# FY 2021 PERFORMANCE PLAN





U.S. Department of Transportation

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# INTRODUCTION

The U.S. Department of Transportation (DOT) ensures our Nation has the safest, most efficient, and modern transportation system in the world that improves the quality of life for all American people and communities, from rural to urban, and increases the productivity and competitiveness of American workers and businesses. The Department oversees and administers programs, policies, and regulations for aviation and surface transportation that keep the traveling public safe, secure, and mobile, and ensures our transportation system contributes to the Nation's economic growth.

In accordance with the Government Performance and Results Act of 1993 (GPRA), as amended by the GPRA Modernization Act of 2010 (GPRAMA), the Department is pleased to present the fiscal year (FY) 2021 Annual Performance Plan. It identifies the Department's performance goals and objectives while establishing the performance targets against which progress will be assessed. In addition, the FY 2019 Annual Performance Report documents the Department's performance during FY 2019. Further information detailing DOT performance is available at Performance.gov.

The results presented here demonstrate that DOT is performing well across a wide range of activities. In FY 2019, DOT monitored dozens of performance measures to manage Departmental programs and activities. The performance measures included in this report illustrate the Department's progress toward achieving its strategic goals. The information presented here spans the Department's operating administrations and Office of the Secretary, providing details on the work of DOT's 55,000 employees across the country.

## PURPOSE AND STRUCTURE OF THIS DOCUMENT

THE ANNUAL PERFORMANCE PLAN (APP) provides an overview of the Department's performance goals and the strategies used to achieve these goals. The performance goals listed in the APP align with the Department's Strategic Plan and include annual numerical targets. A limited number of these performance goals are designated as Agency Priority Goals (APG). APGs are near-term results or achievements that leadership wants to accomplish within approximately 24 months and that rely predominantly on agency implementation. This plan directly links to the long-term strategic goals in DOT's Strategic Plan and outlines how the Department plans to achieve them over the upcoming fiscal years.

THE ANNUAL PERFORMANCE REPORT (APR) evaluates DOT's success in meeting its performance targets. Each strategic goal is linked to one or more strategic objectives, and progress in each strategic objective is measured by performance metrics, the goals of which were outlined in the APP. The performance information included in these documents is used to inform Departmental budget, policy, and legislative reauthorization decisions.

## CHANGES TO PERFORMANCE MEASURES SINCE LAST YEAR'S APP SUBMISSION

#### NEW MEASURES

OPERATING ADMINISTRATION	MEASURE	STRATEGIC OBJECTIVE	CAP GOAL? <sup>1</sup>	RATIONALE
FAA	Percentage of Completed NextGen Priorities for the Northeast Corridor (NEC)	Innovation Strategic Objective: Deployment of Innovation	NO	This goal was chosen in collaboration with OST to be the FAA's piece of the response to the congestion in the Northeast Corridor.
FHWA	Percentage of Interstate Pavement in Good or Fair Condition	Infrastructure Strategic Objective 2: Life Cycle and Preventative Maintenance	NO	To implement a MAP-21/FAST Act provision.
FHWA	Percentage of Deck Area on NHS Bridges in Good or Fair Condition	Infrastructure Strategic Objective 2: Life Cycle and Preventative Maintenance	NO	To implement a MAP-21/FAST Act provision.
MARAD	Percentage of Shipping Capacity and Crews Available Within Mobilization Timelines	Infrastructure Objective 3: System Operations and Performance	NO	MARAD's emergency preparedness programs provide assurance to commercial- and government-owned vessels during times of National emergency, and are monitored monthly to ensure availability of sufficient capacity and U.S. mariners.
OST/OCIO	Shared Service Utilization Percentage	Accountability Objective 2: Mission Efficiency and Support	CAP Goal 5	To measure IT shared services adoption.

#### DISCONTINUED MEASURES

OPERATING ADMINISTRATION	MEASURE	STRATEGIC OBJECTIVE	CAP GOAL? <sup>1</sup>	RATIONALE
FHWA	Percentage of VMT on the NHS in Good Condition	Infrastructure Strategic Objective 2: Life Cycle and Preventative Maintenance	NO	To implement a MAP-21/FAST Act provision.
FHWA	Percentage of NHS Bridges in Poor Condition	Infrastructure Strategic Objective 2: Life Cycle and Preventative Maintenance	NO	To implement a MAP-21/FAST Act provision.
FTA	Total Number of Certified States with SSO Programs	Safety Strategic Objective 1: Systemic Safety Approach	NO	Goal Completed as of March 2019.
FTA	Reduce Total Transit Injuries	Safety Strategic Objective 1: Systemic Safety Approach	NO	Goal is duplicative of "Reduce Rail Transit Collisions Involving Persons."
FAA	Increase the Integration of Drones into the Airspace without Sacrificing Safety	Innovation Objective 2: Deployment of Innovation	CAP Goal 5	Goal completed and dropped.
OST/OCIO	Improve IT Project Performance	Accountability Objective 2: Mission Efficiency and Support	CAP Goal 5	No longer required by OMB.
OST/OCIO	Consolidate Data Centers	Accountability Objective 2: Mission Efficiency and Support	CAP Goal 5	The Department plans to discontinue this measure as a result of new OMB guidance.
OST-Research	Laboratory Utilization Rates	Innovation Objective 1: Development of Innovation	NO	The measure was discontinued due to data unreliability. The Department will reassess how to more accurately measure lab utility.

<sup>1</sup> Cross-Agency Priority (CAP) Goals are a tool used by leadership to accelerate progress on a limited number of Presidential priority areas where implementation requires active collaboration among multiple agencies.

## MISSION STATEMENT

The mission of the U.S. Department of Transportation (DOT) is to:

Ensure our Nation has the safest, most efficient and modern transportation system in the world, which improves the quality of life for all American people and communities, from rural to urban, and increases the productivity and competitiveness of American workers and businesses.

## LEGISLATIVE AUTHORITIES

Congress provides the funding and legislative authorities needed to carry out the Department's mission. The Department's authorities are substantially codified under titles 23 (highways), 46 (maritime), and 49 (aviation, railroads, and other surface modes) of the U.S. Code. The following are significant authorization acts for DOT's programs:

- > The Fixing America's Surface Transportation (FAST) Act (P.L. No. 114-94: December 4, 2015), authorized appropriations to DOT from FY 2016 through FY 2020 to improve the Nation's surface transportation infrastructure, including our roads, bridges, transit systems, and rail transportation network. The Act reforms and strengthens transportation programs, refocuses on National priorities, provides long-term certainty and more flexibility for States and local governments, streamlines project approval processes, and maintains a strong commitment to safety.
- The FAA Reauthorization Act of 2018 (P.L. No. 115-254: October 5, 2018), provides a five-year authorization of the FAA, the first significant multiyear reauthorization since the FAA Modernization and Reform Act of 2012 (P.L. 112-95), and the first five-year reauthorization in over a decade. The Act authorizes appropriations to the FAA through FY 2023

and includes important changes related to increasing the safety and pace of Unmanned Aircraft Systems integration, expediting the financing and development of airport capital projects, directing the FAA to advance leadership in the field of international supersonic aircraft policies, reforming the aircraft certification process, addressing aircraft noise, and ensuring safe lithium battery transport.

- > The Protecting our Infrastructure of Pipelines and Enhancing Safety (PIPES) Act of 2016 (P.L. No. 114-183: June 22, 2016), authorized the continued oversight of the Nation's 2.7 million miles of oil, gas, and hazardous liquid pipelines, added new authority over the underground storage of natural gas, and authorized research, grants, programs, and the related appropriations from FY 2016 through FY 2019.
- The John S. McCain National Defense Authorization Act (NDAA) for Fiscal Year 2019 (P.L. No. 115-232: August 13, 2018), authorized appropriations in FY 2019 for MARAD's programs, including the U.S. and State maritime academies, ship operations, the Maritime Security Program, grants to small U.S. shipyards, and loan guarantees for ships constructed or reconditioned in the United States.

## ORGANIZATIONAL STRUCTURE

Congress established DOT in 1967, consolidating 31 transportation agencies and functions under the first U.S. Secretary of Transportation, Alan S. Boyd. During the past half-century, DOT employees have brought innovation and integrity to the work of improving the safety and performance of our multimodal transportation system. Today, approximately 55,000 employees work in the Department.



## CROSS-AGENCY PRIORITY GOALS

Per the GPRA Modernization Act requirement to address Cross-Agency Priority Goals in the agency Annual Performance Plan and Report, please refer to www.Performance.gov for the Department's contributions to those goals and progress, where applicable.

## AGENCY PRIORITY GOALS

#### **APG FY2018 – FY2019**

Agency Priority Goals (APGs) provide agencies with mechanisms to focus leadership priorities, set outcomes, and measure results. They set goals that can be achieved within about 24 months and depend predominantly on agency implementation. DOT had five APGs that spanned the period of FY 2018 through FY 2019:

- > Reduce surface transportation-related fatalities
- > Reduce aviation-related fatalities
- > Simplify and enhance environmental review process for major transportation infrastructure projects
- > Improve condition and performance of America's transportation-related infrastructure
- > Control regulatory burden by complying with executive orders to reduce number and economic impact of regulations

#### APG FY2020 – FY2021

The next APG cycle began in FY 2020 and runs until the end of FY 2021. The FY 2020-2021 cycle includes the following APGs:

- > Reduce surface transportation-related fatalities
- > Reduce aviation-related fatalities
- > Improve America's transportation-related infrastructure
- > Enhance commercial space innovation

## STRATEGIC GOALS, OBJECTIVES, AND APGS OVERVIEW

DOT has four strategic goals aligned to nine strategic objectives. Within each strategic objective, the Department sets numerous performance goals. Some goals are managed

by a single OA, while others are shared among two or more OAs. The following table depicts how DOT's strategic goals and strategic objectives are organized:

STRATEGIC GOALS								
SAFETY	INFRASTRUCTURE	INNOVATION	ACCOUNTABILITY					
STRATEGIC OBJECTIVES								
Systemic Safety Approach	Project Delivery, Planning, Environment, Funding and Finance	Development of Innovation	Regulatory Reform					
	Life Cycle and Preventive Maintenance	Deployment of Innovation	Missions Efficiency and Support					
	System Operations and Performance							
	Economic Competitiveness and Workforce							

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## STRATEGIC GOAL 1 SAFETY

DOT's top priority is to make the U.S. transportation system the safest in the world. The Nation has made progress in reducing overall transportation-related fatalities and injuries during the past two decades, even as the U.S. population and travel rates increased significantly. Over the past 15 calendar years (2004 to 2018), the number of fatalities on the Nation's roadways has dropped by 14.7 percent, from 42,836 to 36,560.

## SAFETY OBJECTIVE 1: SYSTEMIC SAFETY APPROACH

This strategic objective focuses on mitigating risks and encouraging behavioral change by using a data-driven, systemic safety approach to identify risks, enhance standards and programs, and evaluate effectiveness. DOT's Systemic Safety Approach is supported by the following goals:

#### SAFETY OBJECTIVE 1: SYSTEMIC SAFETY APPROACH GOALS

Reduce Motor Vehicle-Related Fatalities Overall (FHWA, NHTSA, FMCSA)

Reduce Motor Vehicle-Related Fatalities by Type (FHWA, NHTSA, FMCSA)

Reduce High-Risk Motor Carriers (FMCSA)

Reduce Fatal Motor Carrier Crashes (FMCSA)

Reduce Rail-Related Fatalities (FRA)

Reduce Train Accidents (FRA)

Improve Safe Transport of Hazardous Materials by Rail (FRA)

Reduce Transit Collisions Involving Persons (FTA)

Reduce Transit-Related Fatalities (FTA)

Reduce Transit-Related Fatalities per 100 Million Passenger Miles (FTA)

Reduce Serious Injuries (NHTSA)

Improve Safety of Fleet on U.S. Roadways (NHTSA)

Improve Timeliness of Data (NHTSA)

Reduce Fatalities Caused by Pipelines and Hazardous Materials (PHMSA)

Improve Safe Delivery of Pipeline Products and Hazardous Materials (PHMSA)

Prevent Excavation Damage to Gas and Hazardous Liquid Pipelines (PHMSA)

Reduce Commercial Aviation Fatalities (FAA)

Reduce General Aviation Fatalities (FAA)

Reduce Runway Incursions (FAA)

Exert Global Leadership at ICAO (FAA)

#### **SUMMARY OF PROGRESS**

DOT, in consultation with the Office of Management and Budget, has determined that performance toward this objective is making noteworthy progress.

In 2019, motor vehicle fatalities constituted 97 percent of all surface transportation fatalities. Rail and transit fatalities combined represented the other 3 percent. DOT continued to make progress in reducing the motor vehicle fatality rate in FY 2019. The fatality rate declined 5 percent from 2016 to 2018. However, there is still much work to be done as the projected number of fatalities in 2018 was 36,750. DOT uses a multi-faceted approach to address the problem by working with State, local, and tribal stakeholders to make the roadway infrastructure safer and to promote safer behavior among drivers, commercial operators, and other road users. DOT also provides National leadership in the development of safer vehicles through research and enforcement as well as in the rapidly growing and evolving field of Automated Driving Systems.

Throughout FY 2019, the Federal Aviation Administration conducted 16 million flights and transported 77 million passengers. Throughout this all-time high period of air traffic, the agency continued to make strides in passenger safety through the seamless implementation of safetyenhancing technology upgrades to the National Airspace System (NAS) and bilateral cooperation with the International Civil Aviation Organization (ICAO). Notable safety achievements to the NAS during FY 2019 include implementing the Commercial and Non-Commercial Safety Risk Index to track runway safety and implementing several helicopter safety enhancements.

#### **APG: Reduce Surface Transportation-Related Fatalities**

GOAL STATEMENT: Reduce overall surface transportation-related fatalities. By September 2021, DOT will reduce motor vehicle fatalities to 1.01 per 100 million vehicle miles traveled.

#### BACKGROUND AND TRENDS

Safety is DOT's top priority, yet fatalities and injuries on the Nation's roads remain a challenging problem.

During 2018, an estimated 36,560 people died in crashes on the Nation's roadways, about a 2.4 percent decrease from 2017, with 37,474 deaths. This was the second year in a row the total number of fatalities declined after two years of fatality increases. The fatality rate also decreased in 2018 to 1.13 fatalities per 100 million vehicle miles traveled compared to 1.17 in 2017.

- > One of the challenges of reducing fatalities is that low unemployment combined with a robust economy leads to more people on the roads. More people are walking, biking, and driving to work. When people have more funds for discretionary travel, they often take more car trips: to the shopping mall, movie theaters, restaurants, etc. This increased movement of people and vehicles increases the odds of someone getting into a crash.
- > Human error, i.e., driver choices, sometimes illegal ones, are a critical factor in over 90 percent of all serious vehicle crashes. This includes distracted driving, driver impairment, driving too fast for conditions, speeding, drowsy driving, illegal maneuvers, and poor directional control.
- > Emerging threats, such as drug-impaired driving, need to be addressed, especially as more States enact new permissive marijuana laws that increase recreational use. Currently, 11 States and the District of Columbia permit recreational use for adults 21 and older, and 47 States allow medical marijuana use.
- > National safety enforcement campaigns focus on reducing some of these behavioral choices, such as driving while impaired or distracted driving which are in many instances illegal. They also seek to increase seat belt use rates. One of the safest choices drivers and passengers can make is to buckle up—seat belts reduce the risk of a fatal injury in a crash by 45 percent. NHTSA estimates that seat belts saved nearly 15,000 lives in 2017. An additional 2,549 lives in 2017 could have been saved if all vehicle occupants had been wearing their seat belts. In 2018,<sup>2</sup> the national seat belt use rate was near the all-time high of 90 percent achieved in 2016.
- > New advanced safety technologies along the full spectrum of automation have the potential for improving safety in all modes of surface travel. Advanced Driver Assistance Systems (ADAS) such as automatic emergency braking, Lane Keeping Assist, Blind Spot Intervention, and several others continue to hold significant potential for improving motor vehicle safety. However, given approximately nine out of ten

2 2019 results should be available in spring 2020.





#### Figure 2 Fatalities by Surface Transportation Mode (2018)



roadway crashes relate to human behaviors, Automated Driving Systems (ADS) hold the potential for even more substantial safety benefits while also delivering enhanced mobility and improved transportation system efficiency. These newer systems should build upon the success of technologies such as airbags and electronic stability control (ESC), or speed sensors on each wheel that help the driver to maintain steering control when braking. NHTSA estimates that in 2017, nearly 2,800 lives were saved by frontal air bags, and from 1987-2017, air bags saved 50,457 lives. ESC saved more than 9,200 lives between 2008 and 2015.<sup>3</sup> Another broader NHTSA study found that safety improvements made after the model year 2000 fleet prevented the crashes of 700,000 vehicles; and prevented or mitigated the injuries of 1 million occupants.4

However, with the evolution of automotive technology comes the expanded use of electronic systems, software,

4 Vehicle safety technology and lives saved statistics from NHTSA report covering 1960-2012 and An Analysis of Recent Improvements to Vehicle Safety. and connectivity. The pace of this technological evolution has increased significantly over the past decade leading to modern vehicles becoming one of the most complex computerized consumer products and exposes vehicles to additional failure modes, vulnerabilities, and threats that could jeopardize benefits while introducing new safety risks. Connectivity and automation introduce possible cybersecurity and privacy concerns. Without proactive measures taken across the vehicle lifecycle, risks could rise accordingly. Methodical identification of potential issues and proactive management of increased connectivity, software, and complexity are essential to designing vehicle architectures that will respond safely even when there are electronic system failures, software errors, or cybersecurity vulnerabilities.

New data sources and more powerful analytical tools can help DOT as well as State and local safety agencies identify problem areas and prioritize safety strategies more quickly.

#### Table 1

#### TRENDS: SURFACE TRANSPORTATION-RELATED FATALITIES BY TYPE

CY: calendar year, January 1 to December 31. Years not specifically denoted as CY in this document refer to fiscal years (FY), which begin October 1 and end September 30.

	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	CY 2019
Total Motor Vehicle- Related Fatalities	33,782	32,893	32,744	35,485	37,461	37,473*	36,560*	1.10 **
Motor Vehicle-Related Fatality Rate per 100 Million Vehicle Miles Traveled	1.14	1.10	1.08	1.15	1.19	1.17*	1.13*	N/A
Total Transit Fatalities	265	272	236	254	257	255	236	245
Total Rail-Related Fatalities***	669	702	767	749	760	818*	832*	N/A

N/A: Not Available

\* Revised totals due to updated data received from the States.

\*\* Statistical projected rate for the first nine months of 2019.

\*\*\* Rail-related fatality data are subject to revision for five years.

<sup>3</sup> Statistics on lives saved by ESC from NHTSA Traffic Safety Facts publications from 2008-2012 and 2011-2015.

#### **APGs and Metrics: Surface Safety**

#### APG: REDUCE MOTOR VEHICLE-RELATED FATALITIES (FHWA, NHTSA, FMCSA)

METRIC: MOTOR VEHICLE-RELATED ROADWAY FATALITIES PER 100 MILLION VEHICLE MILES TRAVELED	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
Targets	1.02	1.02	1.02	1.02	1.01	1.01
Actuals	1.19	1.16	1.11	1.10(p)	N/A	N/A

(p) Statistical projection, based on the first 9 months of 2019.

## APG Supporting Indicators: Reduce Motor Vehicle-Related Fatalities by Type (FHWA NHTSA FMCSA)

(								
METRIC: MOTOR VEHICLE FATALITY SUPPORTING IND (FHWA, NHTSA, FMCSA)	-RELATED DICATORS	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	
Passenger Fatalities Per 100 Million Vehicle Miles Traveled	Targets	0.75	0.75	0.75	0.74	0.74	0.74	
Minion venicle miles fraveled	Actuals	0.75	0.74	0.70	N/A	N/A	N/A	
Large Truck and Bus Fatalities Per 100 Million Vehicle Miles Traveled	Targets	0.114	0.114	0.114	0.114	0.114	0.114	
	Actuals	0.155*	0.160*	0.160*	N/A	N/A	N/A	
Non-Occupant Fatalities (Pedestrian, Bicycle) Per 100,000 Population	Targets	2.19	2.15	2.15	2.10	2.10	2.10	
	Actuals	2.19	2.15	2.25	N/A	N/A	N/A	
Motorcycle Fatalities Per 100,000 Motorcycle Registrations	Targets	62	62	62	62	61	61	
woweyere registrations	Actuals	60.9	59.34	N/A	N/A	N/A	N/A	

\* Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) implemented changes to revise vehicle classification based on gross vehicle weight rating (GVWR), which reclassified 329 light pickup trucks as large trucks. Due to this methodology change, comparisons of the 2016 (and later) Fatality Analysis Reporting System (FARS) large truck data with prior years should be performed with caution.

DOT's strategies to accomplish the priority goal of reducing surface transportation fatalities include the following:

- Pursue a systemic safety approach that uses data to identify risks, enhance standards and programs, and evaluate effectiveness;
- > Improve and enhance data collection and analysis;
- Research and deploy advanced vehicle technology, including deregulatory actions to facilitate and enable innovation;
- > Develop and enforce vehicle safety standards;
- Collaborate with partners to conduct National safety campaigns to promote safe driving practices;
- Work with State and local partners to encourage roadway infrastructure improvements and safer roadway design;
- Boost implementation of proven safety countermeasures, and address risks that impact vulnerable road users and rural communities; and
- > Provide oversight to commercial operators and drivers.

#### FY 2019 PROGRESS UPDATE

DOT continued to make progress in reducing the motor vehicle fatality rate in FY 2019. The fatality rate declined 5 percent from 2016 to 2018. While that did not meet the APG goal, the decline reflects the impact that ongoing safety efforts have had. Moreover, the decline took place at the same time the economy continued to expand. The fatality rate often increases as the economy improves due to increased VMT: more vehicles and people are on the roads. But much work remains to be done. DOT efforts to improve safety in infrastructure, advanced vehicle design and defects investigations, commercial motor carrier safety oversight, and road user behaviors are on track to provide additional gains in the coming years.

While automation innovation and technology matures and data becomes available to inform decision-making, NHTSA's current Federal Motor Vehicle Safety Standards apply to both traditional and emerging vehicles and technologies. If a safety risk develops or a noncompliance matter emerges, the Agency will use its broad enforcement authority to act as necessary. Likewise, NHTSA has multiple advanced vehicle technology research projects in progress, and has initiated efforts to remove unnecessary barriers to innovation and further assure safety including: (1) an ADS Pilot Program Advanced Notice of Proposed Rulemaking (ANPRM) published October 2018; (2) an NPRM on adaptive driving beams, published October 2018; (3) an ANPRM to Remove Regulatory Barriers to ADS, published May 2019 and included in US DOT's 2019 Spring Regulatory Agenda; and (4) three new regulatory/ deregulatory actions on Safety Principles for ADS, Occupant Protection for ADS, and Considerations for Telltales and Indicators.

Building on the work started in 2018 to prioritize drugimpaired driving prevention, in FY 2019, NHTSA continued to promote its drug-impaired safety campaign, If You Feel Different, You Drive Different, with State Highway Safety Offices, in the media and with law enforcement. In April 2019, NHTSA and the Ad Council launched a new National public service announcement campaign to address drug impairment while driving. NHTSA also awarded a \$2.3 million grant to the International Association of Chiefs of Police (IACP) to expand the Drug Recognition Expert (DRE) program. The grant will provide funding for State and local agencies to offer DRE training to law enforcement, judges, and prosecutors and to certify more police officers in the detection and identification of persons impaired by alcohol and/or drugs.

When a crash does occur, timely and efficient emergency medical services (EMS) provide a crucial link to saving lives. NHTSA provides education, training, and other technical resources to strengthen State and local EMS systems. To keep pace with the technological changes occurring in the field, NHTSA in partnership with the U.S. Commerce Department awarded \$109 million in Next Gen 911 grants to 34 States and two tribes to support and enhance State EMS telecommunications systems. NHTSA also released a bold new strategic plan, EMS Agenda 2050, in January 2019 that will help guide EMS efforts for the next decade.

FHWA is working with States and local agencies to advance a data-driven, systemic application of proven safety countermeasures to address the types of crashes that result in the most fatalities: roadway departures, intersection crashes, and crashes involving pedestrians and bicyclists. In meeting this goal, FHWA has completed the following activities:

- FHWA worked to address intersection crashes by publishing two new technical summaries (on Reduced Left-Turn Conflict Intersections and Systemic Application of Multiple Low-Cost Countermeasures at Stop-Controlled Intersections) and initiating a jointly-funded, cooperative study with six State DOTs and one city to improve driver behavior at multilane roundabouts.
- FHWA is promoting Safe Transportation for Every Pedestrian (STEP) through FHWA-sponsored workshops, training, and technical assistance. As of September 30, 2019, 31 States indicated they would like to advance their implementation of STEP by December 2020 during the FHWA Every Day Counts-5 (EDC-5) initiatives.
- > FHWA has also initiated a jointly-funded, cooperative study with five State DOTs and one city to address driver behavior at multilane roundabouts.
- FHWA released a series of six low-cost safety improvement videos that promote the use of Proven Safety Countermeasures to address these crash types.
- FHWA worked with 16 states to reduce the numbers and severity of roadway departure crashes on rural roadways through the EDC-5 technical assistance effort, Focus on Reducing Rural Roadway Departures.
- As of September 30th, 2019, FHWA met the goal of 17 for the "Average number of State DOTs implementing Proven Safety Countermeasures at the postdemonstration level on EDC scale."

DOT and FHWA, in cooperation with the American Association of State Highway and Transportation Officials (AASHTO), sponsored the first National Safety Engineer Peer Exchange. More than 180 safety practitioners from 49 States convened in Minneapolis July 9-11, 2019 to discuss implementing a safe systems approach for infrastructure. National experts and State peers presented on topics from HSIP Safety Management, countermeasure success stories, partnerships and collaboration, pedestrian and bicycle safety, workforce development, and more.

To improve transportation system access and safety for all users, DOT and FHWA convened its 5th meeting of the Motorcyclist Advisory Council on December 10th, 2019, to help identify infrastructure-based countermeasures that could improve motorcyclist safety. After discussing the issues, the members formed draft recommendations and decided to submit committee recommendations by winter 2020.

DOT maintains a robust capacity-building program to prepare and train transportation professionals in the safety discipline. FHWA's 2019 Safety and Operations Boot Camp in September conducted 11 virtual sessions and 1 in-person (3-day) boot camp to prepare professionals for advanced safety analysis.

FHWA published and updated the Crash Modification Clearinghouse (CMF). A Crash Modification Factor is an estimate of the change in crashes expected after the implementation of a countermeasure. The CMF Clearinghouse serves as a repository of the CMFs for transportation professionals to use as they are selecting safety countermeasures. Over 8,000 CMFs reside in the clearinghouse, and 750 CMFs have been added for FY 2019, October 1, 2018 through September 30, 2019. FMCSA continued to implement rulemakings to improve safety. The electronic logging device (ELD) rule is intended to help create a safer work environment for drivers and make it easier to track, manage, and share accurate records of duty status data. Phase II, the full compliance phase of the ELD rule was completed in December 2019. The ELD final rule is estimated to annually save 26 lives and prevent 562 injuries from crashes involving large commercial motor vehicles. FMCSA administers the Drug and Alcohol Clearinghouse. The final rule established central database requirements for Commercial Driver's License (CDL) holders who have verified positive test results for controlled substances and/ or alcohol or have refused to submit to testing. This rule will ensure that CDL holders, who have tested positive or have refused to submit to testing, complete the return-toduty process before driving a truck. The compliance date was January 6, 2020.

FMCSA's grants program awarded over \$77 million in grants to improve Commercial Motor Vehicle (CMV) Safety. \$44.3 million was awarded from the High Priority (HP) grant program which consists of HP-Commercial Motor Vehicle (HP-CMV) grants and HP-Innovative Technology Deployment (HP-ITD) grants. HP-CMV grants are designed to provide financial assistance to state commercial vehicle safety efforts, while HP-ITD grants provide financial assistance to advance the technological capability and promote the deployment of intelligent transportation system applications for CMV operations. State, local, and tribal stakeholder engagement and dialogue is an essential element for the success of the Department's strategic safety initiatives. NHTSA, FHWA, and FMCSA partnered with to support the development of a coalition that has brought together more than 800 State and local organizations to focus on developing short and long-term strategies to reduce crashes and fatalities.

More information about this APG can be found on www.Performance.gov.

#### SURFACE SAFETY APG LEADS

- > FHWA: Nicole R. Nason, Administrator
- > NHTSA: James Owens, Acting Administrator
- > FMCSA: Jim Mullen, Acting Administrator

#### **APGs and Metrics: Surface Safety**

#### PERFORMANCE GOAL: REDUCE HIGH-RISK MOTOR CARRIERS (FMCSA)

METRIC: AVERAGE NUMBER OF DAYS TO INVESTIGATE "HIGH RISK" DESIGNATED CARRIERS	2017	2018	2019	2020	2021
Targets	—	55	55	45	45
Actuals	45.6	49.6	50	N/A	N/A

#### DESCRIPTION

High-risk carriers are the FMCSA's top investigative priority. Passenger carriers are identified as "high risk" if they have not received an onsite investigation in the previous 12 months and two or more of the following Behavior Analysis and Safety Improvement Categories (BASICs) rank at or above the 90th percentile for one month: Unsafe Driving, Crash Indicator, Hours-of-Service (HOS) Compliance, and Vehicle Maintenance. These are the BASICs most closely correlated with crash risk.

This population demonstrates an average crash rate that is four times the National average. Investigative outcomes show that 45 percent of high-risk carrier investigations result in enforcement actions, compared to the 15 percent enforcement rate observed on non-high-risk carriers.<sup>5</sup>

The high-risk carrier population is identified monthly, and FMCSA policy is to investigate high-risk carriers within 90 days of being identified. FMCSA measures the average number of days from when a "high-risk" identification is made to when an investigation is conducted. In addition to the strategies listed under the APG: Reduce Motor Vehicle-Related Fatalities, FMCSA will achieve the target of reducing high-risk motor carriers by continuing to prioritize high-risk carrier investigations.

#### FY 2019 PROGRESS UPDATE

In FY 2019, 2,456 high-risk carriers were investigated. The average time from identification to investigation was 50 days. The number of high-risk carriers identified as in need of an investigation has increased 43 percent since FY 2016. Nevertheless, FMCSA surpassed its target of averaging 55 days to investigate "high risk" carriers.

<sup>5</sup> More information about high-risk carriers is available at <u>https://www.fmcsa.dot.gov/mission/policy/high-risk-carriers-investigation-report.</u>

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METRIC: NUMBER OF MOTOR CARRIER INCIDENTS	2016	2017	2018	2019	2020	2021
Targets	_	4,352	4,308	4,264	4,220	4,176
Actuals	4,396*	4,586*	4,630	N/A	N/A	N/A

PERFORMANCE GOAL: REDUCE FATAL MOTOR CARRIER CRASHES (FMCSA)

\* Beginning with data for 2016, the National Highway Traffic Safety Administration (NHTSA) implemented changes to revise vehicle classification based on gross vehicle weight rating (GVWR), which reclassified 329 light pickup trucks as large trucks. Due to this methodology change, comparisons of the 2016 (and later) Fatality Analysis Reporting System (FARS) large truck data with prior years should be performed with caution.

#### DESCRIPTION

This metric is a lagging indicator (two years). The target is for a five percent reduction from the 2016 baseline by 2022. In addition to the strategies under the APG: Reduce Motor Vehicle-Related Fatalities, FMCSA will carry out the following strategies:

- Our Roads, Our Safety: With over 12 million commercial motor vehicles (CMV) on the road, this program helps raise awareness among the driving public about sharing the road and operating safely around large trucks and buses. The program's outreach efforts focus on educating passenger vehicle drivers, CMV drivers, bicyclists, and pedestrians about CMV blind spots or *No Zones.<sup>6</sup>*
- New Entrant Safety Audits: During their initial 18 months of operation, new entrants will continue to be monitored and new entry safety audits will be conducted. A new entrant may be a motor carrier that applies for a U.S. DOT number to initiate interstate commerce operations or to transport hazardous materials within the State boundaries. Carriers remain in the new entrant safety assurance program until they pass the safety audit and have been in business for 18 months. In FY 2018, 36,755 new entrant safety audits were conducted; the pass rate was 89.8 percent.<sup>7</sup> In FY 2019, 39,436 audits were conducted. Of those, 91.0 percent were conducted on time with a pass rate of 88.2 percent.
- > *CDL Drug and Alcohol Clearinghouse:* This rule will ensure that CDL holders who have tested positive or have refused to submit to testing complete the return-

to-duty process before driving a truck. The compliance date was January 6, 2020.<sup>8</sup> As of January 21, 2020 approximately 2,300 drivers who tested positive have been reported to the Clearinghouse.

Implement Phase 2 of the ELD rule: The ELD rule is intended to help create a safer work environment for drivers, and make it easier, and faster to accurately track, manage, and share records of duty status data. The ELD Final Rule is estimated to annually save 26 lives and prevent 562 injuries, resulting from crashes involving large commercial motor vehicles. Phase 2, the Full<sup>9</sup> Compliance Phase, is from December 18, 2017 to December 16, 2019.

#### FY 2019 PROGRESS UPDATE<sup>10</sup>

In 2017, there were 5,151 fatalities (13.87 percent of total fatalities on the Nation's roadways) in crashes involving a large truck or bus, resulting in a fatality rate of 0.160. In 2018, there were 5,184 fatalities (14.11 percent of total fatalities on Nation's roadways) in crashes involving a large truck or bus, resulting in a fatality rate of 0.160. Large truck and bus fatalities have stayed the same from 2017 to 2018.

9 More information about ELDs is available at https://eld.fmcsa.dot.gov/.

<sup>6</sup> More information about Our Roads, Our Safety is available at <u>https://www.fmcsa.dot.gov/ourroads/about-campaign</u>.

<sup>7</sup> More information about FMCSA's New Entrant Safety Assurance Program is available at <u>https://www.fmcsa.dot.gov/safety/new-entrant-safety-assurance-program</u>.

<sup>8</sup> More information about the Drug and Alcohol Clearinghouse is available at https://www.fmcsa.dot.gov/regulations/commercial-drivers-license-drug-and-alcoholclearinghouse.

<sup>10 2018</sup> is the most current year with total data available. The mathematical model that provides early estimates for the overall number of fatalities on a quarterly basis cannot be used to provide projected numbers for any of the subcategories, such as large trucks. Also, the vehicle miles traveled (VMT) for subcategories cannot be projected through the early estimates process. As a result, full year results for 2019 are not yet available.

METRIC: RAIL-RELATED FATALITIES (FRA)		2017	2018	2019	2020	2021
Per million train-miles						
Highway-rail grade crossing incident rate	Targets	_	2.85	2.84	2.84	TBD
	Actuals	2.999	3.040	3.279	N/A	N/A
Rail right-of way trespass incident rate	Targets		1.55	1.51	1.48	TBD
	Actuals	1.384	1.352	1.633	N/A	N/A

#### PERFORMANCE GOAL: REDUCE RAIL-RELATED FATALITIES (FRA)

Actual data are subject to change and might differ from prior-year materials based on the latest information available. As of September 30, 2019.

#### DESCRIPTION

A highway-rail incident is any impact, regardless of severity, between rail and highway users at a public or private crossing. A trespass incident is any event that causes a death or injury in a rail right-of-way, other than at a highway-rail grade crossing.

Highway-rail grade crossing and trespass incidents account for almost all rail-related deaths.

Trespassing on railroad rights-of-way is the leading cause of rail-related fatalities, accounting for 62 percent of U.S. rail-related deaths in FY 2018. In 2018, approximately 580 people died (an 18 percent increase compared to FY 2014) and 478 were injured trespassing not at grade crossings. An average of 448 trespassers died each year between FY 2009 and FY 2018. Since 1997, more people have been killed each year while trespassing than in motor vehicle collisions with trains at highway-rail grade crossings. Preventing trespassing will not only save lives but will also improve the efficiency of the rail transportation network.

Collisions at highway-rail grade crossings are the second leading cause of rail-related fatalities, accounting for approximately 30 percent of all such fatalities. Each of the 209,000 U.S. highway-rail grade crossings has the potential for a collision between a train and highway vehicle. FRA expects the risk of highway-rail grade crossing incidents to remain a significant rail and public safety issue during the next decade.

#### FY 2019 PROGRESS UPDATE

Preliminary data through June 2019 indicated the FY 2019 grade crossing incident was almost eight percent above the FY 2018 rate and more than nine percent above the FY 2017 rate. Rising motor vehicle and rail traffic as well as higher population densities and land development around crossings increase the risk of crossing collisions.

FRA is undertaking a comprehensive approach to grade crossing safety. Following FRA's 2018 Grade Crossing Fatality Prevention Summit to gather stakeholder perspectives, FRA conducted listening sessions in 2019 on grade crossing safety technology. FRA is planning a 2020 symposium to review findings from the FY 2019 listening sessions and develop a 3- to 5-year strategy to implement and demonstrate promising technologies. FRA also partners with Operation Lifesaver, Inc., a National, non-profit organization dedicated to reducing grade crossing and trespassing incidents through public outreach, education, and law enforcement partnerships. FRA consistently evaluates program partnerships to ensure funds are being used most efficiently to meet program goals. FRA provides funding to enable active and retired law enforcement officers to raise awareness and enforce traffic laws at grade crossings and on railroad rights-of-way.

The trespasser incident rate per million train miles was a new performance measure for 2018. Preliminary data through June 2019 indicated the FY 2019 trespassing incident rate was almost 20 percent higher than the FY 2018 rate and almost 18 percent higher than the FY 2017 rate. Trespassing is a complex challenge for the industry, communities, and FRA to address. FRA's 2018 National Strategy to Prevent Trespassing on Railroad Property focuses on four strategic areas: (1) data gathering and analysis; (2) community site trespass prevention assessments; (3) funding; and (4) partnerships with affected stakeholders.<sup>11</sup>

11 FRA, National Strategy to Prevent Trespassing on Railroad Property, February 19, 2019, https://www.fra.dot.gov/eLib/Details/L19817.

#### PERFORMANCE GOAL: REDUCE TRAIN ACCIDENTS (FRA)

METRIC: TRAIN ACCIDENTS Per million train-miles	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
Targets	_	2.30	2.30	2.29	TBD
Actuals	2.555	2.652	2.731	N/A	N/A

Actual data are subject to change and might differ from prior-year materials based on the latest information available. As of September 30, 2019.

#### DESCRIPTION

Train accidents involve damage to on-track rail equipment above the annual reporting threshold (\$10,700 for calendar year 2019) and exclude grade crossing and trespass incidents.

FRA will accomplish the goal of reducing train accidents through its <u>comprehensive safety program</u> that targets inspections and other oversight activities to railroads and regions with below average performance. FRA subject matter experts provide ongoing technical assistance to railroads and field personnel to address challenges.

#### FY 2019 PROGRESS UPDATE

The train accident rate per million train miles was another new performance measure for FRA in FY 2018. Preliminary data through June 2019 indicated the FY 2019 accident rate was about 14 percent higher than the agency target and less than 0.5 percent below the FY 2018 rate. FRA is increasing its analytical capabilities and working with participating railroads through the <u>Confidential Close</u> <u>Call Reporting System<sup>12</sup></u> to understand and mitigate root causes. As railroads implement positive train control systems and adopt risk reduction programs, FRA expects to see improvement in this measure.

<sup>12</sup> The Confidential Close Call Reporting System (C3RS) is a partnership among the National Aeronautics and Space Administration, FRA, and participating railroad carriers and labor organizations. The program is designed to improve railroad safety by collecting and analyzing reports which describe unsafe conditions and events in the railroad industry. Employees may report safety issues or "close calls" voluntarily and confidentially.

METRIC: RATE OF NON-ACCIDENT RELEASES OF HAZARDOUS MATERIALS	2016	2017	2018	2019	2020	2021
Per 10,000 tank-car originations						
Targets		—	2.30	2.28	2.28	TBD*
Actuals	2.32	2.42	2.47	1.81	N/A	N/A

#### PERFORMANCE GOAL: IMPROVE SAFE RAIL TRANSPORT OF HAZARDOUS MATERIALS (FRA)

Projection based on PHMSA Form 5800.1 reports submitted through August 31, 2019; shipping volume estimates based on Surface Transportation Board waybill sample data and commodity movement projections from industry. Final CY 2019 data expected in August 2020.

\* CY 2021 target should be set in 2020.

#### DESCRIPTION

A non-accident release (NAR) is an unintentional release of a hazardous material while in transport (including loading and unloading while in railroad possession) not caused by derailment, collision, or other rail-related accidents. NARs consist of any amount of product (liquid, solid, or vapor) released from improperly secured or defective valves, fittings, and tank shells. These include undesired venting of non-atmospheric gases from safety relief devices. Most NARs involve small quantities of material. Data are derived from multiple sources, which limits their timeliness.

FRA's tank car program conducts inspections and oversight activities of tank car facilities and tank car fleet owners to ensure compliance with regulations and to ensure tank car owners take necessary measures to reduce risks. In addition, FRA is focusing on ensuring that processes and technologies hazmat shippers and receivers have implemented in recent years are accurate and consistent with regulatory requirements. FRA works with the <u>Association of American Railroads' Tank Car Committee</u> to understand emerging issues, improve safety, and enhance oversight of tank car facilities and owners. Moreover, FRA continues to work with PHMSA to implement regulatory and other changes as recommended through processes such as the <u>Rail Safety Advisory Committee</u> and the Tank Car Committee.

#### FY 2019 PROGRESS UPDATE

CY 2018 data indicate that the total percentage of hazmat shipments transported without a release was 99.9998 percent for the fourth consecutive year. The NARs rate was below the 2018 goal due to the higher total hazmat shipping volume of 2.17 million tank car originations. Sources of most rail tank car NARs were: liquid valves; hinged and bolted manway; bottom outlet valves; vapor valves; pressure relief devices.

METRIC: TOTAL RAIL TRANSIT COLLISIONS WITH PERSONS	2017	2018	2019	2020	2021
Targets	_	450	420	430	430
Actuals	408	425	466	N/A	N/A

PERFORMANCE GOAL: REDUCE RAIL TRANSIT COLLISIONS INVOLVING PERSONS (FTA)

Source: National Transit Database, data pulled as of May 2019. Data is reported by Federal Fiscal Year. Rail transit collisions with persons includes suicides. Targets for FY 2019 and FY 2020 were revised in December 2018 based on FTA exceeding its targets in FY 2018.

#### DESCRIPTION

Each year, FTA collects data on transit collisions that involve people and works to reduce that number. This measure includes events only for those systems for which FTA has safety oversight. This measure includes all cases where a rail transit vehicle strikes a person, resulting in either a fatality, a serious injury, or immediate medical transportation away from the scene.

#### FY 2019 PROGRESS UPDATE

To improve upon its efforts to reduce rail transit collisions, FTA issued the Public Transportation Agency Safety Plan Rule on July 18, 2018. This rule requires all transit rail systems to have a safety plan in place by July 20, 2020. The safety plan for each rail transit system will be based on the <u>Safety Management Systems (SMS)</u> approach to identifying and mitigating risks, including those for rail transit collisions with persons. In addition to the safety plan, FTA also issued the Public Transportation Safety Training Certification Rule, which completes FTA's safety regulatory framework. This rule requires safety oversight personnel in the transit industry to complete a training program by August 20, 2021. On July 19, 2019 FTA published a Dear Colleague letter to alert the transit industry of an important, upcoming safety deadline. July 19, 2019 marks one year from the compliance deadline for the Public Transportation Agency Safety Plan (PTASP) regulation. The PTASP regulation implements a risk-based Safety Management System approach and requires recipients or sub-recipients of financial assistance under the Urbanized Area Formula Program (49 U.S.C. Section 5307) and rail transit agencies to have a safety plan in place no later than July 20, 2020. The plan must include safety performance targets. Transit operators also must certify they have a safety plan in place meeting the requirements of the rule by July 20, 2020.

The plan must be updated and certified by the transit agency annually. Transit agencies will be responsible for completing certifications and assurances of their PTASP plans. FTA will track grantees affirmations that they met the PTASP requirements. FTA leadership plans to track PTASP certifications through the Transit Award System Management System (TrAMS) and is currently planning the implementation of the process. FTA will not award new grants to agencies required to complete PTASP certifications and assurances and fail to do so. If agencies do not meet this requirement, they will have findings in their triennial reviews and be given corrective action.

METRIC: TOTAL TRANSIT FATALITIES	2015	2016	2017	2018	2019	2020	2021
Targets		_	—	278*	260	255	255
Actuals	254	257	241	250	236	N/A	N/A

#### PERFORMANCE GOAL: REDUCE TOTAL TRANSIT-RELATED FATALITIES (FTA)

\* New measure established in 2018.

#### PERFORMANCE GOAL: REDUCE TRANSIT-RELATED FATALITIES PER 100 MILLION MILES (FTA)

METRIC: TOTAL TRANSIT FATALITIES PER 100 MILLION PASSENGER MILES	2015	2016	2017	2018	2019	2020	2021
Targets			0.543	0.607	0.601	0.596	0.596
Actuals	0.583	0.582	0.597	0.550	0.572	N/A	N/A

Note: The transit fatality rate is calculated by dividing fiscal year fatalities from all transit modes (excluding FRA-regulated transit systems) by 100 million passenger miles traveled. The fatality rate provides a way of examining transit deaths relative to the average passenger trip length (exposure). The fatality rate measure is benchmarked using FTA's National Transit Database, which collects monthly data for safety events and annual data for passenger miles traveled.

#### DESCRIPTION

Transit is one of the safest modes of transportation, and FTA is committed to improving safety of the traveling public. FTA collects safety data of total injuries, total fatalities, and transit fatality rates from transit agencies receiving Federal funds through reporting to the National Transit Database. (NTD). Through tracking and analysis FTA creates initiatives to improve safety for transit riders throughout the Nation.

FTA made notable progress in multiple areas during FY 2019, meeting overall performance goals and delivering results that supported people who rely on public transportation each day, all while protecting Federal financial interests and ensuring that the safest surface transportation mode becomes even safer.

#### FY 2019 PROGRESS UPDATE

Certification of All 31 State Safety Oversight (SSO) Programs — During FY 2019, FTA supported States meeting new statutory safety oversight provisions by an April 15, 2019 deadline. FTA successfully partnered with the 30 States with rail transit to certify all 31 SSO Programs by the deadline. This was a high-visibility effort, because if a State failed to meet the deadline, FTA would have been prohibited by law from awarding new grant funding to any transit agency within the State until certification was achieved, putting as much as \$10 billion in FTA funds of risk of withholding.

Completed Direct FTA Safety Oversight of D.C. Metrorail and Transitioned Oversight to Multi-State Agency — FTA successfully provided direct safety oversight of the Washington Metropolitan Area Transit Authority (WMATA) Metrorail system until March 2019, when FTA certified the new Washington Metrorail Safety Commission's (WMSC's) State Safety Oversight Program (SSOP). For over three years FTA performed the highvisibility and resource-intensive role as the temporary and direct safety oversight agency, making Metrorail a safer system. Timely certification of the new SSOP allowed FTA to make available \$48.5 million in FTA grant funds previously withheld to DC, Maryland, and Virginia transit agencies.

*Public Transportation Agency Safety Plan (PTASP) Rule Implementation* — FTA continued robust support for the transit industry's compliance with the PTASP Final Rule, in advance of a July 2020 compliance deadline. Through August 2019, FTA delivered PTASP-related presentations at 11 conferences, issued more than 17 guidance and technical assistance documents, conducted 26 webinars with over 4,500 attendees, published 17 articles, and received over 1,000 individual questions from industry stakeholders. FTA established a single PTASP website with over 50 resource documents that received over 40,000 page views. FTA also conducted 7 one-day workshops reaching over 400 attendees.

Public Transportation Safety Training — For the new FTA Safety Certification Rule Training Program, FTA issued 170 Certificates of Completion. The safety certification training program Final Rule established a uniform curriculum of minimum requirements for safety training. In addition, to support the Public Transportation Agency Safety Plan Rule implementation and related roles, FTA directly delivered 157 safety-related courses and issued over 9,000 Certificates of Completion to course participants. FTA also developed three new safety training courses. Human Trafficking & Public Safety Initiative — In FY 2019, FTA launched the Human Trafficking Awareness and Public Safety Initiative in support of DOT's Transportation Leaders Against Human Trafficking initiative. FTA published two Notice of Funding Opportunities (NOFO) with \$4 million to fund innovative solutions to address human trafficking, protect transit operators from assault, and reduce crime on public transit.

Rule Protecting Public Transportation Operators from Risk of Assault — In FY 2019, FTA issued a notice in the Federal Register highlighting that the PTASP Final Rule (49 CFR part 673), issued in FY 2018, addressed the risk of transit operator assault and more promptly implemented a separate statutorily required NPRM, thereby fulfilling the NPRM requirement's objective and making such an NPRM unnecessary.

PERFORMANCE GOAL: REDUCE SERIOUS INJURIES FROM MOTOR VEHICLE CRASHES (NHTSA)

METRIC: OCCUPANTS EJECTED FROM PASSENGER VEHICLES PER 100 EMERGENCY MEDICAL SERVICES (EMS) MOTOR VEHICLE CRASH DISPATCHES	2017	2018	2019	2020	2021
Targets		1.2*	1.1	1.0	0.80
Actuals	N/A	0.75	0.76	N/A	N/A

\* New measure established in 2018.

#### DESCRIPTION

Motor vehicles have become much safer over time, due to the Federal Motor Vehicle Safety Standards (FMVSS) promulgated by NHTSA. In fact, more than 600,000 lives were saved between 1960 and 2012 by FMVSS-required safety technology, such as seat belts and airbags. These technologies save lives and reduce serious injuries because they help prevent occupants from being ejected from vehicles, which is one of the most dangerous consequences of a crash. Seat belts are the single most effective vehicle safety technology that can reduce vehicle ejection and injuries. Research shows that they can reduce moderateto-critical injury to front-seat occupants by 50 percent for passenger cars and by 65 percent for light trucks (SUVs, pick-ups, vans). By reducing ejections and serious injuries, seat belts save lives: an estimated 14,668 lives were saved in 2016. NHTSA conducts a National seat belt enforcement and media campaign to increase belt use. NHTSA also works with its EMS partners to track occupant ejections in vehicle crashes through the <u>National</u> <u>EMS Information System</u>.

#### FY 2019 PROGRESS UPDATE

In 2018, the National seat belt use rate was 89.6 percent near the all-time high of 90 percent in 2016. For individual States, the seat belt use rate ranged from 76.4 percent in New Hampshire to 97.8 percent in Hawaii. Twenty-four States and the District of Columbia achieved seat belt use rates of 90 percent or higher.

METRIC: PERCENTAGE OF FLEET CRASH TESTED	MY* 2017	MY 2018	MY 2019	MY 2020	MY 2021
Targets		86%	85%	85%	84%
Actuals	86%	87%	91%	N/A	N/A

PERFORMANCE GOAL: IMPROVE SAFETY OF FLEET ON U.S. ROADWAYS (NHTSA)

\* In the United States, manufacturers traditionally release new model year vehicles in the previous year (so 2018 model years are released in 2017, for example). Therefore, the model year often pre-dates the calendar year. NHTSA tests new vehicles by model year.

#### DESCRIPTION

#### NHTSA's New Car Assessment Program (NCAP)

provides comparative new vehicle safety information to assist with consumers' vehicle purchasing decisions and encourage motor vehicle manufacturers to make vehicle safety improvements. To keep pace with advancements in occupant protection and the introduction of advanced technologies, NHTSA periodically updates the program.

#### FY 2019 PROGRESS UPDATE

NCAP met its target of crash testing 85 percent of new vehicles for FY 2019. Given the growing importance of advanced safety technology, NHTSA has continued to expand the focus of the NCAP program to include

information for consumers on forward collision warning, lane departure warning, crash imminent braking, and dynamic brake support. When consumers now review the crash test ratings on the NHTSA website, they will also see which vehicles include each of the safety technologies listed above for new vehicles and models going back to 2011.

As new technology gets developed and deployed, it will be equally important to help consumers make more informed choices on safety performance when purchasing new vehicles. In 2020, the agency will request public comment on its plans to update the NCAP, including an evaluation of newer crash avoidance technologies.

#### PERFORMANCE GOAL: IMPROVE TIMELINESS OF DATA (NHTSA)

METRIC: PERCENTAGE OF STATES THAT MEET THE QUARTERLY TIMELINESS BENCHMARK FOR REPORTING	2017	2018	2019	2020	2021
Targets		80%	82%	84%	86%
Actuals	80%	90%	85%	N/A	N/A

#### DESCRIPTION

Collecting motor vehicle crash data provides the foundation to understand and quantify the causes of crashes and injuries as well as to develop evidencebased countermeasures, identify emerging trends, and evaluate program effectiveness. NHTSA works closely with the States to develop and implement crash data collection systems. Ensuring the States meet the quarterly benchmarks for entering data will help ensure the process is as efficient as possible. Relevant and timely data reporting helps government agencies make more informed policy, program, and regulatory decisions that will lead to improved motor vehicle safety.

#### FY 2019 PROGRESS UPDATE

NHTSA met its FY 2019 target. The agency continues to implement its ongoing data modernization efforts, and its research project to increase the use of electronic data transfer from the States.

METRIC: CONFIRMED FATALITIES CAUSED BY THE RELEASE OF HAZARDOUS MATERIALS TRANSPORTED VIA PIPELINE OR SURFACE TRANSPORTATION CONVEYANCE	2017	2018	2019	2020	2021
Targets	_		25	24	22
Actuals	16	18	25(p)	N/A	N/A

#### PERFORMANCE GOAL: REDUCE FATALITIES CAUSED BY PIPELINES AND HAZARDOUS MATERIALS (PHMSA)

(p) preliminary. FY 2019 actuals will be finalized in October 2020.

#### DESCRIPTION

PHMSA tracks incidents involving death or major injury, evacuations, fires, and explosions and determines whether any fatalities or injuries were related to the transport of hazardous materials by pipeline or other modes. For pipelines, these data are derived from pipeline operators' reports.<sup>13</sup> PHMSA regulations require incidents to be reported online through the PHMSA Portal. For all other modes, hazardous materials transportation incident data are derived from reports submitted to PHMSA<sup>14</sup> and through other sources (e.g., State and local law enforcement and first responder reports). These data are maintained in the Hazardous Materials Information System.

In FY 2019, PHMSA refined its performance goal and metric to account for the number of fatalities caused by the release of hazardous materials transported via pipeline or surface transportation. PHMSA arrives at its target through an exponential regression analysis of past year data. These targets project a general declining trend into the near future. PHMSA's target for FY 2020 is not more than 24 fatalities. While this level is higher than 2016 and 2017 actuals, it is lower than the prior years and represents a trend of declining fatalities.

#### FY 2019 PROGRESS UPDATE

As mentioned above, in FY 2019, PHMSA began using a new performance measure to account for fatalities caused by the release of hazardous materials by all modes, including pipeline. In prior years, PHMSA reported on incidents involving fatalities and serious injuries (combined). PHMSA determined that there were 18 fatalities in FY 2018, based on available incident report data. This represents an uptick in the number of fatalities, which reflects the increase in the transport of hazardous materials by pipeline or other modes.

<sup>13</sup> PHMSA Forms F-7100.1, F-7100.2, F-7100.3, and F-7000-1.

METRIC: PIPELINE PRODUCTS AND H MATERIALS DELIVERY DATA	AZARDOUS	2017	2018	2019	2020	2021
Incidents Involving Death or Major Injury Resulting from the Transport of Hazardous	Targets	_	63	62 (r)	61 (r)	61
indication invorting Detail of High High y       Intgets       00       00       00       00         esulting from the Transport of Hazardous       Intgets       Actuals       45 (r)       52       4         ipeline Hazardous Liquid Spilled, iross Volume (Barrels)       Targets       —       —       55,795       53         ipeline Hazardous Liquid Spilled       Targets       —       29,300 (r)       23,50	49(p)	N/A	N/A			
Pipeline Hazardous Liquid Spilled, Gross Volume (Barrels)	Targets	_		55,800	53,500	51,200
	Actuals	—	55,795	53,034	N/A	N/A
Pipeline Hazardous Liquid Spilled, Net Volume (Barrels)	Targets	_	29,300 (r)	23,500 (r)	22,900 (r)	22,200
	Actuals	29,251	4,453	20,471	N/A	N/A
Hazardous Materials Incidents Reported Annually	Targets		18,000 (r)	17,000 (r)	16,000 (r)	15,000
	Actuals		19,150	22,036 (p)	N/A	N/A

PERFORMANCE GOAL: IMPROVE SAFE DELIVERY OF PIPELINE PRODUCTS AND HAZARDOUS MATERIALS (PHMSA)

(p) preliminary. FY 2019 actual data will be available in October 2020.

(r) revised.

#### DESCRIPTION

PHMSA invests in programs that prevent incidents before they occur. This includes safety standards that assist shippers and carriers in preparing and transporting hazardous materials safely and programs that prepare communities and first responders for the threats these hazardous materials and pipelines pose. PHMSA supports several State and local activities (state inspection grants, training of state inspectors, etc.) that help prevent leaks, spills, and other incidents. PHMSA also provides direct outreach and education to communities for the prevention of pipeline accidents.

To achieve further gains, PHMSA will continue to focus on safety rulemakings, safe transportation of energy products, risk-based inspections, and enforcement and outreach activities to improve safety. PHMSA will also encourage operators to be vigilant in their operating practices. Pipeline operators and other industries have demonstrated success in improving safety through safety management systems (SMS). Therefore, PHMSA will continue to engage with regulated industries to implement SMS and improve safety cultures to further improve safety outcomes. PHMSA will base future annual incident targets on a rolling five-year average, thereby creating more ambitious targets for the safe movement of hazardous materials.

#### FY 2019 PROGRESS UPDATE

PHMSA's actual performance compared favorably to the targeted levels in FY 2019, reflecting safety improvements in the delivery of hazardous materials and the operation of pipeline facilities. For pipelines, the volume spilled was below the target. For the total number of reportable hazardous materials incidents, PHMSA believes the overall increase in Form 5800.1 filings paired with low levels of serious filings is the result of an aggressive outreach campaign focused around PHMSA's new online filing tool and not an indication of increased risk from hazmat transportation.

PERFORMANCE GOAL: PREVENT EXCAVATION DAMAGE TO GAS AND HAZARDOUS LIQUID PIPELINES

METRIC: DAMAGES PER 1,000 ONE-CALL TICKETS FOR GAS DISTRIBUTION PIPELINES (NATIONAL AVERAGE)	2017	2018	2019	2020
Targets	—	—	3.0	3.0
Actuals	2.8	2.8	2.7	N/A

#### DESCRIPTION

PHMSA's performance measure—excavation damages per 1,000 one-call tickets—is widely used as an indicator of the success of damage prevention efforts. PHMSA considers this to be an effective measure because the desired outcome focuses on reducing the number of excavation-related incidents <sup>15</sup>. This measure is influenced by 811 education and awareness, State enforcement of one-call laws, and technology improvements. The source of the data for damages per 1,000 tickets is PHMSA's gas distribution operator annual report submissions. Pipeline operators are required to submit annual reports to PHMSA and its State partners no later than March 15 of each year.<sup>16</sup>

#### FY 2019 PROGRESS UPDATE

Although this measure was implemented in FY 2019, PHMSA has been tracking damages per 1,000 one-call tickets for gas distribution pipelines, and the national average for 2013 through 2019 ranges between 2.7 and 3.1.

<sup>15</sup> This measure replaces a previous one ("Increase Awareness of Calling 811 before Digging") because it better reflects PHMSA's efforts to reduce the number of excavationrelated incidents. Additionally, the data for the new measure come from operator reports whereas the previous measure's data came from a survey.

<sup>16</sup> Aggregated information is available at <u>https://opsweb.phmsa.dot.gov/primis\_pdm/</u> excavation\_damage.asp.

#### **APG: Reduce (Commercial)** Aviation Fatalities

GOAL STATEMENT: Increase aviation safety for the flying public. By September 30, 2021, FAA's range of programs will contribute to the commercial air carrier fatality rate remaining below the target of 5.4 fatalities per 100 million persons on board and contribute to reducing general aviation fatal accidents to no more than 0.98 fatal accidents per 100,000 flight hours.

#### BACKGROUND

DOT distinguishes between U.S. commercial aviation and general aviation. U.S. commercial aviation covers U.S.-owned carriers only, and includes both scheduled and nonscheduled flights of U.S. passenger and cargo air carriers (14 CFR Part 121) as well as scheduled passenger flights of commuter operators (14 CFR Part 135). It excludes on-demand (i.e., air taxi) service and general aviation. Accidents involving passengers, crew, ground personnel, and the uninvolved public are all included. There are two parts to the FAA priority goal of reducing aviation fatalities: Commercial Aviation and General Aviation. They are measured in two different ways because the safety and validation requirements for training pilots and certifying commercial equipment for U.S. passenger and cargo air carriers are very different than those for private and personal use. Because of these requirement differences, the FAA uses separate metrics to measure the safety of U.S. passengers and cargo than the measures used for flights that are conducted for private personal use.<sup>17</sup>

In 2007, FAA created a long-term goal of reducing the commercial air carrier fatality rate by 50 percent by 2025—from 8.8 fatalities per 100 million persons on board in 2007 to 4.4 in 2025. FAA also set incremental annual targets within that span, following a downward linear projection.

Since 2010, FAA has consistently met or exceeded its

Figure 3

U.S. COMMERCIAL AIR CARRIER FATALITY RATES AND TARGETS PER 100 MILLION PERSONS ON BOARD

FY20 Year-to-Date Fatalities: 1 Fatality Threshold: 51 FY20 Rate Assumes No Additional Fatalities



<sup>17</sup> FAA's commercial fatal accident rate includes data for U.S. air carriers only. Therefore, the Lion Air event in October 2018 and the Ethiopian Airlines event in March 2019, involving Boeing 737 MAX aircraft, are not included in this metric. For more information on this issue, refer to the Department's FY 2020 Major Management Challenges appendix.

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RENDS: U.SOWNED COMMERCIAL CARRIER AVIATION FATALITIES									
	2013	2014	2015	2016	2017	2018	2019	20	
al U.SOwned Commercial Carrier iation Fatalities Carrier Aviation Fatalities	9	5	1	5	3	1	5(p)	1	

#### TR

(p) preliminary. FY 2019 data will be finalized in the second quarter of FY 2020.

To Av

#### APG: REDUCE U.S.-OWNED COMMERCIAL CARRIER AVIATION FATALITIES PER 100 MILLION PERSONS ON BOARD (FAA)

		2017	2018	2019	2020	2021
Metric: U.SOwned Commercial Carrier Fatalities Per 100 Million Persons on Board	Targets	6.4	6.2	5.9	5.7	5.4
	Actuals	0.3	0.1	0.6	0.1(p)	N/A

(p) preliminary. FY 2020 data will be finalized in the first quarter of FY 2021.

annual targets-the actual fatality rate has been 1.1 or less per 100 million persons on board during this time. Having sustained a superior safety record, FAA will strive to maintain this level of performance in the future.

More information about this APG can be found on www.Performance.gov.

#### BASELINE/TRENDS: U.S. COMMERCIAL **AVIATION FATALITIES**

Commercial aviation continues to be the safest form of transportation. While rare, however, commercial aviation accidents have the potential to result in large loss of life. The FAA continues to work with aviation industry stakeholders to establish and implement safety management systems to address and reduce risk within their operations and the National Air Space (NAS). With these systems in place, the FAA and the aviation industry agree that partnership is critical to aviation safety and will work together to address risks.

New technologies, such as unmanned aircraft systems (drones) and commercial space launches, and increased air traffic in popular corridors are emerging areas of focus for FAA.

FAA's strategies to accomplish this priority goal include the following:

- > Work with stakeholders to establish and implement safety management systems to address and reduce risk within their operations and the NAS.
- > Collaborate with the aviation community to encourage voluntarily investing in safety enhancements that reduce the fatality risk.
- > Ensure that safety risk is systematically included as part of the equation when decisions are made in the FAA.

#### FY 2019 PROGRESS UPDATE

In 2019, air travel was at an all-time high with more than 16 million<sup>18</sup> flights and more than 77 million passengers. While rare, commercial aviation accidents happen, with five U.S. fatalities in FY 2019. As of December 31, 2019, this safety metric is on track. There has been 1 fatality, therefore, the actual rate is 0.1 versus a not-to-exceed of 5.7

#### COMMERCIAL AVIATION SAFETY APG LEADS

- > FAA: Ali Bahrami, Associate Administrator, Aviation Safety
- > FAA: Michael O'Donnell, Deputy Associate Administrator (Acting), Aviation Safety

18 Estimated

#### **APG: Reduce (General) Aviation FATALITIES**

GOAL STATEMENT: Increase aviation safety for the flying public. By September 30, 2021, FAA's range of programs will contribute to the commercial air carrier fatality rate remaining below the target of 5.4 fatalities per 100 million persons on board and contribute to reducing general aviation fatal accidents to no more than 0.98 fatal accidents per 100,000 flight hours.

#### BACKGROUND

General aviation encompasses a wide variety of aircraft: gliders; single-seat home-built aircraft; helicopters; and balloons; as well as sophisticated, extended-range turbojets; and UAS that require new thinking with respect to pilot training and operations. FAA resources must be sufficient to address oversight responsibilities consistent with the expected growth in large UAS-certified general

aviation operations (e.g. agricultural operations and external load operations).

The FAA can leverage lessons learned in commercial aviation to continue to improve the level of general aviation safety by identifying precursors to accidents.

#### BASELINE/TRENDS: U.S. GENERAL AVIATION FATALITIES

General aviation fatality rates are at historic lows. FAA recognizes the need to identify precursors to accidents to improve safety. The three most recent final general aviation rates, FY 2006—FY 2008, were used as the baseline. FAA's performance target is to reduce fatalities by 10 percent in 10 years from this baseline. Each year's annual target is an approximate one percent reduction to achieve the overall goal.

Although general aviation fatality rates in aviation are at historic lows and continue to decrease over time, the FAA

#### FIGURE 4

**Fatal Accident Rate** 

AVS SAFETY PERFORMANCE—U.S. GENERAL AVIATION FATALITY ACCIDENT RATE



(Fatal Accidents/100,000 Hours)

The above graph shows the reduction of fatal general aviation accidents against a 3-year baseline in comparison to the 10 percent reduction goal.

must be smarter about how it assures safety as the aviation industry introduces more complex new technologies, such as unmanned aircraft systems (UAS) and electric vertical takeoff and landing (eVTOL) aircraft.

TRENDS: U.S. GENERAL AVIATION FATALITIES

	2012	2013	2014	2015	2016	2017	2018	2019
Total General Aviation Fatalities	267	259	252	238	219	209	226	243

#### APG: REDUCE GENERAL AVIATION FATAL ACCIDENTS PER 100,000 FLIGHT HOURS (FAA)

		2017	2018	2019	2020	2021
Metric: U.S. General Aviation Fatal Accidents per 100,000 Flight Hours	Targets	1.01	1.00	0.98	0.97	0.96
	Actuals	0.83	0.89	0.94*	0.93*	N/A

\* FY 2019 data will be finalized in late 2020. FY 2020 data will be finalized in the first quarter of FY 2022.

FAA's strategies to accomplish this priority goal include the following:

- > Support the installation of new safety-enhancing technology in general aviation aircraft by streamlining the certification and installation processes and encouraging aircraft owners to install such equipment;
- > Continue implementing new Airman Testing and Training Standards to improve airman training and testing by establishing an integrated, holistic airman certification system that clearly aligns testing with certification standards, guidance, and reference materials;
- > Work in partnership with industry on a data-driven approach to understand fatal accident causes and develop safety enhancements to mitigate the risk;
- Reduce pilot deviations, including runway incursions, caused by a lack of English language proficiency;
- Continue working with the general aviation community to educate pilots and other stakeholders on the benefits of sharing (in a protected, non-punitive manner) safety data and utilizing these data in their daily operations; and

Leverage the FAA Safety Team (FAASTeam) program products and product delivery outreach systems. National FAASTeam outreach initiatives include safety articles in the FAA Safety Briefing magazine; FAAST Blast emails; aviation safety courses through the FAASafety.gov website; runway safety educational posters; and live safety seminars on weather, ADS-B, UAS, Loss of Control, and aeronautical decision-making.

#### FY 2019 PROGRESS UPDATE

In FY 2019, the FAA continued to work with the General Aviation Joint Steering Committee (GAJSC) on improving general aviation safety with positive achievements, including several web-based resource guides and information on overall GA community coordination on Loss of Control and engine issue topics. FAA continues to partner with industry (e.g., the GAJSC and the United States Helicopter Safety Team [USHST]) to analyze and develop strategies using a non-regulatory, collaborative, proactive, and data-driven approach to improve safety. There were 22 helicopter safety enhancements (H-SEs) approved, targeting the top 3 occurrence categories: loss of control-in flight (LOC-I), unintended flight in instrument meteorological conditions (IMC), and low altitude operations (LALT) and the top four industries: personal/ private, helicopter air ambulance, commercial operations, and aerial application.

As of December 31, 2019, the target is on track. Year-todate, there have been 53 fatal accidents, making the rate 0.93 versus a not-to-exceed rate of 0.97. These 53 fatal accidents compare against a not-to-exceed of 55. Those 53 fatal accidents resulted in a total of 106 fatalities. Of the total number of GA fatal accidents through December, 10 (18.9 percent) were fatal experimental accidents.

#### GENERAL AVIATION SAFETY APG LEADS

- > FAA: Ali Bahrami, Associate Administrator, Aviation Safety
- > FAA: Michael O'Donnell, Deputy Associate Administrator (Acting), Aviation Safety

#### **PERFORMANCE GOALS AND METRICS: AVIATION SAFETY**

PERFORMANCE GOAL: REDUCING RUNWAY INCURSIONS (FAA)

METRIC: REDUCE RUNWAY INCURSIONS PER TOTAL PROCEDURES		2017	2018	2019	2020	2021
Category A and B* Runway Incursions Per Total Number of Runway Operations**	Targets	0.395	0.395	0.395	—	
	Actuals	0.282	0.159	0.251	—	—
Commercial Surface Safety Risk Index: Maintain the Weighted Surface Safety Risk Index Per Million Operations for Commercial Aviation	Targets	—	_	_	0.35	0.35
	Actuals	—	—	—	0.014(p)	N/A
Non-Commercial Surface Safety Risk Index: Maintain the Weighted Surface Safety Risk Index Per Million Operations for Non-Commercial Aviation	Targets	_	_	_	0.60	0.60
	Actuals	_			0.192(p)	N/A

\* Category A is a serious incident in which a collision was narrowly avoided. Category B is an incident in which separation decreases and there is a significant potential for collision, which may result in a time critical corrective/evasive response to avoid a collision.

\*\* In FY 2020, the metric, Category A and B Runway Incursions Per Total Number of Runway Operations, will be replaced by the Commercial and Non-Commercial Surface Safety Risk Indexes.

(p) preliminary. FY 2020 actuals will be available in the second quarter of FY 2021.
#### DESCRIPTION

The National Transportation Safety Board (NTSB) database is the primary source of runway accident data used for the Surface Safety Risk Index. Runway excursion data is supplemented by the Office of Accident Investigation and Prevention's Aviation System Analysis and Sharing (ASIAS) database, which aggregates runway excursion data from multiple sources. Preliminary incident reports are evaluated when received. An evaluation can take up to 90 days. ASIAS data are then combined with CEDAR and OPSNET data to produce final results.

In FY 2019, the FAA implemented the Commercial and Non-Commercial Surface Safety Risk Indexes, which take an improved, risk-based approach to runway safety by monitoring all types of relevant safety events that occur in the runway environment. These include events involving runway excursions,<sup>19</sup> incursions,<sup>20</sup> and surface incidents.

#### FY 2019 PROGRESS UPDATE

The Commercial Surface Safety Risk Index metric measures the overall safety performance of the NAS in the runway environment. It also includes all manner of operations (commercial and other types), aircraft, vehicles, and pedestrians that occur in that environment. It includes runway collision accidents, runway excursion accidents, taxiway collision accidents, runway incursion incidents, runway excursion incidents, and taxiway surface incidents. Operations are defined as total takeoffs and landings. Commercial operations are considered those operating under FAR Parts 121, 129, and 135; all other operation types are considered non-commercial. The SSM Target is to maintain the weighted surface safety risk index at or below 0.35 per million operations for Commercial Aviation. The latest status, as of July 2019, fiscal year to date (Oct 2018-Jul 2019) is .014. FAA expects to meet this target.

The Non-Commercial Surface Safety Risk Index metric measures the overall safety performance of the NAS in the runway environment. It includes all manner of operations (commercial and other types), aircraft, vehicles, and pedestrians that occur in that environment. It includes runway collision accidents, runway excursion accidents, taxiway collision accidents, runway incursion incidents, runway excursion incidents, and taxiway surface incidents. Operations are defined as total takeoffs and landings. Non-Commercial operations are considered those operating under FAR Part 91. The Surface Safety Metric Target is to maintain the weighted surface safety risk index at or below 0.60 per million operations for Non-Commercial Aviation. The latest status, as of July 2019, fiscal year to date (Oct 2018—Jul 2019) is 192. FAA expects to meet this target.

<sup>19</sup> An excursion is an incident involving only a single aircraft, where it makes an inappropriate exit from the runway.

<sup>20</sup> An incursion is any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and takeoff of aircraft.

Performance Goal: Exert Global Leadership at International Civil Aviation Organization (ICAO)\*

METRIC: EXERT GLOBAL LEADERSHIP AT ICAO		2019	2020	2021
Advance U.S. Standards to Foster the Safety of U.S. Citizens Traveling Internationally and Reduce Regulatory Barriers to U.S. Aviation Firms Globally. Implement FAA's Strategy to Focus and Enhance International Engagement	Targets	Identify priority issues or outcomes from the 13th Air Navigation Conference and implement an action plan for regional and bilateral outreach to promote, advance, and secure FAA's top three objectives relating to safety, air navigation, and emerging issues from the ICAO 40th Assembly.	TBD**	TBD**
	Actuals	The FAA submitted all U.S. working papers to ICAO. Work begins on the communications plan. Arrangements for the U.Shosted event are ongoing.	N/A	N/A

\* Exerting Leadership at ICAO is a new goal for FY 2019.

\*\* This measure is under development.

#### DESCRIPTION

The FAA engages internationally to increase global awareness and compliance with international standards and improve aviation safety and efficiency. The FAA collaborates with other U.S. government agencies and industry, international organizations, as well as bilateral and regional international partners, to set international safety and efficiency standards and to develop bilateral agreements on the exchange of aviation products, services, and information. The FAA works closely with the International Civil Aviation Organization (ICAO), as the United States is a member state to this specialized agency of the United Nations, based in Montreal, Canada.

As a leader in aviation since its inception, the FAA faces global competition from other standard-setting organizations. For example, the European Aviation Safety Agency announced a multi-million-dollar effort to establish new training, recruiting, and safety arrangements in Central America and the Caribbean. This followed a sizable investment by the Chinese in Latin America during the past three years. These regions of the Western Hemisphere are of critical importance to the United States. Not only does the FAA provide air traffic services for a sizable portion of Caribbean airspace, the region is also a top destination of the U.S. traveling public. While foreign entities seek dominance in the areas nearest to the United States, they are also seeking to seize leadership roles in the growing Asia-Pacific and African markets. It is imperative for the United States to make a strong presence at ICAO to drive

U.S. safety standards, practices, and policies, as well as to counter those that facilitate, protect, and enhance foreign aviation businesses.

FAA's responsibility, working with ICAO, is to achieve safety and efficiency within the global network, focused on the safety of U.S. traveling public and the interoperability of U.S. air carriers' equipment and standards. To remain the foremost authority on aviation standards, the FAA must continue to maximize opportunities to engage and redouble its efforts with its international partners to improve safety and increase safety standards. FAA globally conducts certain functions for safety inside and outside of the United States, such as performing air traffic control handoffs and assessing whether a foreign civil aviation authority complies with international aviation standards. The FAA also inspects repair stations, oversees navigation and infrastructure, sets safety standards, and provides oversight around the world for air traffic. The FAA strives to remain the aviation "gold standard" that will ensure U.S. aviation safety and security priorities are met around the world.

#### FY 2019 PROGRESS UPDATE

Working through ICAO, the FAA promotes U.S. priorities, policies, and positions with the goal of influencing the global direction on these key topics. The FAA submitted all U.S. working papers to ICAO for translation. Cosponsorship was gained from Canada, Peru, and Trinidad and Tobago for the Pilot Automation paper. The ICAO 40th Assembly met September 24—October 4, 2019.

# STRATEGIC GOAL 2 INFRASTRUCTURE

To stimulate growth and retain economic competitiveness, DOT must guide strategic investments that enable more efficient movement of people and goods. To achieve the Infrastructure goal, DOT will provide guidance, technical assistance, and research that leverages Federal funding, accelerates project delivery, reduces project lifecycle costs, optimizes the operation and performance of existing facilities, and provides multimodal travel options for people of all ages and abilities.

# INFRASTRUCTURE OBJECTIVE 1: PROJECT DELIVERY, PLANNING, ENVIRONMENT, FUNDING AND FINANCE

This strategic objective speaks to facilitating expanded infrastructure development, modernization, and construction in both rural and urban communities by fostering more efficient and collaborative planning and construction techniques, accelerating project approval, leveraging all sources of funding, and promoting innovative financing while maintaining environmental stewardship. DOT is committed to accelerating environmental reviews,

institutionalizing use of the Permitting Dashboard to improve accountability and transparency, and increasing opportunities for private sector investment to upgrade our transportation infrastructure for the benefit of all communities, from rural to urban. DOT's Project Delivery, Planning, Environment, Funding and Finance objective is supported by the following goals:

#### INFRASTRUCTURE OBJECTIVE 1: PROJECT DELIVERY, PLANNING, ENVIRONMENT, FUNDING AND FINANCE

Maintain Accountability for Permitting Projects (FHWA, FTA, FAA)

Reduce the Time to Complete an EIS (FHWA, FTA, FAA, FRA)

Reduce the Time to Complete a Major Infrastructure Project (FHWA, FTA, FAA, FRA)

Increase the Number of States and Local Agencies using a Federal Innovative Finance Tool (FHWA)

Improve Major Project Performance in FHWA Portfolio (FHWA)

Improve Major Project Performance in FTA Portfolio (FTA)

Increase Grants to Rural and Small Urban Areas (FTA)

Decrease Grant Processing Time (FTA)

Increase Percentage of Grants Identified as Inactive at the Beginning of the Fiscal Year that are either Closed or Returned to Active Status (FTA)

# **SUMMARY OF PROGRESS**

DOT, in consultation with the Office of Management and Budget, has determined that performance toward this objective is making noteworthy progress.

DOT has completed several policy documents to help aid in gaining efficiencies and producing better outcomes related to environmental review and authorizations. Over the past several years, DOT has seen increased efficiencies with environmental review processes. As a baseline, DOT's average completion time for environmental impact statements (EISs) was six and a half years. Comparatively, EISs that started after August 2017 are currently averaging under three years per their project schedules on the Permitting Dashboard.

DOT and FHWA developed an interagency working agreement with Federal resource and permitting agencies to accelerate and coordinate the planning, environmental review, permitting, and decision-making processes for major infrastructure projects. DOT saw progress toward meeting the goal with more projects being tracked on the Permitting Dashboard and a higher percentage of those projects remaining on schedule in FY 2019. DOT added two major infrastructure projects in FY 2019. Major infrastructure projects must have an agency average timeframe of under 24 months.

DOT currently contributes Federal funds to more than 100 major projects that are near or in construction. The development and delivery of these projects, which cost \$500 million or more, is often complex and challenging. Of the 70 annual updates to Major Project financial plans submitted to FHWA between July 2018 and June 2019, 79 percent reflected a two percent or less increase in costs, and 66 percent were found to have less than a two percent increase in schedule.

To encourage infrastructure development, DOT facilitated the use of innovative financing tools in 17 States. DOT's Center of Innovative Finance Support (CIF\$) provided onsite Public Private Partnership training to two States and onsite innovative finance training to DOTs in six States, as well as technical assistance to local governments in two States. In addition, the CIF\$ worked with the Build America Bureau to establish a program for State Infrastructure Bank lending for rural projects. In terms of transit-related projects and funding related to this objective, FTA awarded \$1.57 billion in grant funds to rural transit agencies in the first three quarters of FY 2019 and is on target to meet its annual goal of \$1.59 billion. Also in FY 2019, FTA announced the allocation of \$125 million to the Santa Clara Valley Transportation Authority (VTA) for the Bay Area Rapid Transit (BART) Phase II project. Additionally, FTA announced that the agency is seeking public comment on revisions to its Project Management Oversight (PMO) rule. Proposed changes would streamline the PMO regulations by reducing the number of projects subject to FTA project management oversight.

# **APG:** Simplify and Enhance Environmental Review Process for Major Transportation Infrastructure Projects

GOAL STATEMENT: DOT will maintain accountability by posting and tracking at least 90 percent of its funded projects for which environmental impact statements are required by the end of FY 2018. By the end of FY 2021, DOT will reduce the average time to complete those environmental reviews to 24 months.\*

\* Upon the conclusion of FY 2019, this goal was discontinued as an APG, but it will continue to be tracked as a performance measure.

#### BACKGROUND AND TRENDS

In alignment with CAP Goal 12, <u>Modernizing the</u> <u>Infrastructure Permitting Process</u>, DOT is committed to reducing the average time to complete the EIS process for transportation infrastructure projects. This APG applies to all modes that fund any infrastructure project that requires an EIS. After the conclusion of the FY 2018-FY 2019 APG cycle, this goal will be reclassified from an Agency Priority Goal to a Departmental performance goal.

On August 15, 2017, President Trump signed Executive Order 13807, *Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure*. This order requires a lead Federal agency to navigate each major infrastructure project through the Federal environmental review and authorization process as <u>One Federal Decision</u>, with the goal of completing all Federal environmental reviews and authorizations decisions for major infrastructure projects in 24 months on average. As defined in E.O. 13807, a major infrastructure project requires (1) multiple authorizations by Federal agencies to proceed to construction; (2) the lead Federal agency has determined an EIS under the National Environmental Protection Act (NEPA) is needed; and (3) the project sponsor has identified funds sufficient to complete the project.

# BASELINE/TRENDS: ENVIRONMENTAL REVIEW PROCESS

While major transportation infrastructure projects make up only a small portion of all projects for which full environmental reviews are required, they are likely to be high-profile, complex, and time-consuming. Traditionally, environmental reviews for major infrastructure projects take much longer than two years. The Council on Environmental Quality examined the timeline for 1,152 EISs for which a notice of availability of a final EIS was published between January 1, 2010, and December 31, 2017, and a final decision was issued by June 7, 2018. The average EIS completion time was 4.5 years and the median was 3.5 years for all agencies. DOT's average EIS completion time was 6.5 years.<sup>21,22</sup>

#### APG OVERVIEW AND PROGRESS

Inefficiencies in current infrastructure project decisions, including the management of environmental reviews and permit decisions or authorizations, have delayed infrastructure investments, increased project costs, and prevented the American people from enjoying improved infrastructure that would benefit our economy, society, and environment. More efficient and effective Federal infrastructure decisions can transform our economy. An accelerated environmental review process (averaging 24 months) will shorten project delivery time, decrease overall project costs, and speed the delivery of project benefits to the public. To ensure that new projects are implementing efficiencies, DOT is tracking projects on the Federal dashboard. DOT has a goal that 90 percent of EIS posted on the Permitting Dashboard remain on schedule. In addition, DOT is tracking project schedules for Major Infrastructure Projects to ensure they remain on schedule. DOT will start tracking timeframes for NEPA reviews, starting with FY 2020 for both Environmental Impact Statements and Major Infrastructure Projects. For purposes of this plan, the Environmental Permitting APG will no longer be a DOT APG.

# **APG and Metrics: Environmental Review Process**

#### APG: MAINTAIN ACCOUNTABILITY FOR PERMITTING PROJECTS (FHWA, FTA, FAA, FRA)

METRIC: PERCENTAGE OF DOT ENVIRONMENTAL STATEMENTS POSTED ON PERMITTING DASHBOA ARE ON SCHEDULE	IMPACT RD THAT	2018	2019	2020	2021
Metric: Percentage of DOT Environmental Impact Statements Posted on Permitting Dashboard that are On Schedule	Targets	90%	90%	90%*	90%
	Actuals	70%	82%	N/A	N/A
Metric: Percentage of DOT Major Infrastructure Projects Posted on Permitting Dashboard that are On Schedule	Targets	90%	90%	90%*	90%
	Actuals	100%	100%(p)	N/A	N/A

\* This target comprises the targets for FHWA and FTA, each set at 100%, and FAA, set at 65%.

<sup>21</sup> https://ceq.doe.gov/nepa-practice/eis-timelines.html.

<sup>22</sup> The latest data from the Federal Highway Administration (FHWA) on median time for EIS completion, measured from the date of the Notice of Intent to the date of the Record of Decision, show a slight increase over time from 41 months in 2012 to 47 months in 2018. See Federal Highway Administration. Environmental Review Toolkit- April 2018. Note that the FHWA analysis measured median time as it asserts it is a better measure by eliminating outliers. https://www.environment.fhwa.dot.gov/nepa/timeliness of nepa.aspx.

<u>Title XLI of the FAST Act</u> created the <u>Federal Permitting</u> <u>Improvement Steering Council</u>, composed of Deputy Secretary-level agency members and chaired by an Executive Director appointed by the President. It also established new procedures that standardize interagency consultation and coordination practices, including the use of the Permitting Dashboard to track project timelines. The Permitting Dashboard tracks DOT projects, FAST 41 projects, and newly identified Major Infrastructure Projects.

#### APG: REDUCE THE TIME TO COMPLETE AN EIS (FHWA, FTA, FAA, FRA)

		2020	2021	2022	2023
Metric: Average Months to Complete an EIS	Targets	24 Months	24 Months	24 Months	24 Months
	Actuals	N/A	N/A	N/A	N/A

#### APG: REDUCE THE TIME TO COMPLETE A MAJOR INFRASTRUCTURE PROJECT (FHWA, FTA, FAA, FRA)

		2020	2021	2022	2023
Metric: Average Months to Complete an Environmental Review for Major Infrastructure Projects for which DOT is the NEPA Lead	Targets	24 Months	24 Months	24 Months	24 Months
Major Infrastructure Projects for which DOT is the NEPA Lead	Actuals	N/A	N/A	N/A	N/A

This goal aligns with Executive Order 13807.

DOT's strategies to accomplish this priority goal include the following:

- > Use provisions in the two most recent surface transportation reauthorizations, MAP-21 and the FAST Act, to accelerate environmental review for major transportation projects. For example, the use of a combined EIS/Record of Decision eliminates the 30-day public notification period prior to issuance of a Record of Decision.
- > Use One Federal Decision processes and policies outlined in Executive Order 13807 and the One Federal Decision Memorandum of Understanding to coordinate with agencies on major infrastructure projects to expedite environmental review and coordination timeframes.
- > Use the DOT Federal Permitting Dashboard to track large or complex projects throughout each stage of environmental review and permitting. This enhanced transparency will encourage agencies to work concurrently, rather than sequentially. Sharing environmental documents and information will reduce

duplicative environmental reviews and identify challenges early in the process, expediting resolutions and accelerating project delivery.

- > Institutionalize best practices across the Department, including programmatic agreements, liaison positions, planning and environment linkages, and implementing quality environmental documents.
- > Work closely with the Federal Permitting Improvement Steering Council and the Council on Environmental Quality to root out inefficiency, clarify lines of authority, and streamline Federal, State, and local procedures so the review process can be as efficient as possible while still improving environmental and community outcomes.
- > Explore ways to create more flexibility in the review process to ensure that transportation projects do not spend years languishing in a cumbersome and ineffective process.

## FY 2019 PROGRESS UPDATE

DOT developed an interagency working agreement with Federal resource and permitting agencies to accelerate and coordinate the planning, environmental review, permitting, and decision-making processes for major infrastructure projects. The agreement provides for conducting concurrent environmental reviews with the processing of relevant environmental permit application materials. FHWA created a process chart that synchronizes NEPA and permitting towards One Federal Decision for major infrastructure projects that includes timetables for projects with and without planning and environment linkages.

DOT continues to promote a One Federal Decision working agreement to accelerate environmental permitting on transportation major infrastructure projects. Two highway-related projects with requirements for an EIS were designated to comply with Executive Order 13807. FHWA encouraged States to review and update their list of active projects requiring an EIS and take proactive steps during the permitting process to reduce delay between the Notice of Intent to Record of Decision.

On-going activities include:

- Reviewing and addressing public comments received on DOT One Federal Decision Policy and Page Limit Policy and publishing the final policy documents. Final documents are anticipated during the second quarter of FY 2020.
- > FHWA is currently working with U.S. Army Corps of Engineers to establish a process that integrates the procedural requirements of NEPA with the substantive

Section 404 Clean Water Act process in a manner that facilitates synchronized reviews and decision-making.

> The eNEPA project collaboration tool is currently being updated to support implementation of the requirements under Executive Order 13807. The newly redesigned tool will allow State and Federal agencies to collaborate concurrently in real-time on environmental reviews and permits.

Although DOT did not meet its APG target of 90 percent, it did increase the percentage of projects that are on schedule, from 70 percent in FY 2018 to 82 percent in FY 2019. DOT will continue working to ensure that the schedules are updated and accurate as well as putting in processes to ensure that projects remain on schedule. For project schedules and information on major infrastructure projects are available on the Permitting Dashboard at <a href="https://www.permits.performance.gov/projects">https://www.permits.performance.gov/projects</a>. Although maintaining accountability for permitting projects continues to be a top priority for the Department, at the end of FY 2019, DOT reclassified its environmental permitting targets from APGs to performance indicators that will be reported annually.

#### ENVIRONMENTAL REVIEW PROCESS APG LEADS

- > OST: April Marchese, Director, Office of Policy Development, Strategic Planning, and Performance
- Office of the Secretary (OST): Gerry Solomon, Senior Advisor to the Assistant Secretary of Transportation for Policy

# **PERFORMANCE GOALS AND METRICS: PROJECT DELIVERY**

Performance Goal: Increase the Number of States and Local Agencies Using Federal Innovative Finance Methods (OST)

METRIC: NUMBER OF STATES AND LOCAL AGENCIES THAT HAVE USED FEDERAL INNOVATIVE FINANCE METHODS (IN THE CURRENT YEAR)	2017	2018	2019	2020	2021
Targets		18	20	20	20
Actuals	15	17	17	N/A	N/A

#### DESCRIPTION

In FY 2021, DOT will continue to support State and local transportation agencies that apply innovative revenue generation, procurement, and project finance strategies to enable major infrastructure projects. The measure, Number of States and Local Agencies that have used Federal Innovative Finance Methods, is a count of the number of States in which a public project sponsor has used one of the following finance tools to assist a Title 23 eligible project, regardless of whether the project receives regular Federal-aid highway funds: TIFIA credit assistance, Private Activity Bond (PAB) issuance, GARVEE bond issuance, Availability Payment reimbursement agreement, or State Infrastructure Bank credit assistance. In FY 2019, DOT facilitated the use of innovative financing tools in 17 different States. Each State faces its own particular circumstances regarding financing opportunities, and even the most progressive may use these tools only once every 3 to 4 years.

#### FY 2019 PROGRESS UPDATE

The Department's Center of Innovative Finance Support (CIF\$) provided onsite Public Private Partnership (P3) training to the Illinois and Colorado DOTs and onsite innovative finance training to DOTs in six States (Florida, Wyoming, Utah, Montana, Idaho, and Washington). The CIF\$ also provided technical assistance to local governments in Texas and Louisiana. In addition, the CIF\$ worked with the Build America Bureau to establish a program for State Infrastructure Bank (SIB) lending for rural projects. The FAST Act amended the TIFIA credit program to allow SIBs to borrow at a discounted interest rate to re-lend, or on-lend, these funds specifically to rural infrastructure projects. The CIF\$ and the Bureau are working with the New Jersey Infrastructure Bank, the NJ State DOT and FHWA to operationalize this authority and create a sustainable, replicable lending model. In FY 2020, FHWA intends to formally recognize the New Jersey I-Bank as an eligible SIB borrower with the intent of the I-Bank securing a TIFIA loan later in the Fiscal Year.

METRIC: PERCENTAGE OF FHWA-FUNDED PROJECTS OVER \$500 MILLION WITHIN 2% OF SCHEDULE AND COSTS		2017	2018	2019	2020	2021
Percentage of FHWA-funded projects over \$500 million within 2% of Schedule	Targets	—	80%	80%	80%	80%
	Actuals	70%	64%	66%	N/A	N/A
Percentage of FHWA-funded projects over \$500 million within 2% of Cost	Targets	_	80%	80%	80%	80%
	Actuals	84%	80%	79%	N/A	N/A

#### Performance Goal: Improve Major Project Performance in FHWA Portfolio

#### DESCRIPTION

DOT currently contributes Federal funds to more than 100 major projects that are near or in construction. (Major projects cost \$500 million or more.) Developing and delivering these projects can be complex and challenging. Project sponsors submit a project management plan and an initial financial plan to FHWA for each major project prior to authorization of Federal funds for construction. Updates to financial plans are submitted annually and updates for project management plans are submitted to FHWA as needed based on changes to the project.

To assess the performance of each project in the portfolio of major projects, FHWA monitors financial plans annually to determine the percentage that are within two percent of the prior year cost estimates and project completion dates. The goal is for at least 80 percent of the financial plans approved each fiscal year to be within two percent of the prior year cost estimate and completion date.

To monitor and improve oversight and stewardship practices, FHWA will:

> Work with State and local partners to create more flexibility in the review process to ensure that transportation projects are completed in more timely manners; and > Institutionalize best practices across the Department, including programmatic agreements, liaison positions, planning and environment linkages, and implementing quality environmental documents.

#### FY 2019 PROGRESS UPDATE

Of the 70 annual updates to financial plans submitted to FHWA between July 2018 and June 2019, 55, or 79 percent, reflected a two percent or less increase in costs. In 15 projects, the estimated costs increased by 2 percent or more due to scope changes (e.g., addition of interchanges) from the initial plan, increases in labor and materials, and other costs, such as an increase in right-of-way costs. Schedules for 46, or 66 percent, of the 70 projects met less than a two percent increase; while schedule increases exceeded two percent in 24 of the projects. Schedule delays resulted from changes in design criteria, poor or unanticipated field conditions, and errors of omission. An internal team began an assessment of the Major Projects Program to determine areas that need improvement in FY 2020.

METRIC: PERCENTAGE OF FTA-FUNDED PROJECTS OVER \$500 MILLION WITHIN OR MINUS 10 PERCENT OF COST	2017	2018	2019	2020	2021
Targets	_	85%	85%	85%	85%
Actuals	93.3%	93.3%	100%	N/A	N/A

#### Performance Goal: Improve Major Project Performance in FTA Portfolio

#### DESCRIPTION

This measure is calculated based on the number of Capital Investment Grant (CIG) projects with full funding grant agreements and that have had cost increases of 10 percent or more over the latest baseline estimate. It should be noted that FTA's CIG program awards grants for fixed dollar amounts upon entering the engineering phase of the program. Local project sponsors are required by the terms of the grant agreement to cover all cost overruns and ultimately deliver the project specified in the grant agreement.

To monitor and improve oversight and stewardship practices, FTA will:

> Continue its robust project management oversight program.

Continue to ensure that the Federal interest in FTAfunded projects is protected and that our grantees deliver the projects they committed to in their grant agreements.

#### FY 2019 PROGRESS UPDATE

In 2018, FTA began requiring new CIG projects meet a P65 standard for the probability of the project coming in on-time and on-budget before it can enter the engineering phase of the program.

Over the course of Fiscal Year 2019, 15 of 17 FTA-Funded projects over \$500 million were within 10 percent of the project baseline. The Honolulu project was the only project more than 10 percent over its budget, at 175 percent over the cost baseline. During Q4 of FY 2019, the cost of the Honolulu project was re-baselined and is now within its new budget baseline.

#### PERFORMANCE GOAL: INCREASE GRANTS TO RURAL AND SMALL URBAN AREAS (FTA)

METRIC: FTA GRANT DOLLARS ALLOCATED TO RURAL AREAS AND SMALL URBAN AREAS	2018	2019	2020	2021
Targets	\$1.56 billion	\$1.59 billion	\$1.62 billion	\$1.62 billion
Actuals	\$1.79 billion	\$1.60 billion	N/A	N/A

#### DESCRIPTION

This metric measures the extent to which FTA has successfully awarded grant funds to rural and small urban areas during the current fiscal year, including both discretionary and formula grant awards. For apportionment purposes, "small urban areas" are defined as areas with populations less than 200,000, while any area less than 50,000 is considered rural. FTA also supports the Rural Transit Assistance Program which funds the design and implementation of training and technical assistance projects and other support services tailored to meet the needs of transit operators in nonurban areas.

#### FY 2019 PROGRESS UPDATE

A total of \$1.79 billion was allocated for rural areas in FY 2019. As of July 2019, FTA awarded \$1.57 billion in funds and is on track to hit its 2019 target.

Rural area grant funds support bus and bus facilities that improve safety, rural transit accessibility, and efficiency. FTA awarded \$536,000 to the State of Colorado to replace diesel buses in rural communities, \$7,000,000 to the Iowa Department of Transportation to replace rural buses that have exceeded their useful life throughout the State, and \$7,000,000 to the Kentucky Transportation Cabinet to replace vehicles, expand fleets, construct and renovate bus facilities, and purchase bus equipment in rural areas. The Oklahoma Department of Transportation will receive \$407,496 to rehabilitate bus facilities, and the Maine Department of Transportation \$2,201,370 to replace rural buses to improve reliability, safety, and cost-effectiveness in rural areas.

#### PERFORMANCE GOAL: DECREASE GRANT PROCESSING TIME (FTA)

METRIC: AVERAGE NUMBER OF DAYS FROM GRANT APPLICATION SUBMISSION TO GRANT AWARD	2017	2018	2019	2020	2021
Targets		36	32	32	32
Actuals		22	21	N/A	N/A

#### DESCRIPTION

This metric sets the standard for the number of days FTA staff takes to process public transportation grant applications. In FY 2016, average grant-processing days dipped to 19 days, rose in FY 2017 to 24 days, and dipped again in FY 2018 to 22 days. The average is across the regions and varies from region to region, and because of the variance FTA leadership recommends FTA continue the target of 32 days in FY 2020. In Q2 and Q3 of FY 2020 FTA is going to hold policy workshops to review FTA's performance measures pertaining to grants, and this measure. The metric and the target will be reevaluated by senior staff and FTA leadership.

#### FY 2019 PROGRESS UPDATE

As of September 2019, FTA's average grant processing time has been 21 days.

Performance Goal: Increase Percentage of Grants Identified as Inactive at the Beginning of the Fiscal Year that are either Closed or Returned to Active Status (FTA)

METRIC: PERCENTAGE OF GRANTS IDENTIFIED AS INACTIVE AT THE BEGINNING OF THE FISCAL YEAR THAT ARE EITHER CLOSED OR RETURNED TO ACTIVE STATUS	2017	2018	2019	2020	2021
Targets	90%	95%	95%	95%	95%
Actuals	100%	99.5%	99%	N/A	N/A

#### DESCRIPTION

At the beginning of each fiscal year, FTA identifies grants that are potentially inactive. Over the course of the fiscal year, a grant can be removed from the cadre by one of the following actions:

- > The grantee makes a draw-down against the grant;
- > The grant is closed; or
- > The grantee provides an approved explanation for why the grant should remain active, despite the absence of any recent draw-downs of funds.

FTA's goal was to have at least 95 percent of the grants in the identified cadre addressed by one of those above resolutions.

### FY 2019 PROGRESS UPDATE

Of the 259 inactive grants targeted for closeout in FY 2019, 117 were closed as of September 30, 2019, 69 became active, and 72 were excluded for reasons provided by the grantees. A total of 1,775 grants and cooperative agreements were closed, and \$383 million in funds were de-obligated from them. FTA's progress on this measure has resulted in a decrease in the number of inactive grants identified each year. The 259 inactive grants identified this year is down from the 444 inactive grants identified at the beginning of FY 2018.

# INFRASTRUCTURE OBJECTIVE 2: LIFE CYCLE AND PREVENTATIVE MAINTENANCE

DOT seeks to keep the Nation's transportation infrastructure secure and in a State of Good Repair by maintaining and upgrading existing transport systems in rural and urban communities.

DOT supports lifecycle management infrastructure preservation by providing Federal funding and targeted

asset management guidance to support the preservation and rehabilitation of existing transportation infrastructure. DOT has increasingly emphasized a risk-based strategy of asset management to efficiently build and maintain infrastructure. DOT's Life Cycle and Preventative Maintenance objective is supported by the following goals:

#### INFRASTRUCTURE OBJECTIVE 1: PROJECT DELIVERY, PLANNING, ENVIRONMENT, FUNDING AND FINANCE

Maintain the Percentage of Deck Area on NHS Bridges in Good or Fair Condition (FHWA)

Increase the Percentage of Interstate Pavement in Good or Fair Condition (FHWA)

## **SUMMARY OF PROGRESS**

DOT, in consultation with the Office of Management and Budget, has determined that performance toward this objective is a focus area for improvement.

FHWA met the annual target associated with the current APG goal indicator of pavement condition for travel on the National Highway System (NHS). The percentage of travel on NHS pavements rated as good or very good condition decreased slightly from 62.3 percent in 2018 to 61.7 percent in 2019, but still exceeded the target of 61.6 percent. In 2019, State DOTs, Puerto Rico, and the District of Columbia (D.C.) began reporting on pavement conditions per the requirements for the National Performance Management measures. FHWA also met the target for the APG indicator for improved bridge condition. The percentage, by deck area, of NHS bridges in poor condition declined from 8.2 percent in 2010 to 4.6 percent in 2019. Starting in FY 2020, bridge condition will be reported as the percent of NHS bridge deck area in good or fair condition.

Maintain Good Runway Condition (FAA)

Monitor Condition and Performance of Transit Systems (FTA)

All 50 States, as well as D.C. and Puerto Rico, submitted Transportation Asset Management Plans with documentation demonstrating implementation of their plans in compliance with <u>2016 requirements</u>. FHWA published the National Tunnel Inspection Program (NTIP) Compliance Review Manual in 2019, which provides guidance and direction for performing NTIP compliance reviews of State tunnel safety inspection programs.

FTA is currently monitoring and documenting the transit State of Good Repair. The 23rd Edition of the Conditions and Performance Report, which documented transit State of Good Repair funding needs, was delivered to Congress in November 2019. To maximize transit assets, FTA is working with transit agencies on Transit Asset Management (TAM). FTA presented at a TAM roundtable the first week of September 2019, in St. Louis, Missouri to approximately 40 different transit agencies.

# **APG:** Improve Conditions of America's Transportation-Related Infrastructure

GOAL STATEMENT: Improve the conditions of the Federally-funded portions of the Nation's transportation systems. By September 30, 2021, the percentage of Interstate Pavement in Good or Fair Condition will be maintained at 95 percent; the percentage of deck area on National Highway System (NHS) bridges in Good or Fair Condition will be maintained at, or above 95 percent; the percent decrease in the Reliability of Interstate Person-Miles Traveled will be no more than 0.7 percent from the 2018 baseline; and the percent of paved runways in the National Plan of Integrated Airport Systems in excellent, good, or fair condition will be maintained at 93 percent.

#### BACKGROUND AND TRENDS

Highway pavement and bridges in poor condition directly impact the lives of ordinary citizens by increasing wear and tear on vehicles, driving up repair costs, inflating travel times, and sometimes introducing new safety concerns. For freight users, poor conditions can increase the cost of doing business and delay the delivery of millions of tons of goods and agricultural products across the country. Since trucks transport most U.S. freight, keeping our roads and bridges in good condition is critical to our country's competitiveness. Likewise, maintaining runway pavement in the National Plan of Integrated Airport Systems at a minimum of fair condition ensures our Nation will continue to enjoy a safe and efficient runway system.

#### APG OVERVIEW

DOT advances strategies and initiatives to improve the condition of the Nation's roadways. The National Highway System (NHS) includes the Interstate system, principal arterial routes, the Strategic Highway Network and connectors, and intermodal connectors. It comprises most major routes with the largest bridges, greatest amounts of traffic, and most important linkages between ports and cities.

While the NHS represents five percent of highway mileage and nine percent of lane mileage, it handles approximately 55 percent of the Nation's vehicle miles traveled (VMT) and about 83 percent of truck travel, including most of the heavy truck movement across multiple state lines. FHWA has a goal to improve the state of NHS pavement by increasing the percentage of interstate pavement in good or fair condition.

While representing about 24 percent of the more than 614,000 bridges in the Nation, NHS bridges comprise about 58 percent of the total bridge deck area and carry 79 percent of annual daily traffic. FHWA is working to improve the state of NHS bridges by maintaining the percentage of deck area on NHS bridges in good or fair condition.

A DOT final rule effective May 2017 established a new framework of National performance measures for pavement and bridge conditions. States are required to make significant progress towards achieving targets for performance measures, with the state-by-state results reported nationally.

# **APGs and Metrics: Infrastructure**

#### APG: IMPROVE ROADWAY PAVEMENT CONDITION (FHWA)

		2017	2018	2019	2020
(Current) Metric: Percentage of VMT on the NHS in Good Condition	Targets	60.3%	61.0%	61.6%	62.3%
	Actuals	60.9%	62.3%	61.7%	N/A

The Transportation Performance Management (TPM) regulations established criteria for bridges and pavements to be classified as in good, fair, or poor condition. FHWA has been reporting pavement condition as the percentage of VMT on the NHS in good condition, as shown in the table above. Recently, FHWA revised the pavement condition indicator to reflect an approach similar to the FAA, which reports the percentage of airport runways in FAA's National Plan of Integrated Airport Systems in excellent, good, or fair condition.<sup>23</sup> This new metric (shown below) assesses pavement condition by calculating the percent of pavements on the Interstate and non-Interstate NHS, respectively, in good *or fair* condition.

23 Unlike the FAA, there is no excellent condition designation in the regulation. Therefore, FHWA will report on the percentage of pavement in good or fair condition.

#### APG: MAINTAIN ROADWAY PAVEMENT CONDITION (FHWA)

		2017	2018	2019	2020	2021
(New) Metric: Percentage of Interstate Pavement in Good or Fair Condition	Targets	_			95.0%	95.0%
	Actuals	—		99.1%	N/A	N/A

FY 2020 actuals will be available in January 2021.

DOT's strategies to accomplish this priority goal (for both roadways and bridges) include the following:

FHWA will help and encourage State DOTs and metropolitan planning organizations (MPOs) implement the TPM and Asset Management approach to strengthen their investment decision-making, while enhancing program accountability to Congress and the public for the expenditure of tax dollars. Through the National Highway Performance Program, FHWA will:

- > Help raise State DOT proficiency levels in the core competencies of performance management;
- Work on-site with partner agencies to facilitate and assist in implementing new regulatory requirements;
- Develop new capabilities to support improvements in data quality, data analysis, and investment planning; and

> Communicate progress, outcomes, and National stories to the public on transportation performance.

FHWA will continue to raise awareness of proven strategies, such as performance-based practical design, and the use of preservation techniques to cost-effectively extend the service life of transportation assets that could further improve investment decision-making.

#### FY 2019 PROGRESS UPDATE (PAVEMENT)

FHWA met the APG goal for improved pavement condition. The percentage of travel on NHS pavements rated as good or very good decreased slightly from 62.3 percent in 2018 to 61.7 percent in 2019, but exceeded the 2019 target of 61.6 percent. The indicator will be replaced in FY 2020 by the measure of the percentage of interstate pavement, by lane-miles, in good or fair condition. In 2019, State DOTs, Puerto Rico, and D.C. began reporting on pavement conditions per the requirements for National Performance Management measures. The pavement condition indicator reflects pavements that are open, drivable, and acceptable to road users. However, NHS pavements still require preservation or maintenance investment to maintain or improve on the current state. The 2019 baseline result is 99.1 percent with 61.0 percent and 38.1 percent in good or fair condition, respectively. The baseline was determined using most recent data submitted for 215,437 thousand lane miles.

FHWA delivered a training course through the National Highway Institute (NHI) on the requirements for the new pavement condition measures. FHWA also developed guidance that was delivered through webinars and workshops to State DOTs throughout the year to assist with implementation and showcase best practices. DOT and FHWA are pursuing intellectual property protection for a groundbreaking new test method for detecting Alkali Silica Reaction (ASR), which is an insidious cause of concrete deterioration that results in a multi-billion-dollar repair and rehabilitation challenge for highway agencies. ASR also affects concrete in dams, locks, levees, and facilities for water, sewer, and energy production. With the initial research complete, FHWA is now collaborating with FAA and several State DOTs to further validate and refine the test method. Specific to airport runways, FHWA and FAA are working on addressing runway deterioration attributed to ASR at Denver International Airport.

#### APG: IMPROVE BRIDGE CONDITION IN THE NATIONAL HIGHWAY SYSTEM (FHWA)

		2017	2018	2019	2020	2021
(New) Metric: Percentage of Deck Area on NHS Bridges in Good or Fair Condition	Targets	_	—	—	95.0%	95.0%
NHS Bridges in Good or Fair Condition	Actuals	_	95.5%	95.4%	N/A	N/A

FHWA assesses bridge condition with a classification system of good, fair, and poor. Beginning in FY 2020, FHWA will use the percentage of deck area on NHS bridges in good or fair condition to track and report on the quality of bridges. In 2019, bridge condition is reported by the percent of deck area on NHS bridges in poor condition shown in the table below. The condition measures reflect the lowest National Bridge Inspection component (i.e., deck, superstructure, substructure, and culvert) condition rating for a bridge, weighted by the deck area.

		2017	2018	2019	2020
(Current) Metric: Percentage of NHS Bridges in Poor Condition	Targets	5.0%	5.0%	5.0%	5.0%
	Actuals	5.0%	4.5%	4.6%	N/A

#### APG: IMPROVE BRIDGE CONDITION IN THE NATIONAL HIGHWAY SYSTEM (FHWA)

(p) Preliminary. FY 2019 actual data are as of March 2019.

FY 2019 PROGRESS UPDATE (BRIDGES)

FHWA met the target for the APG indicator for improved bridge condition. The percentage by area of NHS bridges in poor condition declined from 8.2 in 2010 to 4.6 percent in 2019. There are 4,734 bridges on the NHS that are classified as in poor condition. In FY 2020, bridge condition will be reported as the percent of NHS bridge deck area in good or fair condition.

In FY 2019, FHWA set aside funds in five states that exceeded the 10 percent threshold for NHS bridge deck area in poor condition. An internally tracked metric, *Percentage of States with National Bridge Inspection System (NBIS) Bridge Load Rating Compliance Assessed as Satisfactory*, indicates progress in maintaining an appropriate level of safety for the traveling public. At the end of June 2019, 54 percent of the States were in satisfactory compliance, a slight decrease from 2018. This decrease is likely due to including the assessment of Specialized Hauling Vehicles (SHV) Group 1 load ratings into the compliance determinations in December 2018.

DOT and FHWA are implementing the Competitive Highway Bridge Program and the Bridge Replacement and Rehabilitation Program to add additional funds to replace or rehabilitate bridges in poor condition.

FHWA presented six Financial Planning for Asset Management training courses to State DOTs in 2019. By June 30, 2019, States are required to submit complete Transportation Asset Management Plans (TAMPs) together with documentation demonstrating implementation of their plans. All 50 States, as well as the District of Columbia and Puerto Rico, submitted TAMPs with documentation before June 30, 2019. FHWA is now reviewing the documents to see if they meet the requirements of 23 U.S.C. 119 and 23 CFR part 515.

FHWA published the National Tunnel Inspection Program (NTIP) Compliance Review Manual in March 2019, which provides guidance and direction to the FHWA Division Bridge Engineers in performing NTIP compliance reviews of State tunnel safety inspection programs. The NTIP compliance review is conducted in a similar way as the National Bridge Inspection Program (NBIP) review, but compliance is measured with 15 metrics. Each metric measures one aspect of the National Tunnel Inspection Standards (NTIS) requirements. The new NTIP oversight process is a comprehensive plan to routinely conduct systematic, data-driven analysis to identify Nationwide tunnel safety risks for remediation in coordination with the States. FHWA Divisions work with State DOTs to establish plans of corrective actions or improvement plans for 15 specific metrics to comply with the NTIS.

FHWA continues to provide technical assistance and educational workshops to State DOTs and MPOs as they set targets and report on performance. State performance dashboards were published for safety, infrastructure condition, travel time reliability (including freight), and traffic congestion measures—see https://www.fhwa.dot.gov/tpm/reporting/state/.

#### APG: MAINTAIN GOOD RUNWAY CONDITION (FAA)

		2017	2018	2019	2020	2021
Metric: Percentage of Runways in FAA's National Plan of Integrated Airport Systems in Excellent, Good, or Fair Condition	Targets	93%	93%	93%	93%	93%
	Actuals	97.7%	97.9%	97.9%	N/A	N/A

#### DESCRIPTION

FAA ensures good runway conditions are maintained through a system of planning, inspection, reporting, analysis, and enforcement. Assessing runway pavement condition is accomplished through both scheduled and surveillance safety inspections at airports. Scheduled safety inspections are regularly scheduled, detailed study of runway surfaces. Surveillance is the persistent remote review of runway surfaces. The combination of methods provides the highest assurance of runway condition.

FAA's strategies to accomplish this priority goal include the following:

Collect safety and pavement condition data under a contract program to inspect non-certificated public use airports every three years.

- Maintain a five-year, forward-looking analysis of airport capital requirements that includes runway rehabilitation requirements, published in the biennial National Plan of Integrated Airport Systems (NPIAS) report.
- > Enforce requirements to have pavement preventive maintenance programs at Federally obligated airports.

#### FY 2019 PROGRESS UPDATE

FAA reviewed airport capital requirements and ensured that adequate funds were allocated toward maintaining runways published in the NPIAS report, in excellent, good or fair condition. For FY 2019, the actual percentage of runways maintained in such condition was 97.9 percent, so the FAA was able to attain this priority goal by the end of the reporting period.

#### APG: MONITOR CONDITION AND PERFORMANCE OF TRANSIT SYSTEMS (FTA)

		2016	2017	2018	2019	2020	2021
Metric: State of Good Repair Backlog (current-year dollars)	Targets	\$94 billion	\$105 billion	\$109 billion	***	***	***
	Actuals	\$98 billion*	\$98 billion**	\$98 billion**	—	—	—

\* Latest data from 23rd Edition of the Conditions and Performance Report, based on 2014 data. FY 2016 actuals will be available when the 24th Edition Conditions and Performance Report is published.

\*\* Actuals for 2017 and 2018 will be published in the 24th Edition of the Conditions and Performance Report, which is expected in November 2020.

\*\*\* FTA is planning to discontinue this measure in 2020, as the underlying data source is not available in a timely manner. FTA is planning to replace this measure with a new measure of state of good repair based on a data source that is available more timely. As such, FTA is not establishing future year targets for this measure.

#### DESCRIPTION

FTA monitors and reports on the transit State of Good Repair backlog. FTA's State of Good Repair goals are to maintain reliable, efficient, and safe service. To mitigate funding gaps, maintain service levels, and ensure safety, FTA has employed several strategies to manage transit funding needs.

FTA's strategies to accomplish this priority goal include the following:

- Implement the National Transit Asset Management (TAM)<sup>24</sup> system, including agency asset management plans and State of Good Repair performance targets.
- > Provide TAM technical assistance for grantees.
- Transmit the 24th Edition of the Conditions and Performance Report to Congress, with new State of Good Repair backlog funding estimates.
- > Implement the State of Good Repair Formula Grant Program.

#### FY 2019 PROGRESS UPDATE

In FY 2019, FTA finalized writing the 23rd Edition of the Conditions and Performance Report, which documents the State of Good Repair, asset conditions, current funding levels, and funding scenario levels. FTA submitted this report to Congress in December 2019 and the report can be found at <u>https://www.fhwa.dot.gov/policy/23cpr/</u>. The 24th Edition of the Conditions and Performance Report is anticipated to be published in November of 2020.

#### IMPROVING INFRASTRUCTURE APG LEADS

- > FAA: Kirk Shaffer, Associate Administrator for Airports
- > FAA: Winsome Lenfert, Deputy Associate Administrator for Airports
- > FHWA: Nicole R. Nason, Administrator
- > FTA: Robert J. Tuccillo, Associate Administrator for Budget and Policy

<sup>24</sup> TAM is a model that prioritizes funding based on the condition and maintenance of transit assets, such as vehicles, equipment, and facilities. Under the TAM plan, a transit agency should consider the results of its condition assessments while performing safety risk management and safety assurance activities. TAM plans must include at a minimum an asset inventory, condition assessments of inventoried assets, and a prioritized list of investments to improve the State of Good Repair of their capital assets.

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# INFRASTRUCTURE OBJECTIVE 3: SYSTEM OPERATIONS AND PERFORMANCE

This strategic objective is about enhancing reliable and efficient movement of people and goods by promoting effective management and ensuring leadership in securing data and in sharing information across the transportation system.

#### INFRASTRUCTURE OBJECTIVE 3: SYSTEM OPERATIONS AND PERFORMANCE

Decrease Average Wait Time (FAA)

Maintain Airport Capacity (FAA)

Increase the Integration of Drones into the Airspace without Sacrificing Safety (FAA)

Advance the Operation of Drones through the UAS Integration Pilot Program (IPP) (FAA)

Alleviate Urban Congestion (FHWA)

Improve Passenger Rail (On-Time) Performance (FRA)

Provide Sustainment Sealift Capacity to the U.S. Armed Forces (MARAD)

### **SUMMARY OF PROGRESS**

DOT, in consultation with the Office of Management and Budget, has determined that performance toward this objective is making noteworthy progress.

Throughout FY 2019, the FAA guided 16 million flights that brought 77 million passengers safely to their destinations. Throughout this all-time high period of air traffic, the agency continued to make strides to integrate new technologies, such as drones with the UAS Integration Pilot Program, full implementation of the Altitude Authorization and Notification Capability (LAANC) and the DroneZone. Additionally, FAA continues to improve the accuracy of the Average Daily Capacity target by identifying and strategically mitigating the impacts of capacity loss events earlier by using data to prioritize mitigation activities, while on-time arrivals remain more that 88 percent. FHWA partnered with States to adopt new measures for travel time reliability using the recently acquired National Performance Management Research Data Set. The percentage of person miles traveled on the Interstate system that was reliable decreased slightly from 83.7 percent in 2017 to 83.4 percent in 2018. Results for the Truck Travel Time Reliability (TTTR) Index, which is a measure of the average reliability for truck movement over the full extent of the Interstate system, also showed a slight decline from 1.36 in 2018 to 1.38 in 2019. While reliability varies from State to State, the actual results for both measures suggest there has been an increase in traffic congestion nationwide. In FY 2019, FHWA continued to promote States' use of tools to identify freight bottlenecks; provided technical assistance in the designation of critical urban and rural freight corridors; shared best practices in prioritizing National Highway Freight Program (NHFP) funding for investment in freight solutions; developed a summary of State Freight Plans for greater awareness and to support corridor-based planning; and encouraged the use of State Freight Advisory Committees for engagement with the private sector.

# **PERFORMANCE GOALS AND METRICS: SYSTEM OPERATIONS AND PERFORMANCE**

PERFORMANCE GOAL: DECREASE AVERAGE WAIT TIME (FAA)

METRIC: NAS ON-TIME ARRIVAL AT CORE AIRPORTS	2017	2018	2019	2020	2021
Targets	88%	88%	88%	88%	88%
Actuals	91.25%	89.80%	88.73%(p)	N/A	N/A

(p) preliminary. FY 2019 final results will be available the second quarter of FY 2020.

#### DESCRIPTION

National Airspace System (NAS) commercial flight ontime arrival performance is measured using the ratio of A) the number of flights arriving on or before 15 minutes of flight plan arrival time divided by B) the total number of completed flights for the core airports. This calculation uses the latest carrier flight plan filed with the FAA and excludes minutes of delay attributed by air carriers to extreme weather, carrier action, security delay, and prorated minutes for late arriving flights at the departure airport as defined by DOT Airline Service Quality Performance. (Core airports are the Nation's 30 busiest airports. Every other reported delay is used in the performance measure. Each airport has one percent or more of total U.S. passenger enplanements or handles 0.75 percent or more of total U.S. nonmilitary flights.)

#### FY 2019 PROGRESS UPDATE

The FY 2019 to-date NAS on-time arrival rate is estimated to be 88.73 percent, which is above the FY 2019 target of 88 percent. The agency continues to improve the processes of planning and tactically managing traffic, which results in more accurate arrival time estimates. This has enabled NAS on-time arrival goals to be achieved for the past four fiscal years.

#### PERFORMANCE GOAL: MAINTAIN AIRPORT CAPACITY

METRIC: AVERAGE DAILY CAPACITY OF ARRIVALS AND DEPARTURES AT CORE AIRPORTS	2017	2018	2019	2020	2021
Targets		59,136	59,303	TBD	TBD
Actuals	60,492	60,448	59,446	N/A	N/A

The FY 2020 target is expected by September 30, 2019.

#### DESCRIPTION

Average daily capacity (ADC) is the sum of core airports' called arrivals and departure rates during reportable hours for each month divided by the number of days in the month. ADC is measured to help manage with projected traffic flow management. Called rates are determined by each airport facility and represent the number of arrivals and departures the facility can handle for each hour of each day. Reportable hours capture periods when at least 90 percent of an airport's operations take place. The overall ADC for the fiscal year is computed as the weighted sum of the monthly ADC values. Annual targets are set using historical trend data for the previous three

years, information on upcoming construction impacts and procedure changes, and inputs from individual air traffic control facilities.

#### FY 2019 PROGRESS UPDATE

As of July 2019, the FY 2019 to-date ADC is 59,410, which is above the FY 2019 target of 59,303. To improve the accuracy of the capacity target, FAA has been identifying and strategically mitigating the impacts of capacity loss events earlier by using ADC data to prioritize mitigation activities. The ADC goal has been met for the past six fiscal years.

METRIC: INCREASE THE INTEGRATION OF DRONES INTO THE AIRSPACE WITHOUT SACRIFICING SAFETY		2017	2018	2019	2020	2021
Reduce the Time for Processing Both Manual and Automated Part 107 Authorizations	Targets			45 days	25 days	25 days
	Actuals	_	_	22 days	N/A	N/A
Reduce the Time for Processing Manual Part 107 Airspace Authorizations	Targets	—	_	86 days	50 days	50 days
	Actuals	_	—	30 days	N/A	N/A
Average Time for Processing UAS Part 107 Operational Waivers	Targets		50 days	45 days	40 days	40 days
	Actuals	50 days	21 days	17 days	N/A	N/A

PERFORMANCE GOAL: INCREASE THE INTEGRATION OF DRONES INTO THE AIRSPACE WITHOUT SACRIFICING SAFETY (FAA)

#### DESCRIPTION

There is increasing demand from commercial and private users of unmanned aircraft systems (UAS) for access to airspace. This drives the FAA's effort to decrease the processing time for access authority. Part 107 of the Federal Aviation Regulations covers a broad spectrum of commercial uses for drones weighing less than 55 pounds. Part 107 waivers allow drone pilots to deviate from certain rules under Part 107 by demonstrating they can still fly safely using alternative methods. The processing time for Part 107 UAS equals the average number of processing days for Part 107.41 authorizations completed cumulatively through the end of FY 2019. Processing days are calculated as the number of days from when a Part 107.41 request is received to when it is responded to through either Low Altitude Authorization and Notification Capability (LAANC) or DroneZone. The response can be either an approval or a denial.

#### FY 2019 PROGRESS UPDATE

The FAA set a goal of 45 days for the cumulative average processing time for both manual and automated Low Altitude Authorization and Notification Capability (LAANC) Part 107 UAS airspace authorization requests by the end of FY 2019. This is a 10 percent decrease from the baseline metric of 50 days. The FAA greatly exceeded this goal with a cumulative average processing time for a Part 107 UAS airspace authorization of 6.5 days, with three months left in the fiscal year. The cumulative average processing time for manual (non-LAANC) authorizations alone was 78 days, a 19 percent reduction from the baseline of 96 days. The current manual authorization time is 33 days.

This drop-in authorization processing time is largely credited to the progressive expansion of LAANC. As LAANC was deployed to more facilities throughout the year, there was a rapid decrease in the average number of days required to process an authorization. LAANC enables an operator to receive automated approval of an authorization request within seconds if the request is within the parameters of the UAS Facility Maps. As FAA continues to encourage applicants to use LAANC where available, the processing rate continues to accelerate. Due to these improvements, the FAA's resources shifted to clearing the backlog of authorization requests requiring manual processing in FY 2019 so they could be processed quicker. Another factor decreasing the average processing time was shifting the processing of authorizations from FAA Headquarters to the service centers, which reduced the processing workload on FAA Headquarters staff. Further, FAA has done extensive outreach and education to the flying public to improve the quality of requests for airspace authorizations and thereby reduce the time spent on processing incomplete or insufficiently justified requests.

As of FY 2019, average processing times (approve or deny) for part 107 operational waivers is 17 days. Individually, the average processing time for approvals is 25 days and denials is 14 days. To date, 4,507 waivers have been processed in FY 2019 (October 2, 2018 thru July 30, 2019). Processing time improvements reflect efforts at multiple levels. FAA created an Executive Review Board to provide direction and guidance on risk tolerance regarding UAS operations and to approve complex waivers. To improve the quality of initial applications received (which will reduce processing time) as well as reduce the number of requests for information (which can lengthen processing time) the FAA is developing streamlined DroneZone Portal processing tools as well as educational application assistance products. PERFORMANCE GOAL: ADVANCE THE OPERATION OF DRONES THROUGH THE UAS INTEGRATION PILOT PROGRAM (IPP) (FAA)

FY 2019 MILESTONES	DEADLINE	STATUS	NOTES
Target 1: Issue Approval for a Part 135 Certificate	March 31, 2019	Completed	FAA is determining milestones for FY 2020 and beyond.
Target 2: Demonstrate capability for advanced UAS operations by enabling 5 distinct Beyond Visual Line of Sight operations and 3 distinct Operations Over People operations	September 30, 2019	Completed	FAA is determining milestones for FY 2020 and beyond.
Issue approval for an additional Part 135 certificate (two total for FY 2019)	September 30, 2019	Completed	FAA is determining milestones for FY 2020 and beyond.

#### DESCRIPTION

Since it began in 2017, the UAS Integration Pilot Program (IPP) has brought State, local, and tribal governments together with private sector entities, such as drone operators and manufacturers, to accelerate safe drone integration. The overarching goal of the IPP is to assist DOT and the FAA in crafting new rules, policy and guidance that support more complex low-altitude operations. Specifically, the program:

- > Identifies ways to balance local and national interests related to drone integration;
- > Improves communications with State, local, and tribal jurisdictions;
- > Addresses security and privacy risks; and
- > Accelerates the approval of operations that currently require special authorizations.

The pilot program evaluates a variety of operational concepts, including night operations, flights over people, flights beyond the pilot's line of sight, and package delivery. It also evaluates detect-and-avoid technologies and the reliability and security of data links between pilot and aircraft. The program will support immediate opportunities for commerce, photography, emergency management, agricultural support, and infrastructure inspections. It will also open a dialogue to help balance Federal airspace authorities with State and local concerns regarding UAS technology and public safety.

# FY 2019 PROGRESS UPDATE

In FY 2019, State, local, and tribal governments all continued working closely with partners from industry and the research community to tackle challenges to safe and secure integration, including night operations, flights over people, operations beyond the pilot's line of sight, package delivery, detect-and-avoid technologies, and the reliability and security of data links between pilot and aircraft. The IPP has been very successful to date and has demonstrated advanced operations by enabling distinct beyond visual line of sight operations and operations over people.

One of the IPP's objectives is to determine community acceptance of drones operating above their neighborhoods. Many of the lead participants are conducting surveys to gauge community sentiment, and all of them have engaged their communities through public meetings, briefings, their websites, and traditional and social media. The IPP has made major progress since inception, with the first Part 135 certification approved in April 2019. North Carolina IPP lead participant, UPS Flight Forward, was issued a Part 135 exemption for Air Carrier Certification on September 27, 2019. This was the second approval for a Part 135 certificate.

The FAA recognizes that unmanned aircraft systems— "UAS," or more popularly, "drones"—are the fastest growing segment of aviation. There are more than 350,000 commercial drones operating in the United States, going places and doing things that would otherwise be dangerous for people or other vehicles. The FAA is dedicated to safely and fully integrating this innovative technology into America's national airspace. The agency and its government and industry partners have two key initiatives underway that will help make the routine use of drones a reality. The UAS IPP has brought State, local, and tribal governments together with private sector entities, such as drone operators and manufacturers, and research entities, such as universities, to accelerate safe drone integration. The overarching goal of the IPP is to assist DOT and the FAA in crafting new rules, policy, and guidance that support more complex low-altitude operations. Specifically, the program is:

- > Identifying ways to balance local and National interests related to drone integration;
- > Improving communications with State, local, and tribal jurisdictions;
- > Addressing security and privacy risks;
- > Accelerating the approval of operations that currently require special authorizations.

As part of the IPP, the FAA has issued 11 distinct BVLOS waivers to 8 different organizational entities, and 7 distinct Operations Over People waivers (5 currently active, 2 were for limited specific R&D operations) to 6 different organizational entities.

#### PERFORMANCE GOAL: ALLEVIATE URBAN CONGESTION (FHWA)

METRIC: INTERSTATE TRAVEL TIME RELIABILITY, AS PERCENTAGE OF PERSON-MILES TRAVELED THAT ARE RELIABLE	2018	2019	2020	2021
Targets	83.7%	83.7%	83.1%	82.8%
Actuals	83.7%	83.5%	N/A	N/A

#### DESCRIPTION

Travel time reliability is a key indicator of transportation system performance. A DOT Final Rule, effective January 2017, established a new measure, Interstate Travel Time Reliability, as Percentage of Person-Miles Traveled that are Reliable, to monitor system performance on the Interstate system. The indicator is based on travel time data from the National Performance Management Research Data Set (NPMRDS) The level of travel time reliability is the ratio of longer travel times (i.e., the 80th percentile of the travel time distribution) to the normal travel time (i.e., 50th percentile) over the course of a year. The 80th percentile is roughly equivalent to the worst travel times for one day during a week of commuting times. To determine if a segment, or length, of Interstate roadway is reliable or not, calculated travel times are compared for four different time periods. If the level of travel time reliability is 1.50 or greater during any of the time periods, then the segment is deemed unreliable. The threshold means that travel times are 50 percent longer than normal (e.g., 15 minutes instead of a 10-minute trip).

The percentage of person-miles traveled on the Interstate portion of the NHS that are reliable is determined based on observed travel and estimates of vehicle occupancies. A higher percentage means that travel is more reliable. States' actuals are reviewed for significant progress towards target achievement biennially. The average result for all States in 2019 was 83.4 percent, which was slightly lower than the baseline of 83.7 percent determined using data submitted in June 2018.

To alleviate or minimize urban congestion, FHWA will:

- Demonstrate innovative practices that speed construction, thereby reducing traffic delays;
- > Work with State and local partners to strengthen routine traffic operations and control practices as well as proactively manage the transportation systems during disruptions such as traffic incidents, work zones, adverse weather, special events, and emergency situations; and
- > Help State and local partners investigate and implement ridesharing, parking demand management, and congestion pricing.

#### FY 2019 PROGRESS UPDATE

The Traffic Incident Management (TIM) Responder training curriculum continues to grow with more than 450,000 responders trained or 39 percent of the 1,158,265 total responders in the target group to be trained. Nineteen States have trained more than 45 percent of their responder population. A TIM program consisting of proactively managed 24/7/365 Traffic Management Centers, Intelligent Transportation Systems, Freeway Service Patrols. Strong partnerships between the transportation, public safety, and towing and recovery community reduces disruptions to travel time and increases roadway safety and reliability.

States continued to work on improving mobility performance measurement in work zones by collecting and analyzing mobility and operational data. Virginia, California, Utah, Ohio, and other State DOTs established a systematic approach to work zone performance measurements that include setting mobility thresholds (i.e., speed and queue length), work zone capacity standards, lane closure maps, use of probe data to monitor performance before/during construction, and bottleneck analysis. State DOTs use the information gained from these efforts to improve project-level work zone management practices and broader agency, district, and corridor-level work zone policies and procedures. This approach helps planning and designing work zones with reduced impacts as well as ensuring the desired performance during construction.

As part of EDC-5, 23 States signed up to implement Weather-Responsive Management Strategies. A few States have already implemented and institutionalized these strategies. Minnesota DOT reported improvements in salt usage practices, Colorado DOT integrated mobile observations into their maintenance decision support system for more efficient snow and ice control, and Wyoming DOT improved traveler information and traffic control during adverse weather conditions. Other technology advancements in weather-responsive management strategies include snow plow route optimization efforts in Delaware, mobile weather sensor deployment in West Virginia, and the use of unmanned aerial systems for flood response and recovery in North Dakota. Together, these weather-responsive management strategies help DOTs prepare, adapt, and respond to adverse weather conditions on our transportation system.

METRIC: ON-TIME PERFORMANCE FOR SHORTER DISTANCE INTERCITY PASSENGER RAIL CORRIDORS (FRA)		2017	2018	2019	2020	2021
Northeast Corridor	Targets	_	84%	85%	86%	TBD
	Actuals	76.1%	79.0%	83.1%	N/A	N/A
State Supported Routes	Targets	—	84%	85%	86%	TBD
	Actuals	80.7%	79.9%	74.6%	N/A	N/A

#### PERFORMANCE GOAL: IMPROVE PASSENGER RAIL ON-TIME PERFORMANCE (FRA)

#### DESCRIPTION

On-time arrivals is one indicator of rail infrastructure performance. In FY 2019, Amtrak began reporting customer on-time performance (OTP)-the percentage of customers who arrive at their detraining stations on time-by merging ridership and train performance data. An Acela train is late when it arrives at a station more than 10 minutes after its scheduled time; a Northeast regional or State-supported train is late when it arrives more than 15 minutes after its scheduled time. For FY 2018 and earlier years, OTP is the percentage of total train arrivals on-time at each station, with every arrival weighted equally. Improved delivery of capital projects to maintain and improve infrastructure, equipment, stations, and systems are essential for Amtrak to improve performance and reduce its reliance on future Federal funding. FRA will support improved passenger rail performance by continuing to oversee the delivery of Amtrak's capital program and operating initiatives.

#### FY 2019 PROGRESS UPDATE

On-time performance improved during FY 2019, but remained below target for the NEC and State-supported routes. Better Acela and Northeast Regional performance drove the NEC improvement, and strong performance on some high ridership routes (such as the Capitol Corridor, Hiawatha, and Keystone) led to the higher State-supported routes result. Amtrak's long-distance routes performance declined, due in part to bad weather and summer maintenance of way and other infrastructure projects. FRA is implementing a range of activities to strengthen Amtrak's long-term operational capacity, reliability, and on-time performance. Federal grants to States and Amtrak have funded projects to improve operational performance. FRA also meets individually with Amtrak service line leadership and representatives of host freight railroads to identify service quality and delay issues and potential remedies. Implementation of enforceable metrics and standards, including host railroad on-time performance and delay-minute measures, would also assist in improving on-time performance. FRA has initiated a collaborative process with stakeholders to develop performance and service quality measures of intercity passenger train operations.

METRIC: PROVIDE SUSTAINMENT SEALIFT CAPACITY TO THE U.S. ARMED FORCES		2017	2018	2019	2020	2021
Increase the Number of U.S. Flag Vessels	Targets	_	81 vessels	82 vessels	83 vessels	84 vessels
	Actuals	81 vessels	83 vessels	81 vessels	N/A	N/A
Percentage of DoD-Required Shipping	Targets	94%	94%	94%	94%	94%
Within Mobilization Timelines	Actuals	97%	94%	92%	N/A	N/A

PERFORMANCE GOAL: PROVIDE SUSTAINMENT SEALIFT CAPACITY TO THE U.S. ARMED FORCES (MARAD)

#### DESCRIPTION

MARAD tracks the number of large, internationally trading, oceangoing commercial vessels operating under U.S. flag. These U.S.-flagged vessels are crewed by skilled, qualified U.S. Merchant Mariners, and are available and capable of meeting Department of Defense (DoD) requirements for sealift support during National contingency operations.

MARAD estimates that at least 125 large, internationally trading, U.S.-flagged commercial ships of 1,600 gross tons or higher are required to maintain a sufficient force of unlimited credentialed mariners to meet the Nation's sealift needs in a major contingency situation.

Surge sealift<sup>25</sup> is provided by federally owned and operated vessels, which includes MARAD's 46 <u>Ready Reserve</u> Force vessels berthed at various U.S. ports, and vessels operated by the Military Sealift Command. Sustainment sealift<sup>26</sup> is provided by large, oceangoing ships of the U.S. flag, an internationally sailing commercial fleet. Most of these commercial vessels participate in MARAD's Voluntary Intermodal Sealift Agreement (VISA) program, which is a partnership between the U.S. Government and the maritime industry to provide commercial sealift and intermodal capacity (dry cargo ships, equipment, terminal facilities, and intermodal management services) to support emergency deployment and sustainment of U.S. military forces. All commercial ships in MARAD's Maritime Security Program (MSP) are required to participate in the VISA program. For MSP, MARAD is authorized to maintain a fleet of 60 U.S.-flagged, U.S.crewed, internationally trading vessels available to meet contingency requirements. In exchange for a fixed, annual Federal retainer payment, participating carriers in MSP provide DoD with assured access to ships, as well as the global multi-billion-dollar networks of intermodal facilities, services, and transport systems maintained by those carriers.

MARAD's goal for shipping and crew availability is to ensure that the level of shipping capacity (both commercial and Government-owned) is sufficient to meet current and projected DoD requirements for cargo transport to support U.S. military forces during times of National emergency. Targets are based on readiness levels that have historically met DoD requirements. The readiness represented by the Government-owned RRF, MSP, and the VISA program provides the desired capability to support U.S. National security interests as well as employment for U.S. citizen mariners to crew the commercial and Governmentowned fleets.

### FY 2019 PROGRESS UPDATE

For FY 2019, MARAD reported 81 U.S. flag, internationally sailing, which was one ship below target and two ships fewer than the prior year. Of these 81 ships, all are enrolled in the VISA program and 60 also participate in MSP. During FY 2019, MARAD engaged with senior U.S. flag carrier executives and the U.S. Transportation Command to discuss ways to increase the

<sup>25</sup> Surge sealift is the initial movement of troops, equipment, and supplies to a designated location to satisfy time-critical war fighting requirements. Surge sealift is also provided by government-owned vessels to support routine operations when commercial assets are not available or suitable.

<sup>26</sup> Sustainment sealift provides the continuous, ongoing support to American military operations for the transport of troops, equipment, and supplies, over an extended period in times of conflict. Sustainment sealift operations are almost exclusively conducted by internationally sailing U.S. flag merchant vessels, while also maintaining commercial sea trade.

U.S. flag commercial fleet in international trade. MARAD is researching concepts aimed at achieving this. The agency is also working with the U.S. Coast Guard and U.S. flag carriers to identify ways to reduce the costs of registering and operating ships under U.S. versus foreign registry. In FY 2019, MARAD was unable to meet all the DoD shipping capacity requirements goals, reporting an overall 92 percent availability. While vessels in the MSP and VISA sustained capacity goals, the RRF vessel readiness decreased due to extended shipyard periods, replacement of significant steel, and emergent repairs of obsolete systems and equipment for the aging fleet.

Readiness of the RRF will continue to be periodically tested by DoD-directed activations of ships for military cargo operations and exercises. During FY 2019, DoD's U.S. Transportation Command test activated 27 ships from the RRF fleet, ordered to fully crew the vessels and get them underway within five days. This no-notice test focused on vessel availability, vessel activation, and vessel reliability of the vessels. While the activation was successful, it also validated known concerns of an aging RRF fleet, and highlighted the need for increased maintenance resourcing, RRF recapitalization, and continued assessment of material condition of the vessels to meet DoD's deployment needs.

# INFRASTRUCTURE OBJECTIVE 4: ECONOMIC COMPETITIVENESS AND WORKFORCE

This strategic objective is about promoting transportation policies and investments that bring lasting economic benefits to the Nation by ensuring multimodal infrastructure connectivity to foster efficient movement of

people and goods at home and abroad, increasing foreign market access and opportunities for American businesses and services, and meeting the Nation's transportation workforce needs.

#### INFRASTRUCTURE OBJECTIVE 4: ECONOMIC COMPETITIVENESS AND WORKFORCE

Alleviate Freight Congestion (FHWA)

Reduce Time to Issue Hazardous Materials Transportation Permits (PHMSA)

Provide a Safe, Secure, Reliable, and Efficient U.S. Portion of the St. Lawrence Seaway to its Commercial Users (SLSDC)

## **SUMMARY OF PROGRESS**

Responding to industry concerns regarding the ability to fill highway construction jobs with qualified workers, FHWA, in partnership with Associated General Contractors of America, American Road and Transportation Builders Association, and the U.S. Department of Labor's Employment and Training Administration, completed a two-year, 12-location pilot to explore partnership opportunities among the participants to more effectively identify, train, and place skilled craft and labor positions in highway construction jobs. This partnership resulted in a lessons-learned Playbook that was released in FY 2019. Shared with industry partners, the Playbook enables a City or a State to coordinate on activities and leverage established connections to apply the successful practices and lessons learned. To date, the 12 original locations are still pursuing these relationships; 16 additional inquiries since the pilot launched may lead to 5 new locations.

PHMSA has worked collaboratively within its Office of Hazardous Materials Safety and with its modal partners to process special permits in an effective and efficient manner. It has also taken steps to address impediments to application processing by updating the application processing system to allow automated processing of "routine" applications so more time can be allocated to processing applications for new or modified special permits in a timely manner. These efforts will continue to be pursued into the future.

## PERFORMANCE GOALS AND METRICS: ECONOMIC COMPETITIVENESS AND WORKFORCE

PERFORMANCE GOAL: ALLEVIATE FREIGHT CONGESTION (FHWA)

METRIC: INTERSTATE TRUCK TRAVEL TIME RELIABILITY INDEX	2018	2019	2020	2021
Targets	1.36	1.36	1.41	1.44
Actuals	1.36	1.38	N/A	N/A

#### DESCRIPTION

Freight reliability is critical to industry for ensuring ontime deliveries. The Truck Travel Time Reliability (TTTR) Index is a measure of the average reliability for truck movement over the full extent of the Interstate system. The TTTR Index is calculated as the ratio of longer truck travel times (i.e., the 95th percentile) and normal truck travel times (i.e., 50th percentile) using truck GPS probe data from the NPMRDS. The TTTR Index is measured for five different time periods during the day and averaged over the full extent of the Interstate system to determine a National TTTR Index. A higher TTTR Index, such as 1.8, indicates there is large variation in travel times from day-to-day, making the system unreliable. A lower TTTR Index, such as 1.05, indicates travel times are more consistent or predictable from day-to-day, making the system reliable. State DOTs and MPOs will set targets for these indicators in FY 2020. Going forward, States' targets will be reviewed biennially for significant progress towards target achievement. The baseline measure for 2018 was calculated based on data submitted by State DOTs in 2018. The National TTRI Index increased from 1.36 in 2018 to 1.38 in 2019.

In many cases, the value of reliability is more important to freight than the value of time. Manufacturers rely on just in time<sup>27</sup> and lean manufacturing practices<sup>28</sup> to maximize efficiency. However, this requires time-certain delivery targets to provide the right material, at the right time, at the right place, and in the exact amount needed in the production cycle. If a truck can't make a delivery to a manufacturer or supplier due to unexpected traffic delays,

this can have a costly ripple effect on production. Other common shipments that require a high degree of on-time performance include expedited or high-value shipments, perishable products, and cargo that need to be transferred to another mode.

To achieve the goal of alleviating freight congestion, FHWA will:

- > Seek to improve the institutional capability and business processes of public agency partners so they can more effectively manage their systems. Enhancing operational roles and responsibilities ensures a greater ability to effectively use resources to address both recurring traffic problems as well as system disruptions due to incidents, work zones, or adverse weather over the longterm.
- > Promote State use of tools to identify freight bottlenecks; provide technical assistance in the designation of critical urban and rural freight corridors; share best practices in prioritizing National Highway Freight Program (NHFP) funding for investment in freight solutions; summarize State Freight Plans for greater awareness and to support corridor-based planning; and encourage the use of State Freight Advisory Committees for engagement with the private sector. Many State DOTs, in coordination with FHWA, industry, and other stakeholders have established State freight advisory committees to discuss these important issues, coordinate, and identify freight infrastructure needs and investments.

#### FY 2019 PROGRESS UPDATE

> All State DOTs established TTTR performance targets and submitted baseline performance reports in October 2018, which included identification of truck freight

<sup>27</sup> Just in time (JIT) manufacturing is a workflow methodology aimed at reducing flow times within production systems, as well as response times from suppliers and to customers. JIT manufacturing helps organizations control variability in their processes, allowing them to increase productivity while lowering costs.

<sup>28</sup> Lean manufacturing practices refers to the application of lean practices, principles, and tools to eliminate waste, optimize processes, cut costs, and boost innovation in a volatile market.

bottlenecks. State baseline performance reports were analyzed for conditions and performance characteristics. Nationally significant highway bottlenecks were mapped. National freight mobility measures, freight significant corridors, and bottlenecks were identified for tracking long-term trends, with the goal of assisting State DOTs and MPOs in addressing freight mobility as part of the performance-based transportation planning and project programing.

> FHWA published a Truck Freight Bottleneck Reporting Guidebook to assist States with reporting required as part of TPM, State freight plans, and identification of critical freight transportation improvements. FHWA developed new web-based training on Transportation Performance Management for Congestion including Freight for State DOTs and MPOs. In addition, the Agency updated the course titled Integrating Freight into the Transportation Decision-Making Process that included recommended steps for engaging the private sector in the freight planning process.

The number of States that manage a Freight Advisory Committee, which is encouraged under the FAST Act, increased from 35 in FY 2017 to 37 in FY 2018. Between 80 to 90 percent of States have had a State Freight Advisory Committee (some were prior to the FAST Act), although the number that met over a 6-month period declined from 25 States in October 2018 to 23 States in June 2019. This decline is related to the fact that most States completed their State Freight Plans in 2017 and 2018.

#### PERFORMANCE GOAL: REDUCE TIME TO ISSUE HAZARDOUS MATERIALS TRANSPORTATION PERMITS (PHMSA)

METRIC: HAZARDOUS MATERIALS SPECIAL PERMIT APPLICATIONS AVERAGE NUMBER OF DAYS TO RESOLUTION	2017	2018	2019	2020	2021
Targets	—	120	115	110	105
Actuals	120	92	107(p)	N/A	N/A

(p) preliminary. Actuals will be available in October 2020.

#### DESCRIPTION

PHMSA is committed to facilitating the use of innovative safety products and methods as well as responding quickly to assistance requests by approving special permit applications from hazardous materials shippers and packagers. PHMSA has the primary responsibility for issuing DOT special permits and approvals for the Hazardous Materials Regulations (HMR). Special permits authorize a person to perform a function outside of PHMSA regulations or to not perform a function currently required under the PHMSA regulations. Federal hazardous materials transportation law authorizes PHMSA to issue such variances in a way that achieves a safety level that is at least equal to the safety level required under the law or is consistent with the public interest if a required safety level does not exist. Each year, PHMSA processes thousands of special permit applications, ranging widely in scope and complexity. PHMSA measures its success by reducing the number of days to render a decision that ultimately brings products to market safely and efficiently.

#### FY 2019 PROGRESS UPDATE

In FY 2019, PHMSA met its annual target for average number of days to resolve a new hazardous materials special permit application. PHMSA continues to improve the online application tool for special permits and works closely with each of its modal partners so that special permit processing is efficient and supports safety. PHMSA also initiated a rulemaking to incorporate long-standing special permits into the regulations; this action will further reduce the administrative burden on industry and the government. PERFORMANCE GOAL: PROVIDE A SAFE, RELIABLE, AND EFFICIENT U.S. PORTION OF THE ST. LAWRENCE SEAWAY TO ITS COMMERCIAL USERS (SLSDC)

METRIC: PERCENTAGE OF TIME THE U.S. PORTION OF THE ST. LAWRENCE SEAWAY IS AVAILABLE TO COMMERCIAL USERS	2017	2018	2019	2020	2021
Targets	99%	99%	99%	99%	99%
Actuals	98.7%	96.2%	99.3%	N/A	N/A

#### DESCRIPTION

The St. Lawrence Seaway Development Corporation (SLSDC) operates and maintains the U.S. infrastructure and waters of the St. Lawrence Seaway, while performing trade development focused on driving economic activity for the Great Lakes St. Lawrence Seaway System. SLSDC operational and capital infrastructure activities supporting Great Lakes Seaway System commercial trade supports 147,500 U.S. jobs and generates associated annual economic benefits of \$26 billion in economic activity, \$11 billion in personal income and local consumption expenditures, and \$5 billion in Federal, State, and local tax revenue.

SLSDC improves its system reliability by providing safer and more efficient vessel traffic control and passage through U.S. locks and waters. SLSDC works to ensure the U.S. portion of the St. Lawrence Seaway remains safe, reliable, and efficient for its commercial users by engaging in the following activities:

- > Maintaining, rehabilitating, and modernizing U.S. Seaway infrastructure;
- Performing safety inspections and ballast water examination of all foreign-flag vessels;
- Continuing close coordination and involvement with the Canadian St. Lawrence Seaway Management Corporation in all aspects of Seaway operations; and
- > Utilizing and enhancing technology to more efficiently manage vessel traffic control and lock transits.

#### FY 2019 PROGRESS UPDATE

The system reliability rate for the U.S. portion of the St. Lawrence Seaway in FY 2019 was 99.3 percent, surpassing the annual goal by 0.3 percent. Obstacles to maintaining that system reliability include weather, vessel, and lockrelated delays. Vessel and weather-related delays accounted for 84 percent of total system delays. Total delays in FY 2019 were 48 hours, 34 minutes. FY 2019 delays were significantly lower than the FY 2018 total of 258 hours, 23 minutes, which can be attributed to severe winter weather conditions in December 2017/January 2018.

The SLSDC has the most control over the proper functioning of its two locks in Massena, N.Y. The SLSDC's lock availability rate, a subset of the system reliability rate, was 99.89 percent (7 hours, 21 minutes) in FY 2019, or 15 percent of total system delays.

# STRATEGIC GOAL 3 INNOVATION

Innovative technologies and practices are key drivers for improving the safety and performance of the Nation's transportation system. To achieve the Innovation goal, DOT will support the development and deployment of innovative technologies by investing in targeted research, facilitating coordination and information sharing, and partnering with industry and other stakeholders (e.g., academia, State, local, and Tribal governments). The Department will also assess existing regulatory approaches to address potential barriers and provide opportunities to expedite the testing and adoption of these beneficial technologies.

The Innovation goal aligns with the President's Management Agenda CAP Goal 14, <u>Improve Transfer of</u> <u>Federally-Funded Technologies from Lab-to-Market</u>. This CAP Goal states that agencies should, "develop and implement stakeholder-informed action plans, which may include improved Federal practices and policies, regulatory reform, and legislative proposals; increase interactions with private-sector experts; identify, share, and adopt best practices for technology transfer; and increase the transfer of federally funded innovations from lab to market." The Department has been able to do this by improving areas in its research and development (R&D) operations.

# INNOVATION OBJECTIVE 1: DEVELOPMENT OF INNOVATION

This strategic objective aims to encourage, coordinate, facilitate, and foster world-class research and development to enhance the safety, security, and performance of the Nation's transportation system.

DOT will bolster its commitment to fostering world-class, innovative research during the development of its research-

related products by encouraging collaboration with external stakeholders, including the private sector and academia. Through such stakeholder engagement, DOT will remain at the forefront of anticipating emerging trends, executing projects with strong potential impacts, and cultivating an innovation-centered research culture.

#### **INNOVATION OBJECTIVE 1: DEVELOPMENT OF INNOVATION**

Increase the Development of Innovations in Transportation (DOT)\*

\* This goal aligns with CAP Goal 14.

# **SUMMARY OF PROGRESS**

DOT, in consultation with the Office of Management and Budget, has determined that performance toward this objective is making noteworthy progress.

The Office of the Assistant Secretary for Research and Technology (OST-Research) in the Office of the Secretary of Transportation (OST) has collaborated with modal research directors to align commonly used terms and definitions to improve data quality of performance management. A common set of terms and definitions was developed and will be included in the revised RD&T Strategic Plan, FY 2018-2022, which is expected to be published in spring 2020. This work in progress would help improve reporting and cross-modal collaboration across DOT's research community. The National Transportation Library (NTL) is continuing its process of transitioning approximately 48,500 publications to a new platform, and a baseline of 2,000 publications can be transitioned annually. The new platform offers improved benefits that include NTL's ability to better manage its publications with improved practices, e.g., using digital object identifiers for publications. Also, the new platform is intended to host all DOT publications in one location. Previously, each mode hosted its own publications. Also, OST-Research started to explore performance management tools to improve collaboration and performance management for research to facilitate information collections for internal reporting and inquiries from external stakeholders.

# **PERFORMANCE GOALS AND METRICS: DEVELOPMENT OF INNOVATION**

METRIC: INCREASE THE DEVELOPMENT OF INNO IN TRANSPORTATION	WATIONS	2018	2019	2020	2021
Research Outcomes Made Publicly Available in Research Hub	Targets	N/A	54	10% Increase	10% Increase
	Actuals	N/A	54	N/A	N/A
Technical Reports Made Publicly Available in The National Transportation Library	Targets	N/A	42.5k	44.5k	46.5k
	Actuals	N/A	42.5k	N/A	N/A

PERFORMANCE GOAL: INCREASE THE DEVELOPMENT OF INNOVATIONS IN TRANSPORTATION (OST)

FY 2019 targets and actuals data is the same and the progress will be monitored in FY 2020.

### DESCRIPTION

DOT funds an array of laboratories that engage in advanced transportation research:<sup>29</sup>

- > FAA's William J. Hughes Technical Center;
- > FHWA's Turner-Fairbank Highway Research Center (TFHRC);

- Office of the Assistant Secretary for Research and Technology's (OST-Research) John A. Volpe National Transportation Systems Center; and
- > FRA's Transportation Technology Center.

In addition to those laboratories listed above, the Department provides funding to research facilities at a variety of University Transportation Centers. DOT is committed to increasing the efficiency and influence of its research investments by collaborating with external stakeholders early in the R&D process. DOT plans to

<sup>29</sup> DOT also conducts research at the Vehicle Research and Test Center, where it rents space.
increase the utility and overall pace of transportation innovation by making R&D activities and results easy to locate. DOT plans to increase the visibility of its research results with stakeholders by connecting them to the <u>National Transportation Library<sup>30</sup></u> and the <u>DOT Research</u> <u>Hub</u>.<sup>31</sup>

This should enhance cross-modal collaboration within the Department as well as between DOT and external stakeholders by providing a full view of the Department's research portfolio to transportation researchers around the world.

#### FY 2019 PROGRESS UPDATE

The metric for the utilization rate of DOT laboratories was removed due to the data quality obtained to perform the measurement. The utility data between labs was difficult to use as a rate because the labs differ in nature and multiple processes to assess utility is required. The Department will continue to explore ways to assess such rates. For this reason, the metric was discontinued in 2020. DOT's NTL continues its transition of publications from an older system into a new platform in FY 2020. The new platform was leveraged from the National Institute of Health, Centers for Disease Control and Prevention. The data for FY 2019 served as the baseline year, and an estimated 2,000 publications will be made publicly available in the new platform annually.

<sup>30</sup> The National Transportation Library: (1) provides National and international access to transportation information; (2) coordinates information creation and dissemination; and (3) offers reference services for the transportation community.

<sup>31</sup> The DOT Research Hub is a web-based, searchable database of DOT-sponsored research, development, and technology project records. The database acts as a central repository for information on active and recently completed projects from DOT's OAs, providing a comprehensive account of the Department's research portfolio at the project level.

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## INNOVATION OBJECTIVE 2: DEPLOYMENT OF INNOVATION

This strategic objective is about seeking to accelerate and expand the deployment of new technologies and innovative practices by reducing barriers and actively promoting transportation innovations that enhance the safety and performance of the Nation's transportation system.

To deploy DOT-sponsored innovative technologies, the Department will focus on ease-of-use of the National Transportation Library to foster the dissemination of DOT research reports. In addition, DOT will encourage technology transfer by developing new stipulations for agency partners that carry out DOT-funded R&D activities.

DOT's innovative technology research and deployment guidance activities focus on maximizing return on investment (public value). Such guidance applies to all modal R&D programs.

#### **INNOVATION OBJECTIVE 2: DEPLOYMENT OF INNOVATION**

Integrating Space Launches into National Airspace System (NAS) by Using Time-Based Launch/Reentry Procedures to Improve National Airspace System NAS Efficiency (FAA)

Increase Effectiveness of Technology Transfer (DOT)\*

Improve NextGen Rollout/Northeast Corridor Returning Benefits (FAA)

Major System Investment (FAA)

Monitor Adoption of Self Driving Vehicles (NHTSA)

\* This goal aligns with CAP Goal 14.

## **SUMMARY OF PROGRESS**

DOT, in consultation with the Office of Management and Budget, has determined that performance toward this objective is making noteworthy progress.

DOT is developing a framework to create case studies that describe the process of selected deployment programs to support the Deployment of Innovation objective. OST-Research implemented an improved process to identify success stories and will be establishing a baseline number of pilot and demonstration projects to create targets for coming years.

NHTSA continues to implement an ambitious vehicle research plan to accelerate the potential benefits of ADS. This includes in-vehicle technologies, such as automatic emergency braking, the use of radar, cameras, and navigation, as well as communications between vehicles. At the same time, NHTSA works to ensure that automakers and other entities developing ADS maintain the highest safety levels of cybersecurity and other safety-critical systems. Ongoing vehicle research efforts focus on human factors and human-machine interface; the functional safety of safety-critical automotive systems, including cybersecurity; occupant protection in non-standard seating configurations; and system performance requirements. Maintaining an active dialogue with stakeholders (in both traditional industry organizations as well as nontraditional ones), such as disability rights advocacy groups, is an essential and ongoing part of this research and development process.

The FAA continues to be at the forefront of strategic innovative practices in the international aviation community. Throughout FY 2019, the FAA led the way through improved departure management out of New York airports to Atlanta, Charlotte-Douglas, Philadelphia, and the District of Columbia. On the West Coast, Time-Based Flow Management completed the most recent Integrated Departure and Arrival Capability at Oakland Center and associated towers. While weather tends to be the leading cause of delays in the NAS, the FAA used innovation to create new departure routes to improve New Yorkarea performance during periods of adverse weather. In addition to the new departure routes in New York, the agency implemented procedures in Philadelphia to increase capacity during lower visibility conditions, resulting in fewer delays to passengers.

## **Developing APG: Enhance Commercial Space Innovation**

GOAL STATEMENT: Develop and implement Time-Based Launch/Reentry Procedures (TBLP) and Dynamic Launch/Reentry Windows (DLRW) for integrating Cape Canaveral Air Force Station/Kennedy Space Center (CCAFS/KSC) launch complex commercial space launch and reentry operations into the NAS. By September 30, 2021, the FAA will develop and implement TBLP/ DLRW procedures at two additional U.S. launch/reentry sites, further integrating commercial space launches and reentries into the NAS, using lessons learned in FY 2020 CCAFS/KSC pilot project.

#### BACKGROUND AND PURPOSE

This is a new APG that is still under development and will cover the period from FY 2019—FY 2021.

The Commercial Space industry is experiencing rapid growth and innovation, challenging established launch and reentry mission norms. The FAA's Air Traffic Organization (ATO) is developing flexible procedures and capabilities with the ability to respond to the changing needs of the launch and reentry operator (LRO) community. Launch and reentry operations in the NAS have historically operated out of Federal Ranges and were managed by the Department of Defense (DoD) and/or the National Aeronautics and Space Administration (NASA), in support of DoD and civil government missions. The airspace required for these missions was also predominately managed by DoD and NASA. This airspace management structure led to a model where launches and reentries were largely segregated from other NAS stakeholders, leading to inefficiencies and delays for the aviation community.

With the advent of commercial launch and reentry operations, increased emphasis has been placed on the efficiency of these launch and reentry operations. Work with Federal Ranges, FAA Air Traffic facilities, and LROs has led to the concept development of Time-Based Launch/Reentry Procedures (TBLP) and Dynamic Launch/ Reentry Windows (DLRW) as a method to increase efficiency and reduce delays associated with launch and reentry operations.

Due to the volume of activity operating from Cape Canaveral Air Force Station/Kennedy Space Center (CCAFS/KSC) launch complex, the volume of air traffic along the east coast of the United States, and the complexity of air traffic operations near CCAFS/KSC, more than 90 percent of the aircraft operations directly affected by launch airspace closures are related to CCAFS/ KSC operations.

Time-Based Launch/Reentry Procedures, in conjunction with Dynamic Launch/Reentry Windows, will ensure efficient access to the NAS for commercial LROs. Such efficient access will help support the economic development of commercial space operators—a key business sector—while minimizing the effects on the aviation community. Work with TBLP and DLRW will help evolve NAS integration of launch and reentry operations and will contribute to faster and more flexible access to space for all stakeholders, advancing National defense initiatives.

#### APG TARGETS AND METRICS: COMMERCIAL SPACE

TBLP and DLW will be implemented once procedures and coordination for their use have been developed, outreach to affected stakeholders has been undertaken, and an operational demonstration of their use has been completed. Implementation milestones include the following:

- Complete and distribute the TBLP briefing video for Air Traffic Controllers and dispatchers. First quarter of FY 2020. (Completed)
- > Brief the New York Air Route Traffic Control Center. First quarter of FY 2020. (Completed)
- Start to train New York Air Traffic Controllers on the Flow Controlled Area rerouting. First quarter of FY 2020. (Completed)

- > Develop preliminary metrics to demonstrate effectiveness of TBLP. Second quarter of FY 2020.
- > Develop FAA briefing and coordination schedule for DLW. Third quarter of FY 2020.
- > Develop industry briefings and coordination schedule for DLW. Fourth quarter of FY 2020.
- Replicate procedures at other launch and reentry sites around the United States. Fourth quarter of FY 2021.

For the most recent information on Commercial Space APG implementation, visit <u>https://www.performance.gov/</u>transportation/.

## **PERFORMANCE GOALS AND METRICS: DEPLOYMENT OF INNOVATION**

PERFORMANCE GOAL: INCREASE EFFECTIVENESS OF TECHNOLOGY TRANSFER (OST)

METRIC: INCREASE EFFECTIVENESS OF TECHNOLOGY TRANSFER		2018	2019	2020	2021
Technologies Toward Implementation	Targets	_	_	75	100
	Actuals	—	Baseline	N/A	N/A
Success Stories (Evidence of Societal Benefits)	Targets	10	10	12	N/A
	Actuals	8*	N/A	N/A	N/A

\* Actual value for FY 2018 changed from 13 to 8 after a more rigorous assessment process was used.

FY 2019 actuals should be available after the first quarter of FY 2020.

#### DESCRIPTION

In accordance with CAP Goal 14, <u>Improve Transfer of</u> <u>Federally-Funded Technologies from Lab-to-Market</u>, the Department's internal working group will develop guidance documents to help agencies, "develop and implement stakeholder-informed action plans, which may include improved Federal practices and policies, regulatory reform, and legislative proposals; increase interactions with private sector experts; identify, share, and adopt best practices for technology transfer; and increase the transfer of federally funded innovations from lab to market."

DOT will leverage resources as well as coordinate and partner with technology deployment experts within the OAs and outside the Department. Additionally, DOT will condition the awarding of funds for relevant R&Dfunded agreements and deployment partnerships on steps that transfer technology. DOT's Technology Transfer (T2) activities will focus on establishing a collaborative platform between internal and external stakeholders. The Department will also research how to develop T2 practices that are useful for stakeholders as well as how to best facilitate the adoption and implementation of innovative technology.

DOT will also increase T2 awareness through Departmental representation with stakeholders. This will foster research through stakeholder coordination, knowledge transfer, and information dissemination, which will in turn lead to the practical application of research through pilots, demonstrations, and related activities. Tracking these activities will yield data and stories describing societal benefits realized throughout the transportation community.

### FY 2019 Progress Update

DOT's technology transfer working group reviewed the Department's current T2 activities and is looking for ways to include them as a part of the R&D scope. For example, DOT has made T2 a part of the revised RD&T Strategic Plan (under review, pending release) and has implemented practices that support parallel work streams for R&D and T2. It also identified ways to include deliverables in relevant R&D-funded agreements that address the transfer of their research results. These activities align R&D and T2 to work in parallel, as opposed to focusing on T2 after the research has already been completed.

FHWA launched the fifth round of the Every Day Counts (EDC) initiative, which extends through FY 2020—see <u>https://www.fhwa.dot.gov/innovation/everydaycounts/edc\_5/</u>. FHWA works with partner agencies to identify and rapidly deploy proven, yet underused, innovations to shorten the project delivery process, enhance roadway safety, reduce traffic congestion, and integrate automation. There are 10 innovations in EDC-5. Every State is

exploring at least 3 of these innovations and 7 of the 10 innovations are being advanced in 30 or more States. FHWA also launched the <u>Accelerating Market Readiness</u> (<u>AMR</u>) Program. While EDC advances proven, marketready innovations, AMR bridges the gap between research and practice to operationally test and evaluate emerging transformative innovations to see if they can advance to being market ready. AMR provides funding to States to field test these emerging innovations, documents the results, and makes the evaluation available at the State and local level. FHWA made \$3 million available and solicited for innovations in FY 2019. FHWA is currently reviewing the applications that were submitted and DOT anticipates announcing the award recipients in FY 2020.

Performance Goal: Complete Annual NextGen Advisory Committee Recommendations for Northeast Corridor (FAA)

		2017	2018	2019	2020	2021
Metric: Percentage of NextGen Projects Completed On-Time and On Budget *	Targets	90%	90%	90%	90%	TBD
	Actuals	92%	91.3%	100%	N/A	N/A
Metric: Percentage of Completed NextGen Priorities for the Northeast Corridor (NEC)**	Targets	_	_	80%	80%	TBD
	Actuals	—	_	100%	N/A	N/A

\* On-time and on budget for each project means completing the schedule within 10 percent of the baseline completion date and completing the program within 10 percent of the total cost baseline established for the program in the acquisition program baseline.

#### DESCRIPTION

The Next Generation Air Transportation System (NextGen) is an ongoing modernization project of the United States' National Airspace System (NAS). Its performance milestones are based on the overall series of related programs and activities the FAA is executing, which are designed to focus on implementing improvements that industry indicates are high priorities. The FAA and industry monitor progress against these commitments through the NextGen Advisory Committee (NAC).

The Northeast Corridor (NEC) covers the most congested airports and airspace in the United States,<sup>32</sup> and has a

significant effect on the daily operations of the NAS. Nearly 50 percent of aviation delays in the entire NAS are attributable to the Northeast Corridor. Commitments identified by the NAC represent near-term initiatives that will enhance operations and are focused on the NAC's stated goal to improve execution of today's operations. Given the complex and compact nature of NEC operations, as well as its connection to the rest of the NAS, single operational improvements can lead to significant savings in time and during weather events. These enhancements establish a foundation and framework for longer-term effective implementation of NextGen, using timebased management techniques and precise repeatable Performance Based Navigation procedures for more predictable and efficient operations.

<sup>32</sup> The Northeast Corridor is the busy airspace between Washington, D.C. and Boston that includes Philadelphia, New York City, and associated airspaces.

### FY 2019 PROGRESS UPDATE

FAA met its FY 2019 goal of completing 90 percent of NAC recommendations for the Northeast Corridor, as of the third quarter of the fiscal year. Specifically, FAA made major progress on the following NextGen projects:

- > Implemented improved procedures to increase capacity at Philadelphia during lower visibility conditions.
- > Improved departure management out of New York airports to Atlanta, Charlotte-Douglas, Philadelphia, and District of Columbia-area airports.
- > Created new departure routes to improve New York-area performance during thunderstorms.

#### PERFORMANCE GOAL: MAJOR SYSTEM INVESTMENTS (FAA)

METRIC: PERCENTAGE OF MAJOR SYSTEM INVESTMENTS COMPLETED ON-TIME AND ON BUDGET *	2017	2018	2019	2020	2021
Targets	90%	90%	90%	90%	90%
Actuals	95.2%	90.5%	90%	N/A	N/A

\* On-time and on budget for each project means completing the schedule within 10 percent of the baseline completion date and completing the program within 10 percent of the total cost baseline established for the program in the acquisition program baseline (APB).

#### DESCRIPTION

FAA's goal is that 90 percent of major baselined acquisition programs must be maintained within 10 percent of their current acquisition cost, schedule, and performance baseline as of the end of FY 2019. Programs classified as acquisition categories 1, 2, or 3, considered strategic, or part of NextGen are considered "major" programs and included in this measure. For FY 2019, 20 major acquisition programs were tracked and monitored. By law, FAA shall consider termination of a program when it is breaching its cost, schedule, or performance goals by more than 10 percent.

#### FY 2019 PROGRESS UPDATE

As of July 2019, 18 out of 20 (90 percent) programs are within 10 percent of their cost, schedule, and performance baseline. Two programs have breached the 10 percent threshold:

- Common Support Services Weather (CSS Wx)—The CSS Wx program is projecting 13-month schedule delay (-14.6 percent schedule variance) and a cost increase of \$44 million (-36.6 percent cost variance). These estimates are preliminary and will be updated. The variances are associated with underestimating software development efforts, interface changes, vendor performance on development and tests, and additional equipment.
- 2. NextGen Weather Processor (NWP)—The program is currently projecting a 13-month schedule delay (-14.6 percent schedule variance) and a cost increase of \$21.2M (-11.2 percent cost variance). These estimates are preliminary. The cost variance is associated with cost increases related to interface changes and underestimated Integrated Logistics Support (ILS) transition costs. In addition, prime contractor rate changes due to a corporate reorganization contributed to the cost increase. NWP and CSS Wx are in coordination to assess impacts due to the CSS Wx delays.

METRIC: DEPLOYMENT OF AUTOMATED DRIVING SYSTEMS	2017	2018	2019	2020
Targets	N/A	This measure will be	monitored from 2018-202	20
Actuals	N/A	Data will be reported	as it becomes available	

#### PERFORMANCE GOAL: MONITOR ADOPTION OF SELF DRIVING VEHICLES (NHTSA)

#### DESCRIPTION

Automated Driving Systems (ADS) offer tremendous potential to reduce vehicle crashes, injuries, and fatalities. However, the pace and nature of the technological change required to reach the highest levels of automation will require a new oversight paradigm compared to the more traditional methods used for introducing new safety technology in vehicles. Part of that change process will include being more nimble and flexible in developing new policies and procedures for automakers to help facilitate the safe deployment of ADS. Vehicle technology in this era is developing at a faster pace than any time in history. NHTSA has been at the forefront of National efforts to promote the safe introduction of ADS through research, stakeholder engagement, and industry guidance.

NHTSA's research program establishes a framework for contributing to the body of knowledge related to ADS safety, and provides leadership that advances the safe testing and deployment of ADS, such that their benefits are optimized and risks appropriately mitigated. The Agency's research program focuses on five general categories of ADS research needs:

- Supporting regulatory decisions on the removal of potential barriers: This area of research identifies potential FMVSS compliance challenges associated with alternative vehicle designs.
- 2. ADS system safety performance: This area of research focuses on the methods, metrics, and capabilities needed to assess system-level ADS safety performance. This will help build public confidence in ADS.
- 3. ADS subsystem functional safety: The objective of this research area is to establish the capability to assess the functional safety of ADS components and subsystems.
- 4. Crashworthiness of Vehicles with ADS: Occupant

safety remains a priority. Alternative seating and cabin designs enabled by ADS pose new challenges in testing, validating, and ensuring occupant safety.

 Real-World Testing: There is a need for research on data acquisition and analysis of ADS deployment strategies in real-world operational conditions for potential pilot programs.

#### FY 2019 PROGRESS UPDATE

In FY 2019, NHTSA continued to advance its efforts on ADS topics by: facilitating additional safety discussions with stakeholders; researching and developing safety performance measures and testing procedures for these technologies; and identifying unintended and unnecessary barriers to safety innovation within existing standards. To date, 18 Voluntary Safety Self-Assessments have been made public by ADS developers and are included on NHTSA's Disclosure Index.

NHTSA's research supported the development of a new guidance document, <u>Automated Vehicles 3.0: Preparing for</u> the Future of Transportation, released in October 2018.

NHTSA remains at the forefront of automated driving policy development at the international level as well. At the June 2019 World Forum for Harmonization of Vehicle Regulations (WP.29) meeting, the Contracting Parties approved a Framework Document to guide the future work of the United Nations on Automated Vehicles. The framework is based on DOT's Automated Driving Systems 2.0 Vision for Safety. The Framework was drafted by NHTSA staff in close cooperation with Japan, China, and the European Union. <u>https://www.unece.org/fileadmin/</u> DAM/trans/doc/2019/wp29/ECE-TRANS-WP29-2019-34rev.1e.pdf. In April 2019, NHTSA published the Naturalistic Study of Level 2 Driving Automation Functions, a study of four focus areas: System Performance (during unscripted, on-road driving), Driver System Interaction, Driver Performance, and Driver Engagement. See <u>https://</u> www.unece.org/fileadmin/DAM/trans/doc/2019/wp29/ ECE-TRANS-WP29-2019-34-rev.1e.pdf.

Four public notices related to automated vehicle technology were issued in the Federal Register:

- Removing Regulatory Barriers for Vehicles With Automated Driving Systems—NHTSA sought public comment on the near- and long-term challenges of testing and verifying compliance with existing crash avoidance Federal Motor Vehicle Safety Standards for Automated Driving System-Dedicated Vehicles that lack traditional manual controls necessary for a human driver to maneuver the vehicle and other features intended to facilitate operation of a vehicle by a human driver, but that are otherwise traditional vehicles with typical seating configurations. Published 5/28/19. <u>https://www. federalregister.gov/documents/2019/05/28/2019-11032/ removing-regulatory-barriers-for-vehicles-withautomated-driving-systems.</u>
- General Motors, LLC—Receipt of Petition for Temporary Exemption from Various Requirements of the Safety Standards for an All-Electric Vehicle with an Automated Driving System—Docket comment period closed on May 20, 2019. Notice of receipt of petition for temporary exemption; request for public comment. Published 3/19/19. <u>https://www.federalregister.gov/</u> documents/2019/03/19/2019-05119/general-motorsllc-receipt-of-petition-for-temporary-exemption-fromvarious-requirements-of-the.
- > Nuro, Inc.—Receipt of Petition for Temporary Exemption for an Electric Vehicle with an Automated Driving System—Docket comment period closed on May 20, 2019. Notice of receipt of petition for temporary exemption; request for public comment. Published 3/19/19. <u>https://www.federalregister.gov/</u> <u>documents/2019/03/19/2019-05121/nuro-inc-receiptof-petition-for-temporary-exemption-for-an-electricvehicle-with-an-automated</u>.
- Advance Notice of Proposed Rulemaking—Pilot Program for Collaborative Research on Motor Vehicles with High or Full Driving Automation. NHTSA sought

public comment on matters related to the near-term and long-term challenges of ADS testing, development, and eventual deployment. Published 10/10/18. <u>https://www.</u> <u>federalregister.gov/documents/2018/10/10/2018-21919/</u> pilot-program-for-collaborative-research-on-motorvehicles-with-high-or-full-driving-automation.</u>

#### STAKEHOLDER OUTREACH

Society of Automotive Engineers (SAE) Government/ Industry Meeting and Joint Cybersecurity Workshop: This annual event held in April 2019 brought together significant numbers of government policy and regulatory makers with auto industry representatives to discuss the effect of government action on future vehicle design. NHTSA presented over 17 technical papers during the conference, facilitated multiple sessions, held various requested company meetings, and bi-lateral discussions during the event.

Leading up to the conference SAE and NHTSA also convened its second joint Cybersecurity Workshop. Its purpose is for government and industry subject matter experts responsible for vehicle security issues to address the progress and planning of cybersecurity across the automotive sector.

In July 2019, NHTSA assembled and moderated a plenary session at the Automated Vehicle Symposium 2019 on "Steps toward Putting Public Safety Community at Ease with Advanced Vehicle Technologies."

> 26th International Technical Conference of the Enhanced Safety of Vehicles: In June 2019, NHTSA co-hosted the 26th International Technical Conference on the Enhanced Safety of Vehicles (ESV) in the Netherlands. ESV is the only government-sponsored vehicle safety research conference that brings together leading engineering experts from international governments, vehicle manufacturers, automotive suppliers, academic researchers, safety advocates, and members of the public. Nearly 700 individuals attended from 22 countries, including broad representation from the 13 ESV member countries. During the conference, along with the opening day ceremony and plenary sessions, the NHTSA delegation co-chaired 8 of 15 technical sessions, presented 11 technical papers, participated in bi-lateral discussions with the Netherlands, and attended offsite company visits. Additionally, NHTSA facilitated professional

development in automotive safety engineering by sponsoring and managing a collegiate Student Safety Technology Design Competition, featuring several teams from across the world. The NHTSA delegation also honored the work of 14 distinguished international researchers by presenting them with U.S. Government Awards.

FHWA supported development of the concept of operations for the <u>Cooperative Automation Research</u> <u>Mobility Applications</u> (CARMA) platform to incorporate and address four sets of use cases—basic travel, traffic incident management, weather management, and work zone management—that will serve as a basis for roadway automation integration. CARMA enables ADS to facilitate cooperative tactical maneuvers with other vehicles and roadway infrastructure though communication. In FY 2019, FHWA received four passenger vehicles and two commercial vehicles with SAE partial and conditional levels of driving automation for research and testing at TFHRC. FHWA completed a Transportation Systems Management and Operations (TSMO) use case study, which will be published in FY 2020.

# STRATEGIC GOAL 4 ACCOUNTABILITY

In accordance with CAP Goal 6, Shifting from Low-Value to High-Value Work, DOT seeks to improve the efficiency, effectiveness, and accountability of the Department by reducing low-value, obsolete, or duplicative regulations and other requirements, thus streamlining and improving coordination of business processes. DOT will be open and transparent, demonstrating to the public how the Department is furthering its strategic goals and objectives and effectively using its statutory and administrative authorities.

## ACCOUNTABILITY OBJECTIVE 1: REGULATORY REFORM

This strategic objective is about reducing current regulatory burdens and bureaucracy to ensure a safe, efficient, accessible, and convenient transportation system for people and commerce.

#### ACCOUNTABILITY OBJECTIVE 1: REGULATORY REFORM

Reduce the Regulatory Burden on the Transportation Industry and Public While Still Achieving Safety Standards (Department-wide)\*

\* This goal is aligned with CAP Goal 6.

### **SUMMARY OF PROGRESS**

DOT, in consultation with the Office of Management and Budget, has determined that performance toward this objective is making noteworthy progress. DOT published 23 deregulatory and four significant regulatory actions in FY 2019. The net cost savings of these actions is \$149 million annualized.

## APG: CONTROL REGULATORY BURDEN BY COMPLYING WITH EXECUTIVE ORDER 13771 ORDERS TO REDUCE NUMBER AND ECONOMIC IMPACT OF REGULATIONS

GOAL STATEMENT: DOT will implement regulatory reform initiatives by evaluating existing regulations in order to lower regulatory burdens on industry and the public. In conjunction with the release of the agency's fall Unified Agenda of Federal Regulatory and Deregulatory Actions, the Department will implement a regulatory reform agenda through the end of FY 2019, focusing specifically on issuing two deregulatory actions for every new regulatory action proposed and achieving a total incremental cost savings from all deregulatory and significant regulatory actions of no less than \$35 million per year for FY 2018 and no less than \$140 million per year for FY 2019.\*

\* Note: This goal was set for the FY 2018-FY 2019 APR cycle and will not be classified as an APG after the conclusion of FY 2019. However, reducing regulatory burden remains a priority of the Department. Therefore, DOT will continue to track and report on its progress with this objective into future years. For more information, visit <u>www.reginfo.gov.</u>

#### BACKGROUND

Regulatory improvement is a continuous focus for the Department. There should be no more regulations than necessary, and those regulations should be straightforward, clear, and designed to minimize burdens. Our regulations should be designed to achieve their regulatory goals (e.g., safety) with the least amount of burden. Generally, economic burden of a regulation refers to the resources needed to comply with the regulation and is measured by calculating compliance costs (i.e., the resources regulated entities must expend because of the regulation). Once issued, regulations and other agency actions should be reviewed periodically and revised to ensure they remain both cost-effective and cost-justified, and continue to meet the needs for which they originally were designed. Among other actions to achieve these goals, the President issued <u>Executive Order 13771</u>, <u>Reducing Regulation and</u> <u>Controlling Regulatory Costs</u>.

The Office of Management and Budget (OMB) issued guidance on implementing this executive order, and DOT has established the Regulatory Reform Task Force to evaluate existing regulations and make recommendations to the Secretary regarding their repeal, replacement, or modification. Other activities to reduce regulatory burdens also fit into this area, such as the review required by Executive Order 13783, Promoting Energy Independence and Economic Growth, and the subsequent burdenreducing efforts that will result from the review.

### BASELINE/TRENDS: REGULATIONS

#### AND RULEMAKING

The Department met this priority goal by successfully implementing a regulatory reform agenda through the end of FY 2019. This agenda focused on providing two deregulatory actions for every new regulatory action proposed, to achieve a total incremental cost for all deregulatory and significant regulatory actions of less than -\$140 million per year for FY 2019.

## **APG AND METRICS: REGULATORY REFORM**

APG: REDUCE THE REGULATORY BURDEN ON THE TRANSPORTATION INDUSTRY AND PUBLIC WHILE STILL ACHIEVING SAFETY STANDARDS (DEPARTMENT-WIDE)

		2018	2019	2020
Metric: Compliance with Executive Order to Reduce Two Regulations for Each New Regulation (Ratio)	Targets	2:1	2:1	2:1
	Actuals	23:1	23:4	N/A
Metric: Reduce the Economic Impact of Regulations*	Targets	-\$35 million	-\$140 million	TBD**
	Actuals	-\$86.2 million	-\$149 million	N/A

\* Expressed in terms of total cost savings (annualized, adjusted at a 7 percent discount rate).

\*\* For the latest target savings for FY 2020, visit https://www.reginfo.gov/public/do/eAgendaEO13771.

#### DESCRIPTION

To accomplish this priority goal, the Department sought input from the public on existing regulations and other agency actions that are good candidates for repeal, replacement, or modification. Recognizing that safety is the Department's highest priority, the Department sought comments on those existing regulations and other agency actions that may be repealed, replaced, or modified without compromising safety. The public was encouraged to identify regulations that (a) eliminate jobs or inhibit job creation; (b) are outdated, unnecessary, or ineffective; (c) impose costs that exceed benefits; (d) create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies; (e) could be revised to use performance standards in lieu of design standards; or (f) potentially burden the development or use of domestically produced energy resources.

#### FY 2019 PROGRESS UPDATE

The Department also met its goal for FY 2019 by issuing 23 deregulatory actions and four significant regulatory actions. These actions resulted in net annualized cost savings of \$149 million. Reducing regulatory burden remains a priority of the Department; therefore, while it will not be classified as an Agency Priority Goal beyond the conclusion of the FY 2018-FY 2019 APG cycle, the Department will continue to report on its progress with this objective into future years. For more information on this objective, visit <u>www.reginfo.gov</u>.

#### APG LEAD

> OST: Christina Aizcorbe, Deputy General Counsel

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## ACCOUNTABILITY OBJECTIVE 2: MISSION EFFICIENCY AND SUPPORT

The following metrics track the Department's progress in executing changes to improve the effectiveness of our programs and the cyber posture of the Department.

#### ACCOUNTABILITY OBJECTIVE 2: MISSION EFFICIENCY AND SUPPORT

Increase Shared Service Utilization Percentage (OST)\*

Improve IT Project Performance (OST)

Consolidate Data Centers (OST)

Improve DOT's Cybersecurity (OST)

Decrease Improper Payments (OST)\*\*

Improve Effectiveness and Efficiency of Support Services (OST)

Increase Use of Best in Class Contracts (OST)\*\*\*

### **SUMMARY OF PROGRESS**

DOT, in consultation with the Office of Management and Budget, has determined that performance toward this objective is making noteworthy progress.

DOT has developed, and continues to refine, a multi-year plan to promote efficiency, reduce redundant operations, and offer best-in-class customer service for Acquisitions, Human Resources (HR), and Information Technology (IT), through a Shared Services model. The Department will continue to standardize and streamline processes to promote organizational efficiency; promote the use of best practices and integrate into future operations; and maintain a strong focus on continuously improving the customer experience.

As part of the Department's Shared Services Initiative, the DOT Office of the Chief Information Officer (OCIO) launched its Destinations*DIGITAL* initiative to modernize information technology and improve cybersecurity. This initiative allows the OCIO to better Increase Facility Consolidation (OST)

Reduce the Number of Unessential Federal Advisory Committees (OST)

- \* This is a new goal that was not included in last year's report. This goal aligns with CAP Goal 5.
- \*\* This goal aligns with CAP Goal 9.
- \*\*\* This goal aligns with CAP Goal 7.

support the Department's mission and unifies the DOT IT community to provide strategic direction to enable a digital transformation for transportation technology management. In FY 2019, the Department has already begun to recognize successes, through significant commodity IT consolidations as well as the development of advanced dashboarding in support of grants and cybersecurity.

In addition, the Department continues to reduce the number of facilities and reduce its overall footprint. The Department conducts recurring high-level assessments of real property to identify opportunities for space reduction and cost savings with a goal to achieve space efficiencies across the country and at DOT Headquarters' in Washington, D.C. This effort includes evaluating scenarios to house Federal and contractor staff to identify the best business solutions, and associated costs, to provide cost effective, quality workspaces to support the Department's mission and meets the office space design policy. Going forward, DOT will continue to seek opportunities to reduce its office and warehouse space.

## PERFORMANCE GOALS AND METRICS: MISSION EFFICIENCY AND SUPPORT

PERFORMANCE GOAL: INCREASE IT SHARED SERVICE UTILIZATION PERCENTAGE

METRIC: SHARED SERVICE UTILIZATION PERCENTAGE OF TOTAL IT BUDGET		2019	2020	2021
DOT*	Targets	25.00%	39.00%	49.00%
	Actuals	28.59%		
FHWA	Actuals	42.03%		
FMCSA	Actuals	24.99%		
FRA	Actuals	42.76%		
FTA	Actuals	22.66%		
MARAD	Actuals	32.16%		
NHTSA	Actuals	17.86%		
OST	Actuals	21.39%		
PHMSA	Actuals	28.33%		
SLSDC	Actuals	25.41%		

\* Excluding FAA & OIG.

#### DESCRIPTION

The President's Management Agenda (PMA) has set a long-term vision for modernizing the Federal Government in key areas that will enhance agencies' abilities to achieve mission-supporting outcomes, deliver improved services, and provide effective stewardship over taxpayer dollars. One of the PMA's primary focus areas centers on CAP Goal 5, <u>Sharing Quality Services</u>, and improvements to the Government's mission-support services, which enable high-quality outcomes to be delivered to the American people. *(OMB Executive Order 19-04-26, Centralized Mission Support Capabilities for the Federal Government)*. DOT is introducing this new measure to track its progress against this goal.

To achieve this CAP Goal, the OCIO intends to continue to increase shared services offerings to OAs throughout the Department.

#### FY 2019 PROGRESS UPDATE

OCIO has made significant progress in consolidating IT platforms and services throughout the enterprise in FY 2019. For 2019, 28.59 percent of DOT's IT budget (excluding FAA and the OIG) was used to fund IT shared service offerings via working capital or franchise funds. Continuing IT consolidation efforts will help bring this total up in FY 2020 and FY 2021. Metric: Percentage of Major IT Projects Within 10% of Projected Costs and Meeting Incremental Development Targets

METRIC: DEPLOYMENT OF AUTOMATED DRIVING SYSTEMS	2018	2019	2020
Targets	25%	50%	75%
Actuals	83%	81%	N/A

#### DESCRIPTION

Capital Planning and Investment Control (CPIC) is a systematic approach to selecting, managing, and evaluating information technology investments. DOT's CPIC teams across the OAs submit incremental development data as part of the monthly submission to the Federal Information Technology (IT) Dashboard.<sup>33</sup> Progress is captured quarterly as part of the OMB's Integrated Data Call, and the OCIO works with the teams to support reporting and assess whether major IT investments<sup>34</sup> in the OAs are

hitting these targets.

### FY 2019 PROGRESS UPDATE

DOT's efforts to improve cost and schedule performance for major IT investments that use an incremental development approach is ahead of schedule, at 77 percent for FY 2019. Increased adoption of agile methodologies that yield value in six month increments is helping to improve adherence to cost and schedule for DOT's selected major IT investments.

<sup>34</sup> Major investments are defined by OMB Circular No. A-11 and include investments such as FAA's NextGen Weather (Wx) Processor (NWP).

#### Performance Goal: Consolidate Data Centers (OST)

METRIC: PERCENTAGE OF DATA CENTERS CONSOLIDATED BY OPERATING ADMINISTRATION		2017	2018	2019	2020
FAA	Targets		35%	48%	N/A
	Actuals	35%	35%	45%	N/A
FHWA	Targets	_	0%	0%	N/A
	Actuals	0%	0%	N/A	N/A
FMCSA	Targets		0%	0%	N/A
	Actuals	0%	0%	N/A	N/A
FRA	Targets	_	100%	100%	N/A
	Actuals	100%	100%	N/A	N/A
FTA	Targets	_	100%	100%	N/A
	Actuals	100%	100%	N/A	N/A
MARAD	Targets	_	0%	0%	N/A
	Actuals	0%	0%	N/A	N/A
NHTSA	Targets	_	64%	93%	N/A
	Actuals	64%	64%	N/A	N/A
OIG	Targets	_	14%	14%	N/A
	Actuals	14%	14%	N/A	N/A
OST	Targets	_	25%	50%	N/A
	Actuals	25%	50%	N/A	N/A
PHMSA	Targets	_	23%	23%	N/A
	Actuals	23%	23%	N/A	N/A
SLSDC	Targets	_	0%	0%	N/A
	Actuals	0%	0%	N/A	N/A

#### DESCRIPTION

FY 2017 was the baseline year for this metric. OMB has released updated Data Center Optimization Initiative (DCOI) guidance, as M-19-19 that will supersede the current guidance. This new guidance substantially changes the way data center consolidation progress is measured in the future by altering the way data centers are classified, and thus significantly changing the number of data centers subject to consolidation. As a result, the Department plans to update this metric with the new OMB guidance.

## FY 2019 PROGRESS UPDATE IN FY 2019, the Department:

Continued to decommission data centers under its digital transformation program, <u>DestinationsDIGITAL</u>. The Department closed one-tiered data centers, thus surpassing the FY 2018 data center consolidation target. DOT has reconciled its data center inventory numbers and continues work to identify cost savings from data center closures and planned closure.

METRIC: IMPROVE DOT'S CYBERSECURITY		2018	2019	2020
Percentage of Systems with Proper Security Authorizations	Targets	99%	99%	100%
	Actuals	99%	98%(p)	N/A
Percentage of Systems Converted to an Ongoing Authorization Process	Targets	25%	50%	75%
	Actuals	17%	24%	N/A

#### PERFORMANCE GOAL: IMPROVE IT PROJECT PERFORMANCE (OST)

(p) preliminary. FY 2019 actuals based on third quarter data and finalized in fall 2019.

#### DESCRIPTION

Under the Risk Management Framework (RMF) developed by the National Institute of Standards and Technology (NIST) in response to the Federal Information Security Modernization Act (FISMA) of 2014, organizations plan for and assess the implementation of internal and security controls for information systems to identify weaknesses, opportunities for improvements, and residual risks that may require additional processes or organization investment to mitigate. That process of planning, assessment, and risk management culminates in the acceptance of risk by an accountable official who both authorizes an information system to operate-denoted as a security authorization or authority to operate (ATO)-and ensures that resources are prioritized to correct control weaknesses and mitigate risks. When done properly, a security assessment and authorization ensures that information is secured in accordance with good security practice and Federal policy, and that any remaining security risks are minor and within the limits, or tolerances, of risk acceptable to the organization. Without a security authorization, an information system may be operating with unidentified weaknesses and with unknown or unquantified risks, which may jeopardize sensitive information, stakeholders, or the organizational mission, resulting in financial, reputational, or, in some cases, life-and-safety damages or impacts.

Ongoing authorization is an enhancement to the security authorization process that leverages the automation of controls and monitoring on a more frequent basis to provide an assessment of risk and weaknesses as changes occur or in near-real-time, permitting an organization to better identify, categorize, manage, and mitigate risks as they develop as part of the system development lifecycle, rather than solely on a fixed, frequently annual, interval. The result is generally both better visibility into residual risk, and reduced risk resulting from more timely action to correct weaknesses and vulnerabilities.

OMB and the Department of Homeland Security are in the process of developing additional agency guidance on implementing ongoing authorization. Once guidance is issued, DOT will execute an enterprise security contract to consolidate and standardize cybersecurity contractual support. DOT will also improve its security authorization performance and accelerate its implementation of ongoing authorization by continuing to reduce its inventory through modernization and consolidation, as well as by immigrating smaller systems and apps to shared service and cloud providers.

#### FY 2019 PROGRESS UPDATE

In FY 2019, the Department's progress saw a slight decline, from 99 percent to 98 percent of systems authorized. The number of reported information systems in the agency inventory declined again last fiscal year from 459 systems to 437 systems, resulting in part from modernization and shared services consolidation initiatives.

METRIC: IMPROPER PAYMENT PERCENTAGE FOR ACTIVITIES IDENTIFIED AS SUSCEPTIBLE	2017	2018	2019	2020*	2021
Targets	0.62%	0.49%	1.51%	0.85%	N/A
Actuals	0.30%	2.21%	0.88%	N/A	N/A

#### PERFORMANCE GOAL: DECREASE IMPROPER PAYMENTS (OST)

\* OMB Memorandums A-123 and A-136 require DOT to publish next year's target in the Agency Financial Report (AFR) and no longer require targets beyond the next fiscal year.

#### DESCRIPTION

Legislation defines a program or activity as susceptible to significant improper payments when the annual payment error rate exceeds 1.5 percent and \$10 million of outlays, or \$100 million of outlays regardless of the error rate. In addition, a risk assessment, statutory law, OMB, or DOT management may identify a program or activity as susceptible to significant improper payments and require it to report annual estimates. One DOT activity, FHWA Highway Planning and Construction, has been identified as being susceptible to significant improper payments and subject to the FY 2019 reporting requirements. The targets and actuals are cumulative totals for the activities identified as susceptible to significant improper payments. They do not represent all the Department's programs and activities. The goal of decreasing improper payments aligns with the President's Management Agenda CAP Goal 9, <u>Getting</u> <u>Payments Right</u>. CAP Goal 9 is focused on reducing the annual amount of cash lost to taxpayers; clarifying and streamlining compliance and reporting requirements; and strengthening partnerships with States to find ways to prevent or reduce incorrect payments by Federally funded, state-administered programs.

#### FY 2019 PROGRESS UPDATE

The Department is monitoring FHWA's corrective actions, which include advising State DOTs of the root causes for their identified improper payments and taking appropriate actions to improve processes and controls. FHWA is cataloging their improper payments in an effort to better identify reoccurring risk areas.

METRIC: PERCENTAGE ACCOMPLISHED AGAINST SHARED SERVICES (HR, IT, AND ACQUISITION) IMPLEMENTATION PLAN	2017	2018	2019	2020
Targets	N/A	33%	66%	65%
Actuals	N/A	35%	50%	N/A

#### PERFORMANCE GOAL: IMPROVE EFFECTIVENESS AND EFFICIENCY OF SUPPORT SERVICES (OST)

#### DESCRIPTION

For decades, DOT has employed shared services<sup>35</sup> effectively for functions such as payroll and financial management. The Department made the strategic decision to expand shared services enterprise-wide to drive efficiency and better support evolving customer and organizational needs. DOT has begun evaluating which operations can be switched to a shared services enterprise to take advantage of multi-year savings. The shared services model will establish centers of excellence throughout the Department in the areas of acquisition, human resources, and information technology.

#### FY 2019 PROGRESS UPDATE

For FY 2019, DOT reported a preliminary estimate of approximately 55 percent. To date, a pilot for IT acquisition continues to be ongoing. The IT Acquisition Center of Excellence (ACE) will continue to provide centralized acquisition and contracting support for procurement to eventually include all IT hardware, software, and services as they move into the Working Capital Fund.

HR launched the pilot of the Executive and Political Resources Center of Excellence in February 2019. The Executive and Political Resources Center of Excellence was established to streamline and oversee critical HR functions like staffing, onboarding, processing, performance management, and training and development in support of 200+ Senior Executive Service (SES) employees. options for how staffing, classification, and processing for the general workforce could be standardized and delivered centrally through a Center of Excellence. The Center exited the pilot phase and was formally launched on September 30, 2019.

The acquisition and IT communities partnered to pilot a centralized acquisition of commodity IT, like help desk support, mobile device management, and network connectivity.

The DOT's OCIO continued work on its DestinationsDIGITAL initiative to modernize information technology and improve cybersecurity. This initiative allows the OCIO to better support the Department's mission. The initiative focuses on three priorities: implementing technology solutions that accelerate the DOT mission, enhancing information security as we deploy innovative solutions, and improving accountability for results with complete transparency. In FY 2019, the OCIO worked across DOT to begin migrating commodity assets and services into the IT Shared Services organization.

The HR community began developing a DOT-wide curriculum for training new supervisors and researching

METRIC: BIC PERFORMANCE	2016	2017	2018	2019	2020	2021
Targets	N/A	N/A	35%*	\$167.4M**	\$184.1M	TBD
Actuals	3.5%	5.0%	6.6%	\$163.3M	\$33.8M***	N/A

PERFORMANCE GOAL: INCREASE USE OF BEST IN CLASS (BIC) CONTRACTS (OST)

\* Percentage of all DOT Contracts Qualified for a BIC Contract as defined by OMB/General Services Administration.

\*\* Target is set by OMB as a 10% increase from the FY 2018 performance level; no percentage target was assigned for FYs 2019-2020.

\*\*\* YTD as of 01/10/2020.

#### DESCRIPTION

DOT remains committed to furthering its achievements under CAP Goal 7, Category Management. DOT has drafted a Category Management Program Charter to address its Spend Under Management (SUM) and Bestin-Class (BIC) usage. The Charter includes an annual plan that addresses required category management agency actions under OMB Memo M-19-13. As part of the agency's plan, DOT is creating a knowledge-based workforce, updating policies for mandatory consideration of BIC and other Government- and agency-wide contract vehicles, and other required actions for implementation. Representatives throughout the agency will not only advocate use of BIC vehicles, but will assess data to find areas for improvement. Using a data-driven approach, the agency will be better equipped to understand opportunities to increase its overall spend under management.

### FY 2019 PROGRESS UPDATE

The Department is making progress with its FY 2020 BIC performance and is working to meet the target. In addition to working towards its BIC target, DOT has completed several actions in support of this goal over the past 12 months, to include:

- > Updated Departmental acquisition policy to require documented consideration of BIC vehicles for all procurements that exceed the simplified acquisition threshold (\$250K);
- Joined the Government-level Facilities and Construction Category leadership team to assess opportunities for DOT-unique construction spend;
- Initiated plans to host a second annual Category Management training day;
- > Collaborated with OMB to host the first annual BIC Fair;
- Disseminated the principles of Category Management at multiple levels within the organization;
- > Drafted a Category Management Program Charter;
- > Submitted the Agency's Annual Category Management Plan per OMB M-19-13; and
- > Assigned BIC targets to each individual DOT Operating Administration.

#### PERFORMANCE GOAL: INCREASE FACILITY CONSOLIDATION (OST)

METRIC: NET CHANGE IN OFFICE AND WAREHOUSE SQUARE FOOTAGE	2018	2019	2020	2021
Targets	(59,624)	(47,471)	(32,983)	TBD
Actuals	(88,806)	(28,147)	N/A	N/A

#### DESCRIPTION

Each of DOT's nine OAs, OIG, and OST have distinct mission foci that require specific sets of real property assets. While all groups have office and related support spaces, mission-specific functions require unique facilities, such as research laboratories, training centers, inspection stations, and air traffic control facilities. Many facilities must be located in defined geographic areas, such as National borders or near transportation facilities, to support mission operations.

As part of the Administration's *Freeze the Footprint* and *Reduce the Footprint* efforts, DOT will reduce its office

and warehouse footprint, which is currently 12,183,327 square feet. OAs will reduce their office and warehouse footprints by 200,000 square feet by FY 2022, or approximately 11,983,327 square feet.

#### FY 2019 PROGRESS UPDATE

In FY 2019, the Department reduced its facility square footage by 28,147 square feet. DOT's target for FY 2019 will not be met due to a canceled project in Alaska. The FY 2020 target is set at 32,983, which will be nearly 5,000 square feet greater in reduction size from the FY 2019 actual.

#### PERFORMANCE GOAL: REDUCE THE NUMBER OF UNESSENTIAL FEDERAL ADVISORY COMMITTEES (OST)

METRIC: FEDERAL ADVISORY COMMITTEES REDUCED	2018	2019	2020	2021
Targets	12	19	21	23
Actuals	12	16	N/A	N/A

#### DESCRIPTION

The Federal Advisory Committee Act (FACA) requires that discretionary committees be terminated when they have accomplished their objectives, become obsolete, or determined to be too costly. Statutory committees must be sunset in the time explicitly specified in statute, or implied by when the operation of the statute expires. Our goal is to fulfill this requirement through our continued efforts.

#### FY 2019 PROGRESS UPDATE

OST continues to evaluate the Department's Federal advisory committees and takes steps to reduce outdated

and ineffective committees. Through our ongoing analysis, committees that are no longer necessary are sunset and committees with logical, near-future sunset dates are flagged. Flagged committees are then monitored and sunset when they reach their logical conclusion. Throughout this process, OST works closely with each committee's sponsoring OA and GSA.<sup>36</sup> In FY 2019, OST has sunset two committees and will sunset an additional six before the end of the year. For more information on the Department's committees please visit the <u>FACA database</u>.

<sup>36</sup> GSA is responsible for issuing administrative guidelines and management controls for advisory committees and assisting agencies in implementing and interpreting the Act.

## LOWER-PRIORITY PROGRAM ACTIVITIES

The President's Budget identifies the lower-priority program activities, where applicable, as required under the GPRAMA, 31 U.S.C. 1115(b) (10). The public can access the volume at: <u>http://www.whitehouse.gov/omb/budget</u>.



1200 New Jersey Avenue, SE Washington DC 20590