA delivered courses and webinars on freight planning, engaging the private sector, freight and land use, and NEPA. In addition to workshops and webinars, FHWA held a Freight Partnership meeting in conjunction with the AASHTO to further engage States and MPOs in a discussion on freight issues and collaborative solutions. FHWA is actively supporting the implementation of MAP-21 freight provisions. These focus on encouraging development of state freight plans and state freight advisory committees, freight performance measurement, development of new or improved data and analytical tools, expansion of truck parking, as well as establishing a National Freight Network, including designation of a Primary Freight Network and supporting the development of Critical Rural Freight Corridors to focus resources on key freight movement corridors and regions.

Credit Assistance Program

To further assist project sponsors, the multi-modal Project Finance Center was established. The TIFIA program delivered \$1.1 billion in credit support to advance the Presidio Parkway (CA), Downtown Tunnel/Midtown Tunnel (VA), and Crenshaw Light Rail projects (CA). In the aggregate, these loans will support \$4.7 billion of public and private investment in infrastructure.

Domestic and International Commerce (MARAD)

For FY 2013, MARAD reported 60 vessels enrolled in the MSP program. MARAD monitored the agreements with the ship owners to maintain the 60 ships enrolled in the program. MARAD achieved the agency target of 19,200 operating days, and reports 21,794 operating days at the end of FY 2013.

The original projection of 15,000 TEUs on American Marine Highway Routes for FY 2013 was based on services that were expected to commence by the second quarter of FY 2013. However, the service did not begin until the 3rd quarter, which significantly impacted the overall total. Additionally, work is ongoing to identify market viability of establishing at least one new Marine Highway service for passengers.

PERFORMANCE PLAN

High Performance Passenger Rail (FRA)

Agency Priority Goal: By September 30, 2015, initiate construction on 65 passenger rail construction projects.

Indicator: Number of passenger rail construction projects.	2014	2015
Performance Target	60	65

Agency Priority Goal: By September 30, 2015, substantially complete 74 planning, preliminary engineering/environmental analysis projects.

Indicator: number of projects completed.	2014	2015
Performance Target	51	74

Modernizing ARTCC Computer System (FAA)

Agency Priority Goal: Air traffic control systems can improve the efficiency of airspace. By March 31, 2015, replace a 40-year old computer system serving 20 air traffic control centers with a modern, automated system that tracks and displays information on high altitude planes.

Indicator: The number of sites obtaining an Operational Readiness Decision for ERAM.	2014	2015
Performance Target	4	5

Highway Congestion (FHWA)

Performance Goal: Maintain Travel Time Reliability in urban areas as measured by a reduction in the Travel Time Index to No More Than 1.20 in 2018.

Indicator: Travel Time Index (A representation of the extra time a driver spends in traffic during congested traffic as compared to light traffic. A TTI of 1.20 = an extra 4 minutes.)	2014	2015
Performance Target	1.20	1.20

Performance Goal: Maintain Travel Time Reliability in Top 25 Domestic Trade Corridors at or below 17.0 through 2018. - REVISED

Indicator: Freight buffer index (A representation of the extra time that would have to be added to the average travel time to ensure on-time arrival 95% of the time.)	2014	2015
Performance Target	17.0	17.0

Performance Goal: All Metropolitan Planning Organizations (MPO) serving a Transportation Management Area (TMA) develop and utilize a congestion management process (CMP) in making programming and project decisions within five years. - NEW

Indicator: Number of MPOs using CMPs in making programming and project decisions.	2014	2015
Performance Target	TBA	TBA

International and Domestic Commerce (MARAD)

Performance Goal: Maintain the US presence in foreign maritime commerce through ships enrolled in the Maritime Security Program (MSP) at 19,200 vessel operating days a year, ensuring availability of sealift capacity for the Department of Defense.

Indicator: Number of days	FY 2014	FY 2015
Performance Targets	19,200	19,200

Performance Goal: In FY 2015, transport 15,000 TCU containers across America's Marine Highway routes.

Indicator: Number of twenty-foot container units (TCU).	FY 2014	FY 201r5
Performance Targets	12,000	15,000

High-Performance Passenger Rail (FRA)

Agency Priority Goal: *By September 30, 2015, initiate construction on 65 passenger rail construction projects and substantially complete 74 planning, preliminary engineering/ environmental analysis, and construction passenger rail projects.*

Overview

High-speed and intercity passenger rail represents an innovative approach to addressing the complex 21st century transportation challenges facing the United States. By 2050, the U.S. population will likely increase by more than 100 million people. Highway and airport congestion are increasing, with related severe economic and environmental impacts. To address these challenges and strengthen the country's competitive position in an increasingly global economy, the U.S. Department of Transportation has a comprehensive program to develop high-speed and intercity passenger rail. FRA manages an approximately \$20 billion grant and loan portfolio focused on:

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

Strategies

For the High-Speed and Intercity Passenger Rail Program, FRA selected 153 projects across the country, with nearly 85 percent of rail investments concentrated in 6 corridors (San Francisco-Los Angeles, Boston-New York City-Washington, D.C., Seattle-Portland-Eugene, Charlotte-Washington, D.C., Chicago-St. Louis, and Chicago-Detroit). These corridors are in five mega-regions, in which about 65 percent of the U.S. population resides and which will likely absorb the bulk of future population growth.

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

Next Steps

To ensure that grantees deliver projects on schedule, within budget, and with their specified scopes and purposes, FRA has established a monitoring program to oversee grantees' project implementation and provide guidance to assist project development and delivery. Project monitoring is a comprehensive review of a grantee's compliance with the grant conditions, as well as an assessment of the grantee's performance in meeting milestones. Monitoring also proactively identifies issues and facilitates work with the grantee to address concerns or implementation impediments through technical assistance. Monitoring by FRA staff and contractors occurs in conjunction with other types of oversight, such as frequent and substantive communications between FRA and its grantees. Monitoring activities can reveal opportunities for FRA to provide grantees training and technical assistance to increase the likelihood of project success. Results, including positive observations, are discussed in detail with the grantee, including recommendations to resolve compliance and performance concerns.

FRA uses a risk-based methodology and professional judgment to prioritize on-site monitoring reviews. The methodology considers detailed risk indicators, such as federal investment amount, last review date, and previous monitoring findings. Professional judgment factors include schedule efficiencies, deliverable quality, and recipient responsiveness. FRA has also established a tool that tracks among other pieces of information the initiation and substantial completion of HSIPR construction projects. FRA uses this tool as part of its monitoring program to oversee grantees' project implementation and provide guidance to assist project development and delivery.

Goal Leaders

Joseph Szabo, Federal Railroad Administrator

Corey Hill, Director of the Office of Passenger and Freight Programs, Federal Railroad Administration

Modernize the Automated Platform at the ARTCCs (FAA)

Agency Priority Goal: *By March 31, 2015, replace a 40-year old computer system serving 20 air traffic control centers with a modern, automated system that tracks and displays information on high altitude planes.*

Overview

The En Route Automation Modernization (ERAM) System is central to our ability to transform our nation's airspace from radar-based to satellite-based operations. ERAM replaces the 1970s era "Central Computer Complex HOST" used at Air Route Traffic Control Centers (ARTCCs) around the country to guide airplanes flying at high altitudes. The new system allows us to maximize the use of airspace, substantially increasing the number of flights that can be tracked and displayed. The new system also offers enhanced back-up capability.

ERAM continues to be an Agency Priority Goal for the Department of Transportation. FAA has been tracking Initial Operating Capability (IOC) on ERAM. IOC is a milestone met when the system is deemed acceptable to be introduced into the operational environment at an ARTCC. A local and national plan must also be in place to support the facility's goal toward extended and continuous operations.

Before 2013, ERAM was operating at the following centers: Albuquerque, NM; Salt Lake City, UT; Seattle, WA; Denver, CO; Minneapolis, MN; Chicago, IL; Oakland, CA; Los Angeles, CA; and Houston, TX. In FY 2013, ERAM achieved IOC at the following centers: Kansas City, MO; Boston, MA; Indianapolis, IN; New York, NY; Cleveland, OH; Washington, DC; Memphis, TN; and Ft. Worth, TX.

Because of the progress FAA has made on getting ERAM to IOC at most of the ARTCCs, we will now be measuring the number of Operational Readiness Dates (ORD) declared for ERAM at an ARTCC. ORD is the commissioning of a new system into the National Airspace System (NAS). ORD is the culmination of a series of events and milestones that demonstrate confidence and operational suitability of a system. ORD occurs prior to decommissioning of a legacy system, and is a separate activity from decommissioning. Within ERAM, achievement of ORD is predicated by achievement of continuous operations and completion of national-level guidance distributed to sites by the collaborative ERAM work group co-chaired by the FAA and representation by the National Air Traffic Controller Association (NATCA).

Strategies

- Perform ERAM-related development testing and implementation.
- Demonstrate new Automatic Dependent Surveillance-Broadcast (ADS-B) applications on the ERAM platform.
- 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.

Goal Leaders

Federal Aviation Administration:

Michael P. Huerta, Administrator

Teri L. Bristol, Chief Operating Officer, Air Traffic Organization

Highway Congestion (FHWA)

Overview

Highway congestion adversely affects the Nation's economy, communities, and quality of life. According to the 2012 Urban Mobility Report, traffic congestion remained relatively unchanged during the past year in American cities. It is estimated that congestion creates a \$121 billion annual drain on the U.S. economy in the form of 5.5 billion lost hours resulting from travel delay and 2.9 billion gallons of wasted fuel. Congestion caused the average peak-period traveler to spend an extra 38 hours of travel time and to consume an additional 19 gallons of fuel annually, which amounts to a cost of \$818 per traveler. While automobile and truck congestion currently imposes a relatively small cost on the overall economy (about 0.6 percent), the cost of congestion has risen at a rate of almost 7 percent per year over the past 25 years, or more than double the growth rate of GDP.

Congestion may contribute minimally to the overall economy, but congestion at freight bottlenecks is estimated as a major cost to the direct users by almost \$8 billion a year. Additionally, congestion impacts the overall supply chains for goods movement, which is not as easily estimated yet and is a recurring concern of the freight community. Impacts to supply chains by congestion increase the cost of production and consumer prices. Businesses increasingly exhibit highly elastic responses to inefficient supply chains by shifting their operations and jobs to locations where these efficiencies are achieved.

Over the next 40 years, the U.S. population is expected to grow by 43 percent and the GDP is expected to almost triple. To support this growth, the demand for both freight and passenger transportation is expected 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. MAP-21 expanded a National Highway System (NHS) that more comprehensively supports economic activity and quality of life. While the NHS comprises 53 percent of U.S. highway border crossings, 98 percent of the value of total truck trade with Canada and Mexico moves on this network.

DOT uses two metrics to measure congestion. **The Travel Time Index (TTI)** represents the extra time a driver spends in traffic during congested traffic as compared to light traffic. A TTI of 1.20 means that a trip that normally takes 20 minutes in light traffic would take 24 minutes, or 4 minutes longer, on average in congested traffic. Therefore, a lower TTI is better.

The Freight Buffer Index, expressed as a percentage, 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. This measure of travel time reliability in key freight corridors is derived from measured commercial vehicle average speeds for 25 freight significant domestic trade routes annually. The trade routes are determined by identifying the top 25 trading partners within the nation using latest update to the Freight Analysis Framework.

FHWA revised its Freight Buffer goal based on an analysis of 2011-2013 data for these corridors obtained from American Transportation Research Institute. The analysis shows more congestion on these new critical freight corridors due to an increase in economic activity and, therefore freight flow, in recent years. <http://ops.fhwa.dot.gov/freight/time.htm> FHWA hopes the index will be lower than 17.0, the level of activity warranted an adjustment on the target.

FHWA provides tools for States and the MPOs serving a TMA that seek to develop or improve a congestion management process (CMP) for use in making investment decisions. Case studies document the ways in which numerous jurisdictions have structured their CMP, how they collect, analyze and use data, and how the CMP is integrated with the development of the metropolitan transportation plan, and other planning processes. By ensuring that all States and Metropolitan Planning Organizations (MPOs) are utilizing the CMP as part of their decision-making process within five years, more effective strategies can be brought to bear on traffic congestion during the planning and programming phase.

Strategies and Next Steps

FHWA has made significant progress on congestion reduction efforts. These efforts have led to a number of programs and analytical tools to improve traffic operations and strategically target capital investments to improve congestion. For example, programmatic and analytic efforts have:

- Increased availability of 511 traveler information telephone service for nearly 75 percent of the American public by 2013;
- Established requirement for a Real-Time System Management Information program;
- Led to the development of the Freight Analysis Framework and Freight Performance Measurement tools and approaches for identifying areas for improvement;
- Deployment of surface transportation weather monitoring infrastructure in 39 States, five local agencies, and four Canadian provinces;
- Development, testing, evaluation, and implementation of innovative adaptive control, corridor management, and congestion pricing strategies; and
- Ensured 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 improving reliability in major freight corridors and connections through analysis of bottlenecks, arterial connections, accessibility, truck volumes and multi-corridor approaches; international border crossings, accessibility and economic competitiveness; and intermodal connectors. FHWA also seeks to improve the capacity of States and MPOs serving TMAs to develop congestion management strategies through the transportation planning and Congestion Management Processes. These strategies will be targeted at reducing single occupant vehicle travel, improving transportation system management and operations, and better integrating modes.

Previous research activity led to the development of a model that links population, freight demand, driver behavior, and other data to vehicle-miles traveled (VMT). Federal, State, and local agencies are currently using the model to forecast VMT and perform a variety of scenario analyses that aid in planning and decision-making. MPOs and other public and private entities have gained valuable insights during the model development and its subsequent publication and use.

Current and future efforts will greatly enhance tools for FHWA, States, MPOs and regional and local governments to assess congestion and target operational and capital improvements most appropriately. FHWA is engaged in developing analytical tools for performance measurement to help others in developing their own programs assess congestion and other performance characteristics. FHWA is providing access to a national data set of average travel time for cars and trucks that States and MPOs will access to support their measurement programs. Additionally, FHWA is focusing on a comprehensive set of freight performance measures by developing best practices on these measures and providing a primer for the application and use of these measures to increase understanding of freight flow impacts.

These efforts support the significant focus on freight in MAP-21 for the development of national freight policy, the prioritization of projects to improve freight movement, the establishment of freight stakeholder advisory committees and development of statewide freight plans and Section 1203 requiring reporting on freight performance. An efficient freight transportation network is

the ultimate goal of the MAP-21 and freight congestion reduction efforts. With such focus on freight flow improvements, FHWA hopes for greater achievements in congestion reduction, which will create efficiencies for all highway travel.

MAP-21 requires DOT to establish a national freight network and develop a national freight strategic plan, which will be in effect a National Freight Policy. These actions will guide investment decisions subject to the Secretary's discretion, provide States with a national perspective for their planning effort, influence State freight mobility decisions, and provide context to the potential increase of the Federal share for freight-oriented projects. Further, DOT is directed to encourage each State to establish a freight advisory committee and develop a freight plan that provides comprehensive strategies for immediate and long-range activities and investments with respect to freight. To assist the States in meeting MAP-21 requirements such as developing Statewide Freight Plans, determining freight project priorities and in addressing performance, FHWA will be providing States and MPOs access to a national vehicle probe data set for average travel times. This information will assist in the analysis of passenger and truck congestion analysis. This is particularly important since States now have broadened flexibility to use Federal funding to improve performance on the designated national freight network. Lastly, DOT will develop new and improve existing tools to support an outcome-oriented, performance-based approach to evaluate proposed transportation freight projects.

FHWA will monitor efforts of MPOs serving TMAs to develop a congestion management process that identifies and evaluates strategies that manage demand, reduce single occupant vehicle travel, improve transportation system management, and enhance integration across modes.

National Highway Performance Program (NHPP) funds will be used to:

- Establish techniques to measure congestion and assess the performance of the highway system, including measuring the relationship between freight movement and congestion;
- Establish techniques and tools to strengthen routine traffic operations and control practices, and also to proactively manage the transportation system during disruptions such as traffic incidents, work zones, adverse weather, special events, and emergency situations;
- Provide useful, real-time information to travelers; and,
- Investigate and implement innovative techniques that better balance transportation supply and demand through ridesharing, parking demand management, and congestion pricing.

Surface Transportation Program funds will be used to:

- Establish techniques and tools, including infrastructure- based ITS, to strengthen routine traffic operations and control practices and to proactively manage the transportation system during disruptions such as traffic incidents, work zones, adverse weather, special events, and emergency situations;
- Demonstrate innovative practices that speed construction and reduce impact to effective and safe movement of goods and people;
- Provide useful, real-time information to travelers; and,

- Investigate and implement innovative techniques that better balance transportation supply and demand through ridesharing, parking demand management, and congestion pricing.

Research, Technology, and Education Program funds will be used to:

- Develop and promote techniques to measure congestion and to assess the performance of the highway system;
- Develop techniques to measure the role that 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 new tools and improve existing tools to support an outcome-oriented, performance-based approach to evaluate proposed freight-related and other transportation projects;
- Develop techniques and tools to proactively manage the transportation system during disruptions such as traffic incidents, work zones, adverse weather, special events, and emergency situations;
- Demonstrate innovative practices that speed construction and reduce impact to effective and safe movement of goods and people;
- Develop and share successful techniques for providing useful, real-time information to travelers;
- Provide guidance materials and tools to decision-makers and senior officials that enable further regional coordination and collaboration activities;
- Implement outreach and capacity-building programs focused on innovative project finance, revenue generation, and procurement strategies;
- Provide tailored technical assistance to advance the financing of major projects and ensure that stewardship protocols related to cost estimates, financing, revenue generation, and procurement practices are in place;

Responsible Officials:

Jeff Lindley, AA for Operations, FHWA

David Kim, AA for Policy and Governmental Affairs, FHWA

Domestic and International Commerce (MARAD)

Overview

Maritime Administration's (MARAD) 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. The Maritime Security Program also contributes to security and preparedness objectives.

The Maritime Security Act of 2003 authorized the enrollment of 60 ships in the MSP. Each enrolled ship is required to operate in the U.S. foreign commerce for a minimum of 320 days each fiscal year to receive full MSP payments. In addition, MARAD approves changes in MSP contracts that improve the quality of the MSP fleet to ensure the retention of modern and efficient ships and U.S. citizen crews. Any ship offered as a replacement for an existing MSP vessel must be less than 15 years old and must be approved by the Maritime Administration and the U.S. Transportation Command as the most militarily useful and commercially viable vessels available.

MARAD also tracks MSP ship operator's compliance in meeting the minimum required operating days of at least 320 days a ship per year, which equates to 19,200 operating days per year. MARAD monitors operating days on a monthly basis to verify that MSP ships are operating as required.

MARAD's American Marine Highway (AMH) program facilitates domestic transport of heavy weight commodities, such as containerized agricultural products. Shippers using Marine Highway services are able to maximize the weight capacity of containers than from what trucks are able to carry, thereby reducing the per unit transportation cost and helping U.S. exports compete in the global market. Every container transported across the marine highway routes is equal to the removal of one truck on our roadways. In addition, by reducing landside congestion and increasing the resiliency of the national transportation system, these fuel-efficient services reduce the nation's dependence on petroleum, contribute to transportation safety, and help to diminish the carbon footprint of freight.

MARAD measures performance of the AMH program by volume of containers, "twenty-foot equivalent units" (TEUs) moved by grant-program-assisted services. The container TEU metric is an indirect indicator of grant funded program performance and permits further downstream calculation of program benefits.

Strategies and Next Steps

In FY 2015, we anticipate meeting MARAD's performance goal of 19,200 ship operating days for the 60 vessels operating in U.S. foreign commerce, as we continue to monitor the agreements with the ship owners to ensure compliance with the terms and conditions in their contracts.

Primary activities include:

- 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.

Goal Leaders

Kevin Tokarski, Associate Administrator for National Security, MARAD.

Credit Assistance Program (FHWA)

Overview

Highway congestion may be addressed through operational improvements or capacity additions. However, traditional funding sources are often inadequate 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 investment requirements. Federal credit support from sources such as the Transportation Infrastructure Finance and Innovation Act (TIFIA) program can provide tremendous leveraging opportunities. In addition, public-private partnerships can attract private sector financial participation in major, costly, and complex projects.

Strategies and Next Steps

FHWA will continue to develop analytical tools to assess innovative finance and revenue generation strategies, as well as provide resources that support State and local transportation agencies as they work to apply innovative revenue generation, procurement, and project finance strategies to support major infrastructure improvements. With MAP-21, DOT can now provide up to \$17 billion in TIFIA credit support to eligible infrastructure projects. For some projects, TIFIA provides the only path forward to a viable plan of finance. For example, the \$452 million TIFIA loan approved by the DOT in December 2013 was critical to delivery of the Downtown Crossing section of the Louisville and Southern Indiana Ohio River Bridges Project. The project will provide congestion relief between Louisville and Jeffersonville, Indiana as well as improve access and eliminate safety hazards in downtown Louisville.

Goal Leaders

David Kim, AA for Policy and Governmental Affairs, FHWA

Regina McElroy, Director, Office of Innovative Program Delivery, FHWA

Strategic Objective 3.2—Increase Access to Foreign Markets

Increase access to foreign by eliminating transportation-related barriers to international trade through Federal investments in transportation infrastructure, international trade and investment negotiations, and global transportation initiatives and cooperative research thereby providing additional opportunities for American business and creating export-related jobs.

Performance Overview

The recent trend towards more international movement of people and goods and globalization of markets is expected to continue. This means continued growth in international air traffic and more goods and services transported from within the country to ports and then across national borders. We will focus on creating new opportunities in foreign markets for U.S. transportation-related goods and services. We will continue our efforts to create a more competitive air transportation system and protect the rights of traveling consumers. We will advance U.S. economic interests in targeted markets abroad in order to create additional transportation-related jobs. We set standards for both the manufacture and operation of transportation products. American transport manufacturers and service providers rely on access to foreign markets through liberalized entry or operational rules and compatible technical standards. We exert extensive positive influence over international transportation development as well as to heighten U.S. competitiveness. Through the development of a National Freight Strategic Plan pursuant to MAP-21, we will focus transportation infrastructure investments on projects that will particularly benefit U.S. exports.

DOT Operating Administrations: Office of the Transportation Secretary (OST).

Performance Plan

Overview

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 Commonwealth of Independent States (CIS) republics. A best practices template is also being developed for the implementation of Open Skies agreements to enhance the prompt usability of negotiated rights with minimum governmental intervention.

Bilateral Agreements (OST)

Performance Goal: Reach 3 or more bilateral and multilateral aviation agreements to remove market-distorting barriers to trade in transportation.

Performance Measure: Number of bilateral and multilateral aviation agreements.	2014	2015
Performance Target	3	3

Key Strategies

Transportation interests advanced in targeted countries around the world through policy development, planning (including preparation of background briefing documentation and event scenarios), support of logistics, meeting support, and follow-up on commitments and deliverables on the following types of activities:

- Meetings with high level foreign counterparts;
- Negotiating sessions with foreign counterparts;
- Speaking engagements at forums, stakeholder group meetings, multilateral organizations, multilateral ministerial meetings, private sector stakeholder events, etc;
- Recurring international forums with key partners, with a growing emphasis on priority countries under the President’s National Export Initiative; and
- Senior level trips to key partner countries, during which multiple meetings normally take place.

Technology transfer and capacity building program is a key component of:

- The Safe Skies for Africa Program
- In-Country multi-modal Iraq team
- In-Country multi-modal Afghanistan team

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; and
- Working with U.S. aviation stakeholders to identify liberalization targets and resolve doing business issues.

Enabling Legislation and Regulations:

49 USC§ 301 (4), (8); 49 USC§ 322; 329 (b) 3; 23 USC § 506; 49 USC§ 5312 (c) provide the framework and direction for negotiating international air services agreements.

Partners:

Partners include the Department of State, Department of Commerce; aviation community industry groups, including Air Transport Association, National Air Carrier Association, Airports Council International North America; individual airlines, airports, Homeland Security (Transportation

Security Administration), the U.S. Trade and Development Agency, communities and labor unions.

Goal Leader:

Susan Kurland, Assistant Secretary for Aviation and International Affairs, Office of the Secretary

Strategic Objective 3.3—Improve System Efficiency

Improve the efficiency of the Nation’s transportation system through transportation-related research, knowledge sharing, and technology transfer.

Performance Overview

Transportation research has little value if its technological outcomes are not transferred to those that might apply them. We will facilitate the exchange of knowledge and technologies by streamlining processes for partnership agreements and increasing awareness of commercialization and technology transfer opportunities. We will also pursue additional innovations through international dialogues such as the International Transportation Forum, cooperation agreements with global partners, and international research initiatives.

DOT Operating Administrations: Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Federal Rail Administration (FRA), and Office of the Transportation Secretary (OST).

PERFORMANCE REPORT

Highways Research and Development (FHWA)

The success of the RT&E program can be illustrated through the following examples of innovations:

The increased use of High Friction Surface Treatments (HFST) to improve highway safety is (in part) a result of research and evaluations conducted by FHWA, industry partners, and leveraging research conducted by foreign countries. This research has shown the use of HFST resulted in decreases in overall crashes, and in many cases, severe crashes. HFST has been tried and proven in 11 States with a total of 23 installations as part of FHWA’s Surface Enhancements at Horizontal Curves (SEAHC) demonstration program. Crash data from the U.S. sites from Pennsylvania, Kentucky and South Carolina DOTs report a before/after total crash reduction of 100 percent, 90 percent and 57 percent, respectively, for their respective signature trial projects, for which the after periods equal approximately three to five years. Kentucky has installed 25 additional HFST applications, and after at least one year these sites have witnessed crash reductions of 69 percent.

Research and evaluations conducted by FHWA, TRB/NCHRP, state DOTs and others on various alternative intersection and interchange geometries have documented decreases in overall crashes, and in many cases, severe crashes (those resulting in injury or fatality), when compared to conventional intersections. For example, roundabouts are becoming increasingly common across

the United States, and they are consistently proving their ability to reduce severe crashes, by an overall average 80 percent according to the AASHTO Highway Safety Manual. Other alternative designs, such as the diverging diamond interchange, are quickly becoming popular for many reasons, particularly their ability to reduce crashes.

FHWA has been working with partners from various universities in cooperation with State DOTs and industry to advance the state-of-practice in condition assessment of concrete bridge decks, pre-stressed girders, and post-tensioned bridges through automation using advanced technologies. The data collected benefits bridge owners, who can use these data to make decisions for planning, operations, and for prioritizing their asset's maintenance and rehabilitation plans. FHWA's Long-Term Bridge Performance program (LTBP) envisioned, planned, designed, and constructed a novel robotic system, the RABIT™ bridge inspection tool, to enhance assessment of concrete bridge decks by integrating multiple non-destructive evaluation technologies, in collaboration with Rutgers University. This allows the FHWA to provide bridge owners with a better understanding of concrete bridge deck performance by characterizing three of the most common deterioration types in concrete bridge decks: rebar corrosion, delamination, and concrete degradation. The system has also been complemented by an advanced data analysis, data interpretation and 3D visualization platform.

Since 1989, the Long Term Pavement Performance program (LTPP) has collected high quality, consistent data characterizing the performance of nearly 2,500 in service highway pavement test sections. Analysis of the collected data has yielded findings concerning the factors that influence pavement performance that highway agencies can apply to make evidence-based decisions concerning pavement design and rehabilitation. For example, based on LTPP findings that the use of skewed joints does not improve the performance of jointed concrete pavements, Pennsylvania discontinued the use of skewed joints, thereby reducing pavement construction costs. More recent LTPP findings provide the evidence of positive performance to support recycling asphalt pavement. The FHWA is developing improved test methods to support evidence-based decision-making during construction. For example, through a Cooperative Research and Development Agreement (CRADA), FHWA is developing an asphalt binder tester that will enable road agencies to easily test more samples and reduce or eliminate more costly testing. This will cut costs and catch possible contaminated materials before they are placed thereby improving performance.

FHWA has been conducting research to explore the benefits of connected vehicles. Recent field testing at Turner-Fairbank Highway Research Center (TFHRC) has shown that up to 12 percent emissions reduction and 10 to 20 percent fuel savings can be achieved when a traffic signal communicates its timing information, such as when it will change from red to green, to a connected vehicle. Modeling and simulation research conducted at TFHRC has shown that if all vehicles on the road were connected with each other and the roadside, the effective handling capacity of a freeway can be doubled.

FHWA's National Household Travel Survey data and information has provided all State and local agencies the foundational information for estimating future travel demand and resolving transportation air quality analysis issues.

New technology developed at FHWA's TFHRC can survey streets, sidewalks, and curb ramps with great precision, allowing for quick evaluation for Americans with Disabilities Act compliance, improving sidewalk access and the livable community experience for everyone.

Railroad Research and Development (FRA)

FRA's R&D program produces long-term benefits. The work that began 5 to 10 years ago contributes to today's safety record. Recent examples of successful rail safety R&D include crashworthiness research that led to improved passenger rail car safety; analysis of vehicle-track interaction that led to revised track safety and vehicle qualification standards; development of a freight train braking algorithm that enables achievement of positive train control safety benefits without adversely affecting operations; and safety culture pilot programs that have reduced the number of human factors caused accidents and incidents.

FRA's Train Control and Communication activity has been developing positive train control related technologies for several years to help ensure implementation is achieved. Notable successes to date include creation of an adaptive braking enforcement algorithm and development of interoperability standards in collaboration with the railroad industry. With these developments, the railroads were able to implement positive train control systems, such as Amtrak's system in Michigan and BNSF Railway's system in Illinois and Texas.

PERFORMANCE PLAN

Highway Related Research

Overview

Three components under the FHWA Research, Technology and Education (RT&E) program are necessary to cover all phases in the innovation life cycle. The Research and Development (R&D) program includes advanced and applied research, exploring new areas of research, developing and testing new products and services to benefit the transportation system. Once a new product or technology has proven to provide value after initial testing and evaluation, the Technology Innovation and Deployment Program (TIDP) supports the implementation, delivery and deployment phase, conducting refined testing and evaluation, market research, and assisting with marketing and communication matters for the technology or innovation to be widely used in the community. Training and Education (T&E) Program funds support training the current and future transportation workforce.

Strategies and Next Steps:

Research and Development (R&D) program funds will be used to perform research associated with safety, infrastructure preservation and improvements, environmental mitigation and streamlining, livability considerations, operations, policy, and innovative program delivery. The research ultimately provides transportation policymakers information that allows them to make accurate decisions. The R&D program includes FHWA's advanced and applied research, and facilitates national and international coordination and collaboration to leverage knowledge and develop solutions to address current and emerging highway transportation needs. The R&D program is closely coordinated with, but does not duplicate, research and development conducted through the University Transportation Center Program, the Intelligent Transportation System Program, the pooled fund National Cooperative Highway Research Program, and State-based research and technology initiatives. The major research areas under the Highway's program are: Safety, Infrastructure, Planning and Environment, Operations, Policy, Innovative Program Delivery, and Next Generation Research and Technology,

Innovations and technologies that have gone through an initial testing and evaluation process, and are ready for conclusive testing or deployment are advanced into the Technology & Innovation Deployment Program (TIDP). This is where final analysis, pilots, demonstrations, marketing, communications, and promotional activities are conducted to accelerate its adoption by State DOTs and other government entities or beneficiaries. FHWA has established a separate program area that aims at advancing deployment-ready technologies to State DOTs or other stakeholders.

As part of the TIDP, FHWA staff will continue to work with the American Association of State Highway and Transportation Officials (AASHTO), State officials, the Transportation Research Board (TRB) and others to implement Strategic Highway Research Program 2 (SHRP2) results. The research and development portion of SHRP2 was managed by the TRB in consultation with AASHTO and the FHWA. The program has now reached the results implementation phase. Because of its ability to partner with all States, attract national expertise and support technology transfer activities, FHWA is uniquely suited to manage the implementation phase of the program. Congress provided explicit authorizing language in MAP-21 to allow TIDP program funds to be used for Federal positions associated with implementation of SHRP2 products. TIDP funds provide a conduit to accelerate technology and innovation delivery through the Every Day Counts (EDC) Initiative. The EDC Initiative identifies underutilized market-ready technologies with high pay-offs and accelerates their deployment and acceptance throughout the Nation.

Training and Education (T&E) Program funds will support a wide variety of services and products, including:

- The National Highway Institute provides training courses to present the latest technologies and best practices in highway construction.
- The Local and Tribal Technical Assistance Programs (LTAP/TTAP) support technology transfer centers in all 50 states, Puerto Rico, and regional centers serving Native American Tribal governments.

- The Dwight David Eisenhower Transportation Fellowship Program provides opportunities for high performing students and faculty to research transportation topics.
- The Garret A. Morgan Technology and Transportation Education Programs enhance science, technology, engineering, and mathematics at the elementary and secondary school level.
- The Transportation Education Development Program develops new curricula and education programs to train individuals at all levels of the transportation workforce.
- Freight Planning Capacity Building supports enhancements in freight transportation planning.
- The Surface Transportation Centers for Excellence will promote and support strategic programs and activities in the areas of environment, surface transportation safety, rural safety, and project finance.

Responsible Officials:

Michael Trentacoste, Associate Administrator for Research, Development and Technology, FHWA

Rail Related Research and Development (FRA)

Overview

FRA's Research and Development (R&D) program provides the scientific and engineering basis for safety rulemaking and conducts research and development that leads to reductions in railroad accidents and incidents in the medium and long-term. Through the program, FRA collaborates with the railroad industry to develop and implement new technology to improve overall system safety. The program also supports intercity passenger rail development by providing technical assistance, equipment specifications, proposal evaluations, and Buy America compliance.

Human errors now account for over a third of all rail-related accidents. FRA's Human Factors research activity focuses on fatigue, distraction, and ergonomics and aims to improve safety culture in railroad organizations. With the introduction of new technologies, such as positive train control and electronically controlled pneumatic brakes, and expansion of high-performance rail, emphasis on human factors R&D is essential to prevent growth in human-caused accident rates.

FRA's Track Research benefits rail passengers, railroad workers and neighbors by reducing the number of derailments. This activity develops track inspection technologies that detect defects before they become failures in service. Currently, all major freight railroads use FRA-developed technologies to locate high-risk track defects. In addition to reducing derailments, this improves the economic competitiveness of the railroads by reducing train delays. As train speeds and density increase, smaller defects will need to be detected at higher measurement speeds. FRA funding ensures that this improved capability is available to the industry when required.

FRA is also measuring in-service train performance and computer modeling to understand vehicle-track interaction. This knowledge is used to improve rules and regulations for track safety and equipment qualification to ensure safety for all relevant train speeds and operating conditions.

Strategies and Next Steps

FRA's plan includes:

- Performance evaluation of the FRA-developed autonomous inspection system and assistance to implement track safety enforcement technology;
- Full scale testing of tank cars to develop performance standards for new tank cars carrying hazardous material and evaluation of new technologies and materials to improve the puncture resistance of tank cars;
- Positive train control technology development, such as positive train location, passenger braking models, fiber optics based track defect detection, and vibration-based broken rail detection;
- Conversion of FRA's Cab Technology Integration Lab to industry compatible simulation and modeling software and a locomotive engineer workstation re-design study; and
- FRA will update its safety risk model for directing future R&D efforts and pilot demonstration evaluations covering projects spanning the R&D lifecycle.

Goal Leaders

Paul Nissenbaum, FRA Associate Administrator for Railroad Policy and Development
John Tunna, FRA Director of Research and Development

Strategic Objective 3.4—Create Dynamic Workforce

Foster the development of a dynamic and diverse transportation workforce through partnerships with the public sector, private industry, and educational institutions.

Performance Overview

The operation of the Nation’s transportation system depends on a highly skilled and qualified workforce, now and for the foreseeable future. To be successful in addressing unmet infrastructure needs, we will need a broad spectrum of skilled workers. As demand for transportation services increase, both public and private sector transportation organizations face the ever increasing difficulty of finding qualified workers and managers to fill priority occupations. We will collaborate with our partners in government agencies, private and public employers, educational institutions, and workforce and labor organizations to identify and advance career and technical education pathways to transportation jobs, support science, technology, engineering and mathematics (STEM) and transportation-related academic and certification programs for K-12 students, and improve pathways into various levels of transportation occupations for all segments of the population.

DOT Operating Administrations: Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Federal Rail Administration (FRA), Maritime Administration (MARAD), Federal Aviation Administration (FAA), and Office of the Transportation Secretary (OST).

PERFORMANCE REPORT

Performance Measure	Actual					2013		2013 Target Met or Not Met
	2008	2009	2010	2011	2012	Target	Actual	
US Merchant Marine Program (MARAD)								
Number of U.S. Merchant Marine Academy (USMMA) graduates.	210	219	198	198	205	210	201	Not met
Number of State Maritime Academy graduates.	N/A	N/A	575	545	642	600	630	Met

Progress Update

US Merchant Marine Program (MARAD)

MARAD’s maritime education programs support the competitiveness of a viable and robust merchant marine to support strategic sealift and serve the nation’s commercial maritime transportation needs. In working to maintain the nation’s pool of skilled merchant mariners in FY 2013, the USMMA graduated 201 students with USCG credentials and the state maritime academies graduated 630 students.

FHWA

In FY 2012, NHI offered 519 instructor-led training sessions, and held web-conference training sessions and on-demand web-based trainings to a total of 35,912 participants. In 2012 the LTAP-TTAP Centers provided 5,543 training events, reached 159,355 participants, and circulated 388,751 newsletters.

For 2013, the Eisenhower Program provided fellowships to 206 university graduate and undergraduate students. Of the fellowships provided, 107 were awarded to the non-minority institution students, and 99 were awarded Minority Institutions of Higher Education (MIHEs). In 2012, 15 Garrett Morgan grants were awarded. Since program funding began in FY 2006, the Garrett Morgan Program has funded 51 projects with 5,400 student participants.

PERFORMANCE PLAN

United States Merchant Marine Academy (MARAD)		
Performance Goal: Graduate 210 U.S. Coast Guard credentialed mariners annually through 2018.		
Indicator: Number of USMMA graduates with USCG credentials	2014	2015
Performance Goal	210	210
State Maritime Academy Program (MARAD)		
Performance Goal: Graduate 660 students annually with U.S. Coast Guard Credentials from the State Maritime Academies through 2018.		
Indicator: Number of SMA graduates (participating in the program) with USCG credentials	2014	2015
Performance Goal	657	660

United States Merchant Marine Academy (MARAD)

Overview

Maritime Administration’s (MARAD) support of mariner education ensures that an annual supply of highly qualified personnel are available to replenish the nation’s pool of skilled merchant mariners who can then be called to service during national emergencies, to support strategic

sealift, and to serve the nation's commercial maritime transportation needs. This program provides mariners for the United States Coast Guard (USCG), all branches of the armed forces, and commercial industry. Merchant Marine Academy graduates in particular support the nation's economic interests in a world where 90 percent of the world's goods travel by the earth's oceans and waterways. The Merchant Marines serve as experts in strategic sealift for potential national crises when the U.S. may choose to rely on its own organic shipping assets rather than employ vessels from other nations. Merchant Marine Academy graduates crew U.S. flagged vessels, reminding other countries that ours is a fully capable maritime nation, whether transporting commercial cargo or sailing in support of national defense and homeland security.

The U.S. Merchant Marine Academy (USMMA or Academy) is an accredited Federal institution of higher education operated by DOT and MARAD. The USMMA educates 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 based 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 USCG 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 provisions that they serve in the maritime industry afloat or ashore for at least five years, maintain their USCG license for at least six years, and serve in a reserve branch of the Armed Forces for at least six years. The service obligation requires USMMA graduates to be available to crew merchant marine vessels during a national emergency.

This measure tracks whether the Academy is graduating the target number of U.S. Coast Guard credentialed mariners, who are also commissioned in the Navy Reserve. Graduates are required to sail commercially or may serve on active duty in the U.S. Armed Forces (either choice will fulfill their service obligation). The Academy also seeks to increase the overall percentage of students who graduate within four years of entering the program.

Strategies and Next Steps

There are many factors that impact the number of graduates per year; these factors include the number of students admitted to the Academy, the number of Midshipmen who resign, and the number of Midshipmen who are disenrolled for academic, disciplinary, or medical reasons. Key activities planned/undertaken to increase the number of graduates include:

- Raise the minimum SAT score for admission;
- Hire a Director for the Academic Center of Excellence; Increase mentor involvement in tracking the academic and Regimental performance of Midshipmen; and

- Change Coast Guard licensing preparatory classes to add more simulators mimicking shipboard electronics and automation and to provide for increased emphasis on the new test format instituted in 2011.

Goal Leader

RDML Susan L. Dunlap, Deputy Superintendent, U.S. Merchant Marine Academy

State Maritime Academies (MARAD)

Overview

MARAD's State Maritime Academies (SMA) program provides approximately 75 percent 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 direct support 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 direct assistance to each of the six state maritime academies for maintenance, support, and fuel; (2) the Student Incentive Payment (SIP) program (financial assistance, to offset the cost of uniforms, books, subsistence, and tuition, 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.

The SMA maritime education program also contributes to security and preparedness objectives.

Strategies and Next Steps

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. Primary key activities include:

- 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 school ships in a safe and seaworthy condition, and in full compliance with federal laws and regulatory requirements.

Goal Leader

Kevin Tokarski, Associate Administrator for National Security, MARAD

Owen Doherty, Acting Associate Administrator for Business and Finance Development, MARAD

Highways Workforce Training

Overview

To retain and develop workers, we need to give employees the opportunity to develop skills in all areas of transportation including financing, project management, sustainability, livable communities, and greater public engagement. These skills go beyond traditional engineering disciplines, which are themselves expanding to reflect new materials and technologies. The growing number of baby boomers eligible to retire accelerates the need to transfer resident knowledge to the next generation, and thereby avoid a shortfall of experience and skills that will be difficult to replace.

Changes in the transportation industry and in the demographics of the US workforce will require public and private sector transportation organizations, training providers, academic institutions and other strategic partners to focus attention on the challenges facing transportation workforce development. We can successfully address these issues by collaborating with our partners in government agencies, private and public employers, educational institutions, and workforce and labor organizations.

Women, minorities, disadvantaged individuals and returning military veterans are under-represented in highway construction. FHWA's On-the-Job Training/Supportive Services program partners with the transportation construction industry targets to provide training and apprenticeship opportunities designed to move them into journey-level positions in skilled and semi-skilled crafts.

FHWA manages a number of training, education, and workforce development programs to address all aspects of the transportation education continuum including career awareness and preparation at the 6-12 grade levels, community college, university and post graduate, and for professional development for incumbent transportation professionals. The programs support public and private sector partner workforce development interests, and engage partners across the

transportation and education communities to assist in program development. Programs include the:

- National Highway Institute (NHI) provides high level technical and policy courses to the transportation industry; primary participants are state DOT employees.
- Local Technical Assistance Program (LTAP) provides technical assistance and training to local agency and tribal government managers and employees. There are fifty-eight locations that include an LTAP Center and seven Regional Tribal Technical Program Centers (TTAP).
- Dwight David Eisenhower Transportation Fellowship Program provides funds to colleges and universities to attract top students and support their pursuit of transportation careers.
- Garrett A. Morgan Technology and Transportation Education Program provides for grants to state and local education agencies to develop and deliver K-12 transportation related curriculum and education enrichment programs with an emphasis on women and underrepresented groups.
- Surface Transportation Workforce Development, Training and Education allows core funds to be used for training, education and workforce development activities, at the discretion of the states, at 100 percent federal funding. Funding could support program development and activities related to career awareness/preparation, college/university transportation curriculum development/programs, and professional development for surface transportation workers.
- Transportation Education Development Program (TEDP) provides grants to institutions of higher education to develop and deliver, in partnership with industry, new curricula and education programs to prepare and train individuals at all levels of transportation. The TEDP provides for innovation in workforce development. TEDP has provided 10 awards to address a broad range of curriculum and education program development in support of career awareness and preparation at the 6 to 12 grade levels, and for community college, university and post graduate studies, and training and professional development for incumbent transportation workers.

Responsible Officials:

Amy Lucero, Director of Technical Services, FHWA.

Strategic Goal:

Quality of Life in Communities

Foster quality of life in communities by integrating transportation policies, plans, and investments with coordinated housing and economic development policies to increase transportation choices and access to transportation services for all.

Strategic Objective 4.1—Enhance Quality of Life

Expand convenient, safe, and affordable transportation choices for all users by directing federal investments in infrastructure towards projects that more efficiently meet transportation, land use, goods movement, and economic development goals developed through integrated planning approaches.

Performance Overview

U.S. transportation investments over the last 50 years have often been poorly coordinated with other investments such as housing and commercial development. These development patterns have provided many American families of all income levels with unprecedented choices in where they can live, and the ability to own a single-family home. The reliance on car-dependent, dispersed development is not without costs. According to the Transportation Research Board, the average American between the ages of 25 and 54 drives over 12,700 miles per year. The Department of Commerce estimates that the average American household spends \$7,658 annually to buy, maintain, and operate personal automobiles. Many communities lack alternatives to auto travel. Fewer than 5 percent of households are located within a half-mile of rail transit and only 53 percent of Americans have access to any form of public transportation service. A reliable, integrated, and accessible transportation network that enhances choices for transportation users will provide easy access to employment opportunities and other destinations, and promote positive effects on the surrounding community.

DOT Operating Administrations: Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Federal Rail Administration (FRA), and Office of the Transportation Secretary (OST).

PERFORMANCE REPORT

Performance Measure	Actual					2013		2013 Target Met or Not Met
	2008	2009	2010	2011	2012	Target	Actual	
Pedestrian and Bicycle Access (FHWA)								
States with policies that improve transportation choices for walking and bicycling. Discontinued	n/a	n/a	21	24	26	27	28	Met
Number of created and/or significantly improved pedestrian and bicycle transportation networks. New	n/a	n/a	n/a	n/a	n/a	n/t	n/a	

Performance Measure	Actual					2013		2013 Target Met or Not Met
	2008	2009	2010	2011	2012	Target	Actual	
Increasing Passenger Rail								
Increase intercity passenger rail ridership	n/a	n/a	n/a	6.53 billion	6.80 billion	6.75 billion	6.80 billion	Met

Progress Update

Pedestrian and Bicycle Access (FHWA)

More than half of the States currently have policies and plans that support improved transportation choices. FHWA provides funding support for reports, technical assistance, and training related to walking, wheeling, and bicycling. During FY 2013, FHWA continued to share information about the importance of considering transportation choices, and to monitor policy activity among the States for the adoption of policies that would improve transportation choices for walking, wheeling, and bicycling. In June, FHWA issued final program guidance for the Transportation Alternatives Program that incorporates funding eligibilities from Transportation Enhancements, Safe Routes to School, and the Recreational Trails Program. Projects eligible to receive funding through the Transportation Alternatives Program include those able to achieve compliance with the ADA.

To strive for greater progress, FHWA continued to promote best practices related to quality of life in communities, multimodal transportation, and collaborating with non-traditional partners. FHWA issued guidance supporting bicycle and pedestrian facility design flexibility. The guidance noted the AASHTO Bike and Pedestrian Design Guides, and highlighted FHWA's support of the National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide and the Institute of Transportation Engineers Designing Urban Walkable Thoroughfares Guide. The guidance also included examples that demonstrated the use of treatments illustrated in the NACTO Guide. Webinars were also held to discuss the guidance. The new NACTO Urban Street Design Guide, which focuses on the critical role streets play in contributing to the livability of communities, was also distributed to Divisions. FHWA initiated a research project focused on the planning and design of cycle tracks. Cycle tracks are bicycle facilities that run alongside a roadway separated from automobile traffic by a physical barrier, such as parked cars, bollards, a landscaped buffer, or a curb. This research will include a detailed safety and mode share analysis, while also highlighting cycle track planning and design considerations.

FHWA offices assisted in the Partnership for Sustainable Communities regional roundtables in Texas and New Jersey. FHWA continues to provide information to stakeholders and the public

about fostering quality of life in communities by developing resources such as the quarterly newsletters, case studies, and rural resources. FHWA also conducted exchanges with Sweden and China as part of its effort to improve knowledge of best practices related to community planning.

Hundreds of communities and many states across the U.S. have established Complete Streets policies, which place and emphasis on projects that provide sufficient accommodation for all users—not just automobiles. DOT will continue to encourage policies that improve transportation choice and begin measuring the results of these policies. The new measure focuses on tracking the successful implementation of connected pedestrian and bicycle networks (i.e. infrastructure). Rather than track States' implementation of policies (the discontinued measure), DOT will now track the creation of pedestrian and bicycle because over time, these networks will directly improve transportation choice in communities throughout the U.S.

Increasing Passenger Rail (FRA)

Americans are choosing rail in record numbers—demand for passenger rail is surging across the United States. Ridership levels have set new records in nine of the past ten years. In FY 2012, Amtrak carried a record 31.2 million passengers—and also achieved the highest on-time performance in 12 years.³ These ridership levels are being achieved even before many of the substantial service improvements funded in recent years begin to come online. Once new trains are added and trip times and delays reduced, the system will have even higher levels of ridership.

Public support for rail is increasing—public opinion polls consistently reveal strong support for intercity passenger rail. A 2011 Harris Poll survey revealed that nearly two-thirds of Americans (62 percent) support using Federal funds to develop high-speed rail.⁴ The National Association of Realtors' *2009 Growth and Transportation* study showed only 20 percent of Americans favored building new roads to deal with congestion, while 47 percent believe that improvements in public transportation would better mitigate congestion and accommodate future U.S. population growth.⁵ Additionally, almost 19 of 20 people are concerned with the state of America's infrastructure, and approximately 84 percent support infrastructure investments.⁶

³ Amtrak, [Amtrak Sets New Ridership Record](#), October 10, 2012. FY 2013 were not available for this report.

⁴ [Harris Poll survey](#) conducted between January 17, 2011, and January 24, 2011.

⁵ National Association of Realtors and Transportation for America, *2009 Growth and Transportation Survey*. The survey was conducted by Hart Research Associates, Jan. 5 to 7, 2009. Hart Research Associates telephoned 1,005 adults living in the United States. The study has a margin of error of plus or minus 3.1 percentage points.

⁶ U.S. Department of the Treasury and Council of Economic Advisers, [An Economic Analysis of Infrastructure Investments](#), October 11, 2010, quoting survey from [The Building America's Future National Survey](#), Luntz et al., 2009.

PERFORMANCE PLAN

Pedestrian and Bicycle Access (FHWA)

Performance Goal: Increase the number of created and/or significantly improved pedestrian and bicycle transportation networks in communities (i.e., local, regional, and state) that provide functional connections and enhance transportation choice to 65 by FY 2018.		
Indicator: Number of created and/or significantly improved pedestrian and bicycle transportation networks.	2014	2015
Performance Target	25	35

Increasing Passenger Rail

Performance Goal: Increase intercity passenger rail ridership to at least 7.5 billion miles traveled by the end of FY 2018.		
Indicator: Intercity passenger rail miles traveled.	2014	2015
Performance Target	6.90 billion	7.05 billion

Pedestrian and Bicycle Access (FHWA)

By encouraging the development or improvement of multimodal transportation networks with more convenient and affordable choices particularly for people with special needs, as well as greater use of alternate modes such as bicycling and walking, DOT will help improve air quality, reduce congestion, and improve roadway safety for all road users.

Strategies and Next Steps

DOT issued a policy statement on *Bicycle and Pedestrian Accommodation Regulations and Recommendations* in 2010. This statement signaled an increased commitment 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. By 2014, DOT and FHWA anticipate more than half of the States to have policies and plans that support improved transportation choices. Similarly, one of the milestones for implementation of the *Americans with Disabilities Act of 1990 (ADA)* was having current transition plans in one-third of the States. This milestone was exceeded in FY 2013.

FHWA conducted regional workshops across the country and webinars to provide resources to practitioners and the general public to better consider the transportation needs of communities within the transportation planning process. FHWA released a series of documents that demonstrate how transportation projects can foster livability in communities of varying sizes including in rural areas. In 2012, a report was submitted to Congress on the results of the Non-motorized Transportation Pilot Program, which demonstrated how communities benefit from policies and investments that support walking and bicycling.

In the future, FHWA will develop performance measures and indicators to track progress in the development of seamless walking and bicycling networks over time. FHWA will work with partners and stakeholders, including communities, states, and others, to identify indicators of performance appropriate to the local context, while also providing information on available data, collection methods and analysis techniques. In addition, FHWA will conduct research to support improved bicycle and pedestrian design, with a focus on cycle tracks and multi-modal intersections.

Transportation Alternatives Program (TAP) funds will support projects that create safe and affordable transportation choices in communities across the country. FHWA will provide guidance to States and other agencies concerning the TAP. In addition, the agency will conduct outreach for the TAP, which can be used to support walking and bicycling transportation projects. The new program continues efforts to enhance transportation choice by replacing the Transportation Enhancements Program, allowing States to continue Safe Routes to School Programs, and maintaining the Recreational Trails Program. Examples of activities that will be funded through the TAP to benefit transportation choice, safety, and human and natural environment include:

- Pedestrian and bicycle facility construction, planning, and design, including projects to achieve compliance with the ADA, including the use of TAP funds to correct accessibility deficiencies identified in a State's ADA transition plan;
- Construction of turnouts, overlooks, and viewing areas;
- Inventory, control, or removal of outdoor advertising;
- Historic preservation and rehabilitation of historic transportation facilities;
- Environmental mitigation activities, including pollution prevention and pollution abatement activities and mitigation to address storm water management, vegetation management, and archaeological activities related to project impacts, historic preservation and rehabilitation of historic transportation facilities, and activities to improve connectivity of terrestrial or aquatic habitats;
- Continuing the Recreational Trails Program as an apportionment set-aside, at the option of the State, and continuing eligibility for Recreational Trails projects in any case;
- Continuing eligibility for Safe Routes to School projects; and
- Planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

Responsible Officials:

Gloria Shepherd, AA for Planning, Environment, and Realty, FHWA

Joyce Curtis, AA for Federal Lands Highway, FHWA

Integrated Planning (FHWA)

Overview

Building quality of life in communities involves a whole government approach. FHWA and other modal administrations in the U.S. DOT work with the U.S. Department of Housing and Urban Development (HUD), and the U.S. Environmental Protection Agency (EPA) through the Interagency Partnership for Sustainable Communities. The Partnership coordinates Federal housing, transportation, water, and other infrastructure policies and investments. The Partnership developed the following principles to guide efforts:

- Provide more transportation choices.
- Promote equitable, affordable housing.
- Enhance economic competitiveness.
- Support existing communities.
- Coordinate policies and leverage investment.
- Value communities and neighborhoods.

Strategies and Next Steps

Federal Highway Administration (FHWA) sponsors activities like Context Sensitive Solutions and public involvement that help enable people to live closer to jobs, save time and money for households, and reduce pollution. Such projects and activities build on the Partnership's principles outlined above, and include investments that increase the number of new and/or significantly improved pedestrian and bicycle transportation networks in communities (i.e., local, regional, and state) that provide functional connections and enhance transportation choice.

FHWA has developed numerous tools, as well as provided training and capacity building for livability including:

- Case studies covering a broad range of policy areas such as expanding transportation choices; promoting equitable, affordable housing; enhancing economic competitiveness; coordinating and leveraging federal policies and investments; and enhancing the unique characteristics of communities;
- Fact sheets to address the relationship of transportation to safety, land use, housing costs, system management and operations, development and the environment, economic development, freight, rural communities, and the role of State DOTs;
- Quarterly newsletters that provide real world examples of the relationship between transportation and community, such as providing access to good jobs and affordable housing, quality schools, and safer streets and roads; and provide access to effective practices and resources for practitioners and the public; and

- Webinars, workshops and videos to improve the capacity of States and communities to address quality of life in communities and transportation in the development of plans, programs and projects.

In the future, FHWA will continue to enhance these types of resources to address quality of life in all aspects of transportation.

- Continue to develop case studies showcasing innovative approaches to improving community quality of life through transportation;
- Continue to develop webinars to share and promote examples quality of life in transportation planning;
- Continue to develop the quarterly newsletter which provides transportation professionals with real-world examples to help them improve the relationship between transportation agencies and communities, such as providing access to good jobs, affordable housing, quality schools, and safer roads;
- Continue to encourage usage of the quality of life discussion board, an online forum for practitioners to share information; and
- Promote use of the new online Community Vision metric tool and the PlaceFit tool which supports lifestyle choices.

Quality of life is important in rural America as well. Many communities outside national parks, refuges, and forests are close enough to urban areas to facilitate the use of transit, vanpools, and bicycles to access Federal lands. Greater use of alternative transportation options inside and outside Federal lands helps reduce car emissions, eases congestion at the gate, and preserves the environment inside the Federal lands for future generations. The Tribal Transportation Program supports rural livability in tribal communities by providing better access to housing, emergency services, schools, stores, places of employment, and medical services. Access to these basic services will enhance the quality of life on tribal lands.

Responsible Officials:

Gloria Shepherd, AA for Planning, Environment, and Realty, FHWA

Joyce Curtis, AA for Federal Lands Highway, FHWA

Increasing Passenger Rail (FRA)

Overview

Rail transportation is well suited to help meet the mobility needs and choices of the growing and aging U.S. population and the goods produced and consumed by that population. The U.S. Census Bureau projects that an additional 100 million people will reside in the United States by 2050, most in concentrated geographic areas called mega regions. The number of Americans 65

years old and older is expected to double by 2040, to more than 80 million people (over 20 percent of expected the U.S. population). Only 15 percent of Americans older than age 65 drive regularly, with 6 percent of those older than age 75 driving regularly. Younger generations of Americans are also choosing to drive both less often and for shorter distances than previous generations.

To accommodate population growth, rail provides very high capacity within a relatively limited geographic “footprint.” During the last 50 years, poor coordination of U.S. transportation investments and housing and commercial development increased the prevalence of automobile dependent, inaccessible communities and disinvestment in urban centers and first suburbs. Federal road construction programs promoted wide, high-speed roadways that are poorly suited to pedestrian and bicycle use. As highway and airport congestion increases, rail service can provide a more reliable and efficient travel options for many markets.

Strategies

FRA’s budget makes strategic investments that reflect the needs of multiple stakeholders – passenger and freight rail operators, the traveling public and shippers, governments and private interests. This wide range of projects is based on specific market needs and rigorous analysis of costs and benefits. FRA will make investments in both new and improved passenger rail services with varying frequencies and conduct comprehensive planning.

Past generations of Americans invested heavily to build the infrastructure we rely on today. For example, most segments of the Northeast Corridor were built over a century ago. Maintaining and modernizing these assets will reduce long-term costs and result in safer, more reliable, and more efficient rail transportation. In support of the Secretary’s *Fix It First Initiative*, will invest to reduce the backlog of rail maintenance needs, replace obsolete equipment, upgrade stations to comply with Americans with Disabilities Act requirements, and continue vital long-distance passenger services.

Specific activities FRA will pursue, subject to the availability of funds include:

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

Strategic Objective 4.2--Expand Access and Choice

Expand convenient, safe, and affordable transportation choices for all by emphasizing greater public engagement, fairness, equity, and accessibility in transportation investment plans, policy guidance, and programs.

Overview

The *Americans with Disabilities Act of 1990* (ADA) prohibits discrimination against persons with disabilities in all aspects of life, and applies to all entities, i.e., public or private regardless of funding source. Title II of the ADA applies to the entire operations of all stations in transit systems, airports facilities, intercity rail transportation system, and roadway facilities including sidewalks and pedestrian crosswalks. While many entities have developed ADA transition plans, implementation has been slowed by competing priorities for limited funds. We will provide guidance and assistance (and funding in a limited number of cases), to encourage ADA compliance in existing facilities. Also, we will integrate environmental justice principles into all Department planning and programming, rulemaking, and policy formulation.

DOT Operating Administrations: Federal Highway Administration (FHWA), Federal Aviation Administration (FAA), Federal Transit Administration (FTA), Federal Rail Administration (FRA), and Office of the Transportation Secretary (OST).

PERFORMANCE REPORT

Performance Measure	Actual					2013		Target Met or Not Met
	2008	2009	2010	2011	2012	Target	Actual	
ADA Compliance (FHWA, FTA and FRA)								
States that have developed an Americans with Disabilities Act (ADA) transition plan that is current and includes the public rights-of-ways. (FHWA)	n/a	n/a	n/a	13	15	18 (r)	23	Met
Number of Key Rail Stations Verified as Accessible and Fully Compliant. (FTA)	N/A	N/A	N/A	513	522	531	567*	Potentially met
Percent of intercity passenger rail stations that comply with the requirements of the ADA (FRA)	N/A	N/A	N/A	N/A	0% (r)	2%	0%	Not met
<u>Notes:</u> (r) Revised; * Preliminary Estimate; ^ 2011 and 2012 Actuals Available Following Release of Conditions and Performance Report								

Progress Update

ADA Compliance, FHWA

A national training webinar, ADA Transition Plans: Best Practices, was delivered in June 2013 that included participation by the NY and FL Division Offices and their respective STAs. The Agency continues to develop training webinars focused on effective practices with regard to the development and implementation of ADA self-evaluation and transition plans. In addition, a civil rights boot camp was held in May 2013 where one-full day was devoted to ADA issues, including the centrality of a transition plan in a State DOT's ADA program.

FHWA developed interim guidance for the Transportation Alternatives Program (TAP) authorized by MAP-21 which indicates that TAP funds may be used to upgrade facilities (e.g., sidewalks and curb ramps) that are not ADA compliant. Further, FHWA led a series of 6 national webinars for employees and stakeholders, including State transportation agencies and sub-recipients, on the new joint technical assistance issued in June 2013 by FHWA and US Department of Justice (DOJ) on ADA requirements for the installation of curb ramps.

FHWA created an ADA Resurfacing Workgroup to address questions that resulted from the new joint FHWA-DOJ technical assistance; a stand-alone ADA Q&A document was completed and is currently under review. The more general ADA Q&A document that was issued by FHWA in 2006 is currently being reviewed and revised; questions pertaining to ADA transition plans appear in this document as well as the stand-alone document referred to above.

ADA Compliance, FRA

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. By the end of calendar year 2011, 95 percent of Amtrak stations had barrier-free access between platforms and trains and ADA-related design and construction work was underway at 110 stations.

PERFORMANCE PLAN

ADA Compliance		
Performance Goal: Improve accessibility on Public Rights of Way by increasing the number of State DOTs with ADA transition plans that include the Public Rights of Way to 48 by FY 2018 (FHWA).		
Indicator: Number of State DOTs with ADA transition plans that include the Public Rights of Way.	2014	2015
Target	25	31

Performance Goal: to transportation for people with disabilities and older adults by ensuring that at least 34 percent of intercity passenger rail stations* comply with the requirements of ADA by the end of 2018, subject to the availability of funds. (FRA)		
Indicator: Number of State DOTs with ADA transition plans that include the Public Rights of Way.	2014	2015
Target	25	31
*Where Amtrak is responsible for compliance.		

ADA Compliance (FHWA)

Overview

ADA transition plans are required by law and regulation. State and local governments with 50 or more employees are required to perform a self-evaluation, or inventory, of their current services, practices, and facilities such as curb ramps and sidewalks that do not or may not meet ADA requirements. The transition plan, which follows this self-evaluation, describes in detail the methods that will be used to make the public entity’s facilities accessible. The plan also specifies the schedule for taking the steps necessary to achieve compliance, which are prescribed in 28 CFR 35.150(d). To date, 23 States have current ADA transition plans that include the public rights-of-ways. FHWA continued to provide technical assistance to States in developing and implementing their transition plans.

Strategies and Next Steps

An additional 24 States are actively developing ADA transition plans, with the majority of those States projecting a completion date within the next two to three years. Further, FHWA continues to track queries from States requiring a technical assistance response concerning an ADA issue, as well as Section 504 of the *Rehabilitation Act of 1973*. This approach will help FHWA identify specific challenges that create obstacles for the States in developing and/or implementing an ADA transition plan and in meeting regulatory requirements for both the ADA and Section 504.

Goal Leaders

- Gloria Shepherd, AA for Planning, Environment, and Realty, FHWA
- Warren Whitlock, AA for Civil Rights, FHWA
- Joyce Curtis, AA for Federal Lands Highway, FHWA

ADA Compliance (FRA)

The *Americans with Disabilities Act of 1990* (ADA) requires that all intercity rail transportation system stations be readily accessible to and usable by individuals with disabilities, including those who use wheelchairs, as soon as practicable, but no later than July 26, 2010. Limited funding prevented Amtrak from meeting this deadline.

Strategies and Next Steps

FRA's National High Performance Rail System contains two programs—Current Passenger Rail Service and the Rail Service Improvement Program—that support initiatives aimed at planning and developing high-speed and intermodal rail corridors and terminal areas, 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.

The Current Passenger Rail Service program funds efforts 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.

Specific activities supporting this objective include:

- Soliciting applications and awarding funding.
- Providing training and technical assistance to states and other stakeholders to aid in the successful development and implementation of high-speed and intercity passenger 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.
- Assisting Amtrak in prioritizing its ADA compliance plan and coordinating with third parties that share responsibility with Amtrak for ADA compliance.
- Overseeing Amtrak's implementation and compliance with ADA requirements.

Goal Leaders

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

Calvin Gibson, Federal Railroad Administration Director of Civil Rights

Strategic Goal:

Environmental Sustainability

Advance environmentally sustainable policies and investments that reduce carbon and other harmful emissions from transportation sources, reduce our nation's dependence on foreign oil, improve air quality, and promote public health.

Strategic Objective 5.1—Promote Energy Efficiency

Reduce foreign oil-dependence and carbon emissions through research and deployment of new technologies including alternative fuels, and by promoting more energy-efficient modes of transportation.

Overview

The transportation sector accounts for about 70 percent of all petroleum usage in the U.S. Consumption for motor gasoline represents about 46 percent of all petroleum consumed. Most transportation activity is based on fossil fuel consumption, which is the largest source of U.S. greenhouse gas emissions, and about 27 percent of these emissions are due to transportation activities. Passenger cars, heavy and medium duty trucks, and light duty trucks are the source for nearly 80 percent of transportation-related greenhouse gas (GHG) emissions in the U.S. We are working across all modes to improve the energy and environmental performance of the transportation sector. The aviation industry has made significant gains in fuel efficiency, with commercial jet aircraft fuel efficiency improvements of 70 percent over the last 40 years. DOT and the EPA have worked closely with auto manufacturers, the State of California, environmental groups and other stakeholders to promulgate new rules and develop a series of programs to increase fuel economy for the Nation's vehicle fleet. We will continue to promote the deployment of advanced vehicle technologies, alternatives fuels and alternatives fuels infrastructure where feasible to reduce energy consumption and greenhouse gas emissions of transportation systems.

DOT Operating Administrations: Federal Highway Administration (FHWA), Federal Aviation Administration (FAA), Federal Transit Administration (FTA), Federal Rail Administration (FRA), Maritime Administration (MARAD), and Office of the Transportation Secretary (OST).

PERFORMANCE REPORT

Performance Measure	Actual					2013		2013 Target Met or Not Met
	2008	2009	2010	2011	2012	Target	Actual	
Aviation Energy Efficiency (FAA)								
NAS energy efficiency (measured by fuel burned per miles flown).	(13.5%)	(14.0%)	(15.3%)	(14.5%)	(14.8%)	(16%)	(15.6%)	Not Met

Performance Measure	Actual					2013		2013 Target Met or Not Met
	2008	2009	2010	2011	2012	Target	Actual	
Sustainable Practices at DOT (OST)								
Percent reduction in greenhouse gas emissions from facilities and fleets.	N/A	N/A	7.9%	15.4%	29%	7%	TBD	Met
Percent reduction of vehicle fleet petroleum use.	8%	14%	5%	4.9%	14.5%	14%	TBD	Met (2012)
Percent of All Applicable Contracts That Meet Sustainability Requirements.	N/A	N/A	N/A	95%	95%	95%	TBD	Met (2012)
Alternative Fuel and Hybrid Vehicles (FTA)								
Percent of Alternative-Fuel and Hybrid Vehicles in the Transit Revenue Service Fleet.	42%	43%	44%	45%*	46%	46%	TBD^	Met (2012)
Notes:								
* Preliminary Estimate; ^ 2011 and 2012 Actuals Available Following Release of Conditions and Performance Report								

Progress Update

Over the past three decades, significant reductions in air pollutant emissions were achieved in the transportation sector, largely by progressively strengthening the regulation of vehicle emissions and fuel quality under provisions of the Clean Air Act. Transportation-related GHG emissions declined 4 percent from 2008 to 2009, largely due to a decline in economic activity and personal vehicle travel. Between 2009 and 2011, GHG emissions declined further by 0.6 percent, even as the level of economic activity recovered. DOT is working to achieve a balance between environmental challenges and the need for a safe and efficient transportation network. In 2013, DOT dedicated an estimated \$4.672 billion to the protection of the natural and built assets of the Nation's communities.

PERFORMANCE PLAN

Improve Aviation Energy Efficiency (FAA)		
Performance Goal: Improve NAS efficiency by at least 26% by FY 2018, relative to the FY 2001 baseline.		
Indicator: Percent reduction in aviation fuel burned per revenue-ton-mile from the FY 2001 energy use baseline.	2014	2015
Performance Target	-18%	-20%

Alternative Fuel and Hybrid Transit Vehicles (FTA)		
Performance Goal: Increase the percentage of alternative-fuel and hybrid vehicles in the transit fixed-route revenue service fleet to 52% of the total by FY 2018.		
Performance indicator: Percentage of alternative-fuel and hybrid vehicles in the transit fixed-route revenue service fleet.	2014	2015
Performance Target	48%	49%
Sustainable Practices at DOT (OST)		
Performance Goal: Reduce DOT building energy intensity use 36% from an FY2003 baseline by FY 2018.		
Indicator: Percent reduction from the FY 2003 energy use baseline.	2014	2015
Performance Target	27%	30%
Performance Goal: Reduce DOT vehicle fleet petroleum use 26% from an FY 2005 baseline by FY 2018.		
Indicator: Percent reduction from the FY 2005 fleet petroleum use baseline.	2014	2015
Performance Target	18%	20%
Performance Goal: Meet sustainability requirements in 95 percent of all applicable contracts by 2020.		
Indicator: Percent of contracts that meet sustainability requirements	2014	2015
Target	95%	95
Performance Goal: Obtain 16% of total energy from renewable sources by 2018. (NEW)		
Indicator: Percent of energy consumed from renewable resources.	2014	2015
Target	10%	10%
Performance Goal: Reduce greenhouse gas emissions by 11% from facilities and fleets from a FY 2008 baseline. (NEW)		
Indicator: Percent of greenhouse gas emissions reduced from the FY 2008 baseline.	2014	2015
Target	7%	8%
Performance Goal: Reduce greenhouse gas emissions by 10.9 % from employee business travel and commuting by 2020 from an FY 2008 baseline (NEW)		
Indicator: Percent of greenhouse gas emissions reduced from employee business travel and commuting from an FY 2008 baseline.	2014	2015
Target	5%	6%

Aviation Energy Efficiency (FAA)

Overview

According to the Aerospace Industries Association, modern aircraft are up to 70% more fuel efficient than early commercial jet aircraft. Fuel currently represents the largest operating cost for U.S. airlines, and this cost has grown dramatically in recent years.

Strategies and Next Steps

FAA will continue to measure and track energy efficiency from aircraft operations annually, in order to monitor improvements in aircraft/engine technology and operational procedures, and enhancements in the airspace transportation system. This information provides an assessment of their influence on reducing aviation's emissions contribution. National Airspace System (NAS) energy efficiency target was selected based upon knowledge of the factors that most accurately characterize commercial aircraft fleet fuel efficiency. The data that underlies this target can be assessed in terms of aircraft and engine technology, fleet turnover, and air traffic management procedures that influence routes and schedule.

Energy Use and Emissions Reduction (FHWA)

Strategies and Next Steps

FHWA has developed tools to support States' efforts to reduce energy consumption and greenhouse gas emissions. In 2013, FHWA continued to promote the use of the Energy and Emissions Reduction Policy Analysis Tool (EERPAT), a policy analysis tool that can be used by States to evaluate strategy alternatives and scenarios for reducing transportation-related GHG emissions and fuel consumption. EERPAT is used to estimate the amount of travel in terms of vehicle miles traveled (VMT) and the resulting GHG emissions, including fuel use and electricity use for battery charging by autos, light trucks, transit vehicles, and heavy trucks. FHWA is developing a spreadsheet calculator to estimate energy use and greenhouse gas emissions from the construction and maintenance of transportation infrastructure. The calculator will facilitate the comparison of transportation plan alternatives, NEPA project alternatives, and alternative construction and maintenance practices. The calculator was pilot tested by several DOTs and MPOs in late 2013 and a final version will be released in 2014.

FHWA is also conducting research to explore the implications of implementation of electric vehicle (EV) infrastructure on the Federal-aid Program to better understand how the deployment of EVs will impact the mission of the FHWA, the financial implications for available revenues, and potential infrastructure development needs for EV deployment in the U.S.

Goal Leader

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

Alternative-Fuel and Hybrid Transit Vehicles (FTA)

Overview

FTA promotes and researches the use of environmentally-friendly equipment in transit infrastructure construction and operations. To track progress, the National Transit Database includes a revenue vehicle

inventory that records the primary fuel type of each vehicle used for carrying passengers in public transportation. The revenue vehicle inventory includes all modes of public transportation, rail and non-rail. This measure is a count of all such vehicles that are recorded as not being powered directly by traditional fossil fuels, divided by the total number of revenue service vehicles.

Strategies and Next Steps

MAP-21 did not extend the Clean Fuels Bus Program as a separate, stand-alone grant program. Nevertheless, FTA will continue to fund the purchase of a significant number of environmentally-friendly transit vehicles through other grant programs. The ongoing decline in prices for natural gas continues to make compressed natural gas an attractive alternative for many transit systems.

FTA does not directly purchase vehicles used for operating public transportation service. Vehicle purchase decisions, including the decision on fuel type, are made at the local level by transit agencies using FTA formula funds and limited discretionary funds.

FTA also has authority to support research activities related to low- or no-emission bus and bus facilities to minimize environmental impacts and improve air quality. FTA can fund research that supports the goal of increasing the percent of alternative-fuel and hybrid vehicles in the transit revenue service fleet.

Goal Leader

Robert J. Tuccillo, Associate Administrator/Chief Financial Officer, Federal Transit Administration

Sustainable Practices at DOT (OST)

Overview

The Department is committed to achieving the above sustainability initiatives, however the following factors may impact the effectiveness of these efforts:

- Increase or change of core mission responsibilities
- Alteration of existing and future appropriation of funds
- New or revised sustainability requirements
- Other unforeseen circumstances outside the control of the Department

To mitigate some of these factors, the Department is maximizing the use of no- or low-cost tools such as performance-based contracts for energy efficiency enhancements or upgrades to existing buildings. Additionally, DOT is leveraging free, web-based data collection and management systems to monitor and measure sustainability performance such as the U.S. Environmental

Protection Agency's ENERGY STAR Portfolio Manager system and Re-TRAC waste management system. Finally, the Department is partnering with other Federal agencies to achieve a common goal. DOT signed a Memorandum of Understanding with the Department of Energy's Federal Energy Management Program (FEMP) to provide technical assistance with improving fleet management and in the design of new energy efficient buildings and the evaluation of existing buildings. This partnership has resulted in the identification of an estimated \$5 million in project savings.

Strategies and Next Steps

- Leadership in Sustainability Scorecard – The Department will continue to evaluate each Operating Administration's sustainability performance during the internal regulatory review meetings with the Deputy Secretary.
- Policy Orders, Action Memos and Guidance Documents – The Department will continue to develop or update sustainability policy orders and supporting guidance documents which help to reduce its environmental footprint and resource consumption and ensure that its buildings and fleet are performing efficiently with the best return on investment for the American people.
- Greenhouse Gas Inventory – The Department will continue to compile a comprehensive inventory of greenhouse gas emissions and identify opportunities and strategies for reducing these emissions.
- Performance-based contracts – The Department will continue, to the maximum extent possible, to use these no- or low-cost contracts for energy efficiency enhancements or upgrades to existing buildings.
- Annual reports to OMB – The Department will continue to track and update its strategies and Departmental performance to meet requirements related to reports such as the Strategic Sustainability Performance Plan and the OMB Scorecard.

The Department has formed a strategic partnership with DOE's Federal Energy Management Program to implement energy, environmental, and sustainability activities. This partnership will identify opportunities to enhance Energy Independence and Security Act (EISA) evaluations and water conservation measures at DOT buildings. It will also help to increase the number of High Performance Sustainable Buildings (HPSBs) within DOT. Finally, the partnership will identify opportunities to improve fleet performance by reducing petroleum consumption and increasing alternative fuel use in DOT vehicles.

Other key partners are 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 Department of Housing and Urban Development (HUD). Through community outreach programs and the DOT-EPA-HUD Partnership for

Sustainable Communities, DOT works with local community, academic, and social organizations to carry out the Department's commitment to sustainability.

As a key member of interagency workgroups, DOT has worked closely with GSA and DOE to provide comments and recommendations on government-wide issues related to HPSBs, the greenhouse gas emissions inventory, and the employee commuter choice survey. Conversely, DOE, CEQ, and OMB serve as oversight agencies, which issue guidance and review DOT's annual sustainability and energy-related reports.

Strategic Objective 5.2—Mitigate environmental impacts

Avoid and mitigate transportation-related impacts to climate, ecosystems, and communities by helping partners make informed project planning decisions through an analysis of acceptable alternatives, balancing the need to obtain sound environmental outcomes with demands to accelerate project delivery.

Performance Overview

Our recent emphasis on ecosystem approaches to determining the environmental impact of transportation projects has promoted broader mitigation and conservation strategies. For the Nation’s transportation systems and infrastructure investments to be sustainable, DOT also must consider the secondary effects of construction and land use more broadly. For example, projects comply with requirements for stormwater runoff management and federal funds are available for restoration activities. Still, more must be done to meet the challenge of reducing transportation’s contribution to water quality problems. We must balance this need against the demand for faster project delivery time, which is often determined by the environmental permitting process. We will work to improve internal project delivery processes and identify opportunities for enhanced interagency harmonization, through continued DOT initiatives, implementing Executive Order 13604 to streamline infrastructure projects, and other related efforts.

DOT Operating Administrations: Federal Highway Administration (FHWA), Federal Aviation Administration (FAA), Federal Transit Administration (FTA), Federal Rail Administration (FRA), Maritime Administration (MARAD), Pipelines and Hazardous Materials Safety Administration (PHMSA) and Office of the Transportation Secretary (OST).

PERFORMANCE REPORT

Performance Measure	Actual					2013		2013 Target Met or Not Met
	2008	2009	2010	2011	2012	Target	Actual	
Ship Disposal Program (MARAD)								
Cumulative number of ships (2010-2017) safely removed from the Suisun Bay Reserve Fleet for disposal.	N/A	N/A	11	26	36	32	44	Met
Hazardous Liquid Pipeline Spills (PHMSA)								

Performance Measure	Actual					2013		2013 Target Met or Not Met
	2008	2009	2010	2011	2012	Target	Actual	
Hazardous Liquid Pipeline Spills With Environmental Consequences.	128	111	88	99	123(r)	94	119*	Potentially Not Met
Aviation Environmental Impacts (FAA)								
U.S. population exposed to significant aircraft noise around airports.	383,465	291,768	317,596	315,293	319,901 (r)	371,000	321,000	Met
DOT Environmental Impacts (OST)								
Percent improvement in water efficiency.	2%	3.3%	(1.2%)	(9.7%)	0.9%	10%	TBD	Not Met (2012)
Percent recycling and waste diversion.	N/A	N/A	N/A	+	11% (r)	8%	TBD	Not Met (2012)
Notes:								
(r) Revised; * Preliminary Estimate; + Data Unavailable; ^ 2011 and 2012 Actuals Available Following Release of Conditions and Performance Report								

Hazardous Liquid Pipeline Spills (PHMSA)

Progress Update

PHMSA reported 119 hazardous liquid pipeline spills with environmental consequences in 2013. The program is continuing to evaluate the patterns in these releases to better understand where program interventions might be more effective.

Aviation Environmental Impacts (FAA)

The metric tracks the residential population exposed to significant aircraft noise around U.S. airports. Significant aircraft noise is defined as aircraft noise at or above DNL 65 dB. In 1981, FAA issued 14 CFR Part 150, Airport Noise Compatibility Planning, and as part of that regulation, formally adopted DNL. Day-Night Average Sound Level, abbreviated as DNL and symbolized as Ldn, is the 24-hour average sound level, in dB, obtained from the accumulation of all events with the addition of 10 decibels to sound levels in the night from 10 PM to 7 AM. The weighting of the nighttime events accounts for the increased interfering effects of noise during the night when ambient levels are lower and people are trying to sleep.

PERFORMANCE PLAN

Ship Disposal Program (MARAD)		
Performance Goal: Reduce risk of environmental contamination from disposal of Federally owned vessels (Note: This is a new performance goal in FY 2014).		
Indicator: Reduce the risk of environmental contamination from the disposal of federally owned vessels by meeting a ratio of 1.0 of incoming vessels for disposal to the number of vessels removed for disposal.	2014	2015
Performance Target	1.0	1.0
Hazardous Liquid Pipeline Spills (PHMSA)		
Performance Goal: Reduce hazardous liquid pipeline spills with environmental consequences		
Performance Measure: Hazardous liquid pipeline spills with environmental consequences	2014	2015
Performance Target	84-109	81-105
Aviation Environmental Impacts (FAA)		
Performance Goal: Reduce the number of people exposed to significant noise around airports to less than 300,000 people in FY 2018.		
Performance Measure: Number of people exposed to day-night average sound levels of 65 dB or greater around US in the previous calendar year.	2014	2015
Performance Target	356,000	342,000
DOT Environmental Impacts (OST)		
Performance Goal: Divert 50 percent of non-hazardous solid waste annually from landfills (excluding construction and demolition waste).		
Indicator: Percent of solid waste diverted from landfills.	2014	2015
Performance Target	40%	50%
Performance Goal: Reduce DOT water use 22% from an FY 2007 baseline by FY 2018.		
Indicator: Percent reduction from the FY 2007 water use baseline.	2014	2015
Performance Target	14%	16%

Ship Disposal Program (MARAD)

Overview

MARAD is the U.S. government's disposal agent for Federal government-owned merchant vessels that exceed 1,500 gross tons. The Ship Disposal Program provides resources to safely remove and dispose of obsolete ships moored in National Defense Reserve Fleet (NDRF) sites in an environmentally sound manner. NDRF vessels are moored in fleet sites located in Virginia, Texas, and California. By agreement with the Navy, MARAD also removes for disposal non-combatant naval vessels located in Pennsylvania and Hawaii that have been decommissioned. The MARAD and Navy fleet sites are located in ecologically sensitive estuarine environments. For

this reason, MARAD's goals are to minimize the time that the non-retention MARAD and Navy vessels remain moored in the five fleet sites and to ensure that any non-retention vessels that are designated as a high disposal priority, due to poor material condition, are removed for disposal within 12 months of being designated as high priority.

Strategies and Next Steps

Fluctuations in the actual per ship disposal costs, as a result of regulatory, industry or market factors, will affect the number of ships that can be disposed of in FY 2014 and FY 2015. Proper custodianship of these vessels requires compliance with environmental requirements to ensure that measures are taken to eliminate environmental risks associated with vessel storage and arrest deterioration for those obsolete vessels awaiting disposal. Primary activities in carrying out the objectives of the Ship Disposal Program include the following:

- Conducting ship recycling for obsolete, Federally owned, merchant vessels in an environmentally responsible manner that reduces the risk of environmental contamination;
- Preventing the potential spread of invasive species by cleaning NDRF ships of marine growth on drydock or with approved in-water hull cleaning methods prior to removing ships from one biogeographical area to another for disposal; and
- Conducting open and competitive solicitations for ship disposal services in a best-value manner that minimizes government costs and takes advantage of the capacity of the domestic ship recycling industry.

Goal Leader

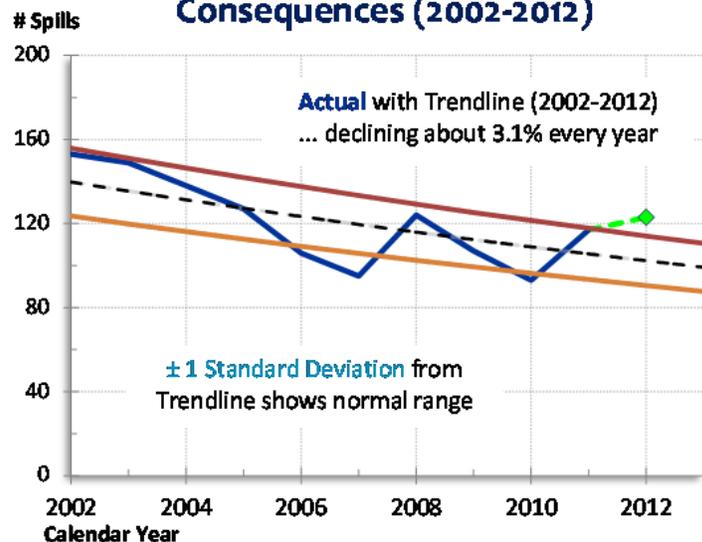
Kevin Tokarski, Associate Administrator for National Security, Maritime Administration.

Hazardous liquid pipeline spills (PHMSA)

Overview

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.

Pipeline Spills w/Environmental Consequences (2002-2012)



Source: PHMSA Incident Data – as of April 1, 2013.

Strategies and Next Steps

Understanding and targeting risk: A systematic approach to risk management requires a comprehensive understanding of the factors contributing to risk and the ability to focus resources in those areas that pose the greatest risk. Our strategy for dealing with this challenge is to:

- Develop our incident investigations program to better understand the root causes of failures;
- Integrate, target, and expand safety inspections based on the most serious risks; and
- Improve data collection and analysis.

Mitigation and response: While our primary focus is on prevention, we recognize that accidents can still occur. Our general strategy for reducing consequences of failures is to:

- Improve leak detection and the use of product controls systems;
- Improve the quality and utility of pipeline facility response plans; and
- Support coordinated emergency response intervention and continuation of our safety mission during any incident of national significance.

Information Technology: The Safety Monitoring and Reporting Tool (SMART) provides a central repository for pipeline safety information; the FedStar system provides information and tools for State programs; the National Pipeline Mapping System provides geospatial information on the national pipeline infrastructure; and the National Pipeline Information Exchange (NPIX) will provide a 360 degree profile of geographic information associated with 2.6 million miles of pipelines within the U.S.

Training: PHMSA provides a comprehensive training and qualification program for Federal and State inspectors, including a three-year core program for new inspectors.

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 when they occur.

Responsible Official:

Jeffrey Wiese, Associate Administrator for Pipeline Safety

Highways Environmental Impacts (FHWA)

Strategies and Next Steps:

In 2012, FHWA developed INVEST, FHWA's sustainability self-assessment tool that enables state DOTs and Metropolitan Planning Organizations (MPOs) to evaluate and improve the sustainability of their transportation plans, projects, and programs. INVEST is highway-focused and is now undergoing marketing and deployment on a broader basis, including training and outreach to improve the skills of States and MPOs in its use.

INVEST is helping State DOTs, MPOs, and others consider sustainability through every phase of the transportation infrastructure lifecycle, including system planning, project management, maintenance, and operation. The tool helps transportation agencies make informed decisions with limited resources to balance economic, social, and environmental factors. FHWA initiated a deployment program for INVEST, which has led to a total of 18 agencies including State DOTs, MPOs, and Federal land management agencies across the country using this tool to assess their level of implementation of sustainable practices in transportation planning; project development, design and construction, and operations and maintenance activities.

Aviation Environmental Impacts (FAA)

Strategies and Next Steps:

As air traffic grows over time, noise exposure is likely to move upwards. The target will continue to be re-assessed as FAA takes a more integrated approach to environmental regulation. FAA will assess the relative costs and benefits of noise, local air quality, and greenhouse gas emissions and the trade-offs in achieving reductions in each. For continued noise reduction, FAA is using a balanced approach taking into account reduction in the source of noise, improved operational procedures, and land-use compatibility. Source noise reduction can be achieved through the maturation and commercialization of aircraft that meet the most stringent noise certification standards. As existing aircraft are retired and replaced with newer quieter aircraft, the number of people exposed is expected to decrease. Implementation of improved operational procedures

developed under NextGen has the potential to contribute to reducing the noise of aircraft operating over some communities around airports. FAA will continue to conduct research and development activities related to technology and operations as well as enhancing our scientific and technical basis for understanding the impacts of aircraft noise on the exposed population.

FAA also publishes a table of land uses that are compatible or incompatible with various levels of airport noise exposure in DNL. This table established that levels below DNL 65 dB are considered compatible for all indicated land uses and related structures without restriction. For more information on airport noise, visit http://www.faa.gov/airports/environmental/airport_noise/.

Reduce DOT Environmental Impacts (OST)

Building, operating and maintaining transportation systems has environmental consequences, and DOT faces many challenges for reducing carbon and other harmful greenhouse gas emissions, promoting energy independence and addressing global climate change for the Department's buildings and fleet. Under Executive Order (EO) 13514, DOT 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 10-year 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 2012-2016 Strategic Plan.

Strategic Objective 5.3 Adapt to Climate Change

Promote infrastructure resilience and adaptation to extreme weather events and climate change through research, guidance, technical assistance, and direct federal investment.

Performance Overview

Recent weather events such as Superstorm Sandy, which disrupted major portions of air, highway, transit, and rail line service in the New Jersey-New York metropolitan region, has prompted us to consider more carefully how we plan, design, and build transportation infrastructure. Superstorm Sandy was the largest tropical storm to impact the Northeast U.S. in recent history. Climate change research predicts that storms will become stronger, so we need to consider climate change impacts and the incorporation of adaptation strategies into DOT planning, operations, policies, and programs so that taxpayer resources are invested wisely and that transportation infrastructure, services and operations remain effective under extreme climate conditions. We will encourage DOT funding recipients to perform climate change vulnerability assessments for their transportation infrastructure and integrate the results into planning their decision-making.

DOT Operating Administrations: Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Federal Rail Administration (FRA), Maritime Administration (MARAD), and Office of the Transportation Secretary (OST).

PERFORMANCE PLAN

Performance Goal: Encourage at least 69 State DOTs, MPOs serving a Transportation Management Area (TMA), and Federal land management agencies to undertake an assessment of vulnerabilities of the highway system by FY 2018.(FHWA)		
Indicator: Number of state DOTs, MPOs and Federal land management agencies who have conducted vulnerability assessments.	2014	2015
Performance Target	47	54

Strategies and Next Steps

Infrastructure resilience is the capacity to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, the economy, and the environment.

FHWA is partnering with State Departments of Transportation (DOTs), Metropolitan Planning Organizations (MPOs), and Federal Land Management Agencies (FLMAs) to pilot approaches to conduct climate change and extreme weather vulnerability assessments of transportation infrastructure and to

analyze options for adapting and improving resiliency. This pilot program is jointly sponsored by the FHWA Office of Environment, Planning and Realty, and the Office of Infrastructure.

In FY 2013, FHWA concluded a four-part webinar series to support and encourage MPOs and State DOT efforts to evaluate their vulnerability to climate change and extreme weather events. FHWA released the “Climate Change & Extreme Weather Vulnerability Assessment Framework,” a guide to help transportation agencies assess their vulnerability to climate change and extreme weather events. To provide guidance on project funding, FHWA released a Memorandum to clarify that, in general, activities to plan, design, and construct highways to adapt to current and future climate change and extreme weather events are eligible for reimbursement under the Federal-aid program and for funding under the Federal Lands program. FHWA will continue to work with the States to:

- Conduct the second round of the climate resilience pilot program to assess vulnerability to climate change and extreme weather events, and to develop options for adapting to future changes;
- Continue to disseminate the results of the Gulf Coast 2 study that was focused on Mobile, AL, including procedures and tools that can be used by MPOs and DOTs around the country;
- Conduct research to develop climate change mitigation and adaptation strategies;
- Develop and promote tools to help State DOTs and MPOs incorporate climate change and related considerations into transportation plans and systems.
- Conduct the Hurricane Sandy project in cooperation with State DOTs and MPOs in the Northeast.
- Conduct a study on transportation engineering approaches to address adaptation and resiliency, which focuses on promoting resiliency at the engineering level.

Goal Leader

Gloria Shepherd, AA for Planning, Environment, and Realty, FHWA

Strategic Goal: Organizational Excellence

Develop an innovative, world-class organization to advance the U.S. transportation system and serve the Nation's long-term safety, social, economic, security, and environmental needs.

Strategic Objective 6.1—Develop human capital

Build a capable, diverse, and collaborative workforce of highly-skilled, innovative, and motivated employees by making DOT a workplace of choice through employee empowerment and engagement, learning and development, succession planning, workplace flexibilities, and a healthy and safe workforce.

Performance Overview

Our ability to provide transportation programs and services that meet the Nation’s needs depends on excellent management of our organization and resources. We must build a workforce that can meet the challenges of this decade, especially in light of the pending retirement of many of our eligible employees. Retirement eligibility among our employees will continue to increase over the next several years given current workforce demographics. Mastering key competencies and skill sets needed in the future is key to effectively perform our jobs. Succession planning and employee engagement will be critical for retaining or replacing our retiring employees. In addition, hiring and training will become increasingly important. We will implement workforce planning, competency-based hiring, and competency-based training to ensure DOT has a diverse and capable workforce; promote selfless leadership that focuses on performance and thrives on collaboration, while leveraging employee inclusion and engagement; and foster a culture of continuous learning and improvement among our employees.

DOT Operating Administrations: All Operating Administrations.

PERFORMANCE PLAN

Performance Goal: Increase DOT’s employee engagement index score on the Office of Personnel Management’s (OPM) Federal Employee Viewpoint Survey (EVS) to 70.5% positive responses by 2018.		
Indicator: Employee engagement index score	2014	2015
Performance Target	65.1	66.4
Performance Goal: Increase hiring of persons with targeted disabilities for eligible positions to 3 percent by 2018.		
Indicator: Percentage of employees with targeted disabilities	2014	2015
Performance Target	1.79%	2.1%

Overview

DOT will refocus its energy and attention on key management practices that address leadership and performance culture and hold management accountable for results. By addressing creativity and innovation, process improvement, poor performance and accountable leadership, DOT’s satisfaction rates in leadership and performance culture will improve.

DOT will become a model employer of a diverse workforce that includes people with disabilities. A diverse and productive workforce is DOT's best guarantee for ensuring safe transportation systems for all Americans and in supporting economic competitiveness, livable communities, and environmental justice and sustainability in the United States.

Strategies and Next Steps

- Refocus energy and attention on key management practices that address leadership and performance culture and hold management accountable for results.
- Develop and implement strategies to increase greater innovation and creativity through the use of IdeaHub.
- Develop and implement strategies to improve internal processes
- Develop and implement strategies that address poor performers
- Form a multi-modal team comprised of supervisors and HR specialists to assess, analyze and recommend approaches to addressing poor performers.
- Assess the effectiveness of the DOT performance management system
- Host a number of webinars and presentations for managers and supervisors on disability awareness.
- Maintain and strengthen partnerships with the local vocational rehabilitation offices, and other Federal agencies and organizations to support the recruitment and hiring of persons with disabilities.
- Provide technical assistance and consultation opportunities to employees with disabilities, managers, and staffing specialists on the recruitment, advancement, and retention of persons with disabilities.
- Host quarterly headquarters listening sessions for the internal DOT disability community.

Strategic Objective 6.2—Improve Information Systems and Financial Management

Advance secure and innovative information systems and technology platforms that protect against cyber threats and support the efficient use of information and data for financial management.

Performance Overview

We will provide secure, customer-focused information systems and technology platforms that support the innovative, effective, and efficient use of information and data for the management of all DOT business processes. We will leverage new technologies and ensure contingency plans are in place for our employees to function as a mobile workforce in all situations. We will continue to emphasize the importance of improving our financial management practices by focusing on increased oversight and proper recording of undelivered orders, which are budget obligations that have not yet been fully liquidated by making a final payment. With the large number and dollar value of DOT-funded grants and projects, identifying unused portions of this funding is constant work. By recovering these unused funds, we can make additional monies available to be used for eligible, higher priority projects.

DOT Operating Administrations: All Operating Administrations.

PERFORMANCE PLAN

Performance Goal: Strengthen the cyber security posture of the Department through holistic situational awareness and risk management capabilities. Note: This is a new performance goal in FY 2014).		
Indicator: Percent of systems governed by Automated Continuous Monitoring capabilities within each component.	2014	2015
Performance Target	60%	70%
Indicator: Percent of systems converted to an ongoing authorization process.	2014	2015
Performance Target	20%	50%

Strategies and Objectives

As part of the Information Resources Management (IRM) Strategic Plan, DOT plans to achieve the following objectives over the next five years:

- Implement a cybersecurity risk management program that continually adapts to changing threats, vulnerabilities, and assets.

- Enhance the Departmental Cybersecurity Incident Response Program to provide interdependent, enterprise-wide coordination, information sharing, and response.
- Focus efforts on data and information entering and exiting our networks, what assets are on our networks, when security statuses change, and who is on our systems.

Goal Leader

Richard McKinney, DOT Chief Information Officer (CIO)

Security, Preparedness, and Other Supporting Objectives

Meet transportation needs for defense readiness through interagency cooperation with the Departments of Defense, State, Homeland Security, and State and local agencies, and foreign governments.

Strategic Objective 7.1-Ensure Effective Response

Mitigate the impacts to transportation due to all hazards by developing effective response planning and training for leaders and responders.

Performance Overview

We proactively prepare to use our internal authorities for the safety and resilience of the U.S. transportation systems and support the transportation mission of the Department of Homeland Security (DHS) and other federal departments and agencies to improve the security of domestic and intermodal transportation sectors. In addition, DOT collaborates with DHS to strengthen the transportation network and effectively mitigate risk through an integrated systems approach. During a response, we work at various locations including the National Response Coordination Center, Regional Response Coordination Centers, and Joint Field Offices to regulate transportation, manage the Nation's airspace, and ensure the safety and security of the national transportation systems. We ensure continuity of operations by maintaining emergency preparedness and response capabilities to effectively provide leadership and response to incidents and fulfill all of our commitments. We also provide guidance and technical assistance to localities, State departments of transportation and their first response partners to improve their ability to conduct emergency response.

DOT Operating Administrations: Federal Highway Administration (FHWA), Federal Rail Administration (FRA), and Office of the Transportation Secretary (OST).

Performance Goal: DOT staff supporting Emergency Response Operations (ERO) will meet or exceed minimum training standards established by DOT and FEMA by 2015.
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Strategic Objective 7.2—Meet national security needs.

Meet transportation needs for national security through interagency cooperation with the Departments of Defense, State, and Homeland Security, and State and local agencies.

Performance Overview

DOT has responsibility for a number of modal emergency preparedness programs that provide the Department of Defense (DOD) and civilian agencies with assured access to commercial transportation during times of national emergency. We will continue to maintain government-owned transportation assets, and provide access to commercial transportation assets for critical support for defense mobility and emergency response; we will maintain steadfast defense readiness across all operating administrations in their respective national security responsibilities through interagency cooperation and drills with the DOD, Department of Homeland Security, and other State and local agencies.

DOT Operating Administrations: Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Federal Rail Administration (FRA), Maritime Administration (MARAD), and Office of the Transportation Secretary (OST).

PERFORMANCE PLAN

MARAD's Ready Reserve Force (RRF) provides sealift capacity to meet the Nation's needs for national security and emergency response. The RRF was first initiated in 1976 as a subset of the National Defense Reserve Fleet (NDRF), and is comprised of ships with special capabilities that can carry or offload heavy and oversized military cargoes which regular U.S.-flag commercial cargo ships cannot carry. When the RRF program first began there were only six ships. Today the program consists of 46 ships berthed at various U.S. ports. RRF ships meet approximately half of the U.S. Transportation Command's surge sealift requirement during a mobilization. Without the RRF ships, DoD would have insufficient sealift capacity in times of emergency. The Maritime Security Program (MSP) and Voluntary Intermodal Sealift Agreement (VISA) programs also provide sustainment sealift via commercial U.S.-flag vessels.

Defense mobility also depends upon port capacity. There are 17 U.S. commercial strategic ports that provide required capabilities to assure that DoD meets its national security missions and timelines. DOT, through MARAD, is responsible for establishing DoD's prioritized use of port facilities and related intermodal services and facilities during DoD mobilizations, and ensuring the safe, secure, and smooth flow of military cargo through the commercial U.S. transportation system while minimizing commercial cargo disruptions.

Strategic Objective 7.3- Expand small business opportunities

Expand business opportunities for small and disadvantaged businesses in the transportation sector.

Performance Overview

The Federal government provides opportunities through its acquisitions to small businesses, which include small disadvantaged, women-owned, veteran-owned, service-disabled veteran-owned, and Historically Underutilized Business Zone small business concerns. These small businesses must also have the maximum practicable opportunity to participate in DOT contracts and subcontracts. In compliance with the *Small Business Act*, we have the responsibility to ensure that small businesses have an opportunity to compete and be selected for a fair amount of the Agency’s contract dollars. We provide various types of assistance to ensure that small businesses have access to transportation-related projects. Through outreach events, we demonstrate a commitment to growing the small business supplier base and increasing their awareness of procurement opportunities.

DOT Operating Administrations: Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Federal Rail Administration (FRA), Maritime Administration (MARAD), and Office of the Transportation Secretary (OST).

PERFORMANCE PLAN

Performance Goal: Maintain the percent of total dollar value of DOT direct contracts awarded to women-owned businesses at 5 percent through FY 2018.		
Indicator: Percent of total dollar value of DOT direct contracts awarded to women-owned businesses	2014	2015
Performance Target	5.0%	5.0%
Performance Goal: Maintain percent of total dollar value of DOT direct contracts awarded to small disadvantaged businesses at 5 percent through FY 2018.		
Indicator: Percent of total dollar value of DOT direct contracts awarded to small disadvantaged businesses.	2014	2015
Performance Target	5.0%	5.0%

Overview

DOT will expand efforts to assist certified Disadvantaged Business Enterprise firms in becoming competitive when competing for highway and bridge construction contracts through the FHWA

Disadvantaged Business Enterprise Supportive Services program. The goal of the program is to achieve a level playing field in a competitive environment where the effects of discrimination are absent and small businesses have a fair chance to participate in DOT-assisted contracts without contending against discriminatory barriers related to race, color, gender, or national origin.

Strategies and Next Steps

- Participate in small business outreach events to include vendor outreach sessions to encourage small business participation in DOT procurements;
- Provide management and technical assistance for small businesses to work closely with state and local transportation agencies;
- Help small businesses gain the financing they need to participate in transportation-related contracts;
- Conduct bonding educational programs to help small businesses become bond ready;
- Increase awareness and participation in all stages of the DOT Small Business Innovation Research program;
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Goal Leaders

DeVera Redmond, Supervisory Small Business Specialist, OST OSDBU
Brandon Neal, Director, OST OSDBU