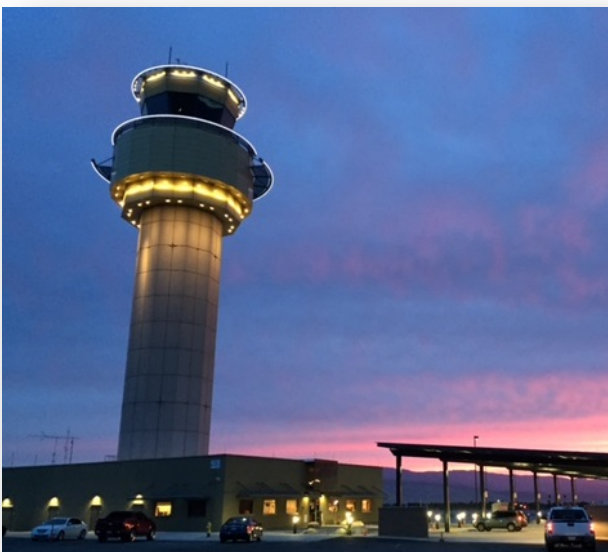




U.S. Department of Transportation

2016 Strategic Sustainability Performance Plan



June 2016

Cover photos:

Top-left: Scott Allen and Corbin Davis of FHWA at the foot of the John Seigenthaler Pedestrian Bridge in Downtown Nashville, TN (Credit: Mary Burroughs, FHWA)

Middle-left: The parking lot of the Federal Aviation Administration's (FAA) Southern California Terminal Radar Approach Control (TRACON) features the first large scale solar PV system owned by the FAA, installed in 2015. (Credit: FAA)

Middle-right: A cyclist crosses a bridge over Florida Avenue on the Metropolitan Branch Trail in Washington, D.C. A MARC commuter train passes, headed for Union Station. (Credit: Brian Vaughn, OST)

Bottom-left: Federal Aviation Administration's Palm Springs Air Traffic Control Tower, next to a newly installed Solar PV array. (Credit: FAA)

Bottom-right: A federal electric vehicle charging at DOT headquarters in Washington, D.C. (Credit: OST)

United States of America

Department of Transportation

2016 Strategic Sustainability Performance Plan

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Office of the Secretary of Transportation | Office of Sustainability and Safety Management

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List of Abbreviations & Acronyms

Abbreviation	Term
ABC	Active Bicycle Commuting Subsidy
AFV	alternative fuel vehicle
ASA	Assistant Secretary for Administration
AWS	alternative work schedule
BACP	Bicycling and Active Commuter Program
C&D	construction and demolition
CEQ	Council on Environmental Quality
CNG	compressed natural gas
CSO	Chief Sustainability Officer
CTEP	Carpooling and Transit Expansion Plan
DOE	U.S. Department of Energy
DOT	U.S. Department of Transportation
E.O.	Executive Order
EISA	Energy Independence and Security Act
EPA	U.S. Environmental Protection Agency
EPEAT	Electronic Product Environmental Assessment Tool
ESPC	Energy Savings Performance Contract
ESPM	ENERGY STAR® Portfolio Manager
EV	electric vehicle
FAA	U.S. Federal Aviation Administration
FAST	Federal Automotive Statistical Tool
FAST Act	Fixing America's Surface Transportation Act
FEMP	Federal Energy Management Program
FHWA	U.S. Federal Highway Administration
FleetDASH	Fleet Sustainability Dashboard
FMC	Fleet Management Council
FMCSA	U.S. Federal Motor Carrier Safety Administration
FMP	Fleet Management Plan
FMR	Federal Management Regulation
FMVRS	Federal Motor Vehicle Registration System
FPDS	Federal Procurement Data System
FRA	U.S. Federal Railroad Administration
FTA	U.S. Federal Transit Administration
FY	fiscal year
GHG	greenhouse gas
GSA	U.S. General Services Administration
GSF	gross square feet
<i>Guiding Principles</i>	<i>Guiding Principles for Sustainable Federal Buildings</i>
ILA	industrial, landscaping and agricultural
ILMS	Integrated Logistics Management System

Abbreviation	Term
<i>Implementing Instructions</i>	<i>Implementing Instructions for Executive Order 13693</i>
LNG	liquefied natural gas
LPG	liquefied petroleum gas
MAP	Multimodal Access Plan
MARAD	U.S. Maritime Administration
NHTSA	U.S. National Highway Traffic Safety Administration
NOAA	National Oceanic and Atmospheric Administration
O&M	operation and maintenance
OA	Operating Administration ¹
OIG	Office of Inspector General
OMB	Office of Management and Budget
OSSM	Office of Sustainability and Safety Management
OST	Office of the Secretary of Transportation
PBC	performance-based contract
PEV	plug-in electric vehicle
PHEV	plug-in hybrid electric vehicle
PHMSA	U.S. Pipeline and Hazardous Materials Safety Administration
PPA	power purchase agreement
PPCC	President's Performance Contracting Challenge
REC	renewable energy certificate
SLSDC	Saint Lawrence Seaway Development Corporation
SSPP	Strategic Sustainability Performance Plan
DOT or the Department	U.S. Department of Transportation
UESC	utility energy savings contract
UML 1/2	unmetered level one or two charging station for electric vehicles
VAM	vehicle allocation methodology
Volpe Center	John A. Volpe National Transportation Systems Center
WPC	workplace charging
WCC	DOE Workplace Charging Challenge
ZEV	zero emission vehicle

¹ This list includes ten different functional units, plus the Secretary's office which for the purposes of this plan are all referred to as Operating Administrations.

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June 2016

Every day, the Department of Transportation (DOT) serves the American people by ensuring fast, safe, efficient and accessible skies, roads, railways, seaways, pipelines, vehicles, and transit systems. To meet our mission, we are continuously looking for innovative ways to improve the effectiveness and resilience of the national transportation system. For example, innovative initiatives such as Ladders of Opportunity and the Smart City Challenge, seek to increase transportation equity for the most vulnerable communities, while performance-based contracts (PBCs) and climate resiliency measures offer opportunities to elevate the sustainability and resiliency of our own operations on behalf of the public.

DOT is proud of its tremendous progress to date in making its operations more sustainable. Since 2008, DOT has reduced its Scope 1 & 2 greenhouse gas (GHG) emissions by 34 percent and its Scope 3 GHG emissions by 31 percent, decreased fleet fuel consumption by 26 percent since 2005 and improved fleet-wide GHGs per mile by two percent since 2014. In addition, DOT has increased its water efficiency by 20 percent since 2007, and awarded several energy performance contracts worth about \$29 million since 2011. DOT is also taking a leading role by exploring employee electric vehicle (EV) charging in its buildings. All of these achievements are the result of engagements and partnerships with the public, states, private sector, and numerous Federal and DOT stakeholders—in particular, the hard work and commitment of DOT employees.

Our deep-rooted culture of sustainability will be the driving force to ensure DOT meets the enhanced Federal requirements in President Obama's Executive Order (E.O.) 13693, *Planning for Federal Sustainability in the Next Decade*. To support the President's vision, DOT will strengthen our efforts by implementing the strategies and tactics outlined in this Strategic Sustainability Performance Plan (SSPP). E.O. 13693 requires DOT to break new ground with bold, new sustainability goals, and we are rising to this challenge. DOT has set ambitious plans, which we will refine over time, for all focus areas, linking our strategies and tactics to an overarching focus on reducing GHG emissions to help mitigate the effects of climate change. Additionally, we will take deliberate steps to ensure our operations are resilient to risks from climate change.

In implementing this SSPP, DOT will enable employees to identify barriers to achieving each goal, deploy innovative solutions, leverage new technologies and best practices, make capital investments, enhance Department-wide policies for greater effectiveness and consistency, and strengthen the quality and quantity of operational data to guide decision-making.

With the continued leadership of Secretary Foxx, we are moving beyond thinking about transportation as something that just takes us places — transportation also connects people to opportunity and can invigorate opportunities within communities all across the country. We will ensure that sustainability continues to be a fundamental part of our organization's fabric and mission. Our commitment to sustainability will not only guide us, but will propel us forward.

Jeff Marootian

Chief Sustainability Officer

Executive Summary

Vision

The U.S. Department of Transportation (DOT or the Department) is proud to serve the American people by supporting a fast, safe, efficient, accessible, and convenient national transportation system built for the 21st century. The Department works to ensure a safe and reliable system for all transportation modes including air, rail, sea, pipeline, ground and public transit. To maintain continuity of the Nation's transportation system and to reduce its environmental footprint, DOT is working to incorporate sustainability into its operations and programs. These initiatives support the Department's efforts to meet the requirements of Executive Order (E.O.) 13693, *Planning for Federal Sustainability in the Next Decade*.

This Strategic Sustainability Performance Plan (SSPP) outlines DOT's significant accomplishments to date on greenhouse gas (GHG) emissions reduction, improving water use efficiency, developing sustainable buildings, pollution prevention and waste reduction, sustainable acquisition, electronics stewardship, increasing use of renewable energy, and climate change resilience. The strategies described in this plan will make our work more cost effective, resilient, and responsive to the needs of the American public. DOT will continue to ensure sustainability guides its work, as part of a culture of service that promotes the economic, social and environmental vitality of the Nation.

Leadership

Secretary Foxx has challenged DOT leaders to elevate sustainability efforts throughout its operations to achieve greater cost-savings, efficiency, and operational resilience. Jeff Marootian, DOT's Chief Sustainability Officer (CSO) and Assistant Secretary for Administration (ASA), along with the DOT's CSO Council, are responsible for implementing this plan, addressing barriers, and overseeing progress. The Council, comprised of representatives from each Operating Administration (OA), the Office of the General Counsel, the Senior Procurement Executive, the Senior Real Property Officer and other senior officials is responsible for promoting sustainability within the ranks of DOT's 54,000 employees.²

Performance Review

DOT has continued to enhance sustainability within its operations. Led

Major Accomplishments

- Received 2015 GreenGov Presidential Good Neighbor Award
- Received two 2015 Federal Energy and Water Management Awards
- Bestowed seven DOT Sustainability Achievement Awards and three honorable mentions
- **34%** ↓ Reduction in Scope 1 and 2 emissions
- **31%** ↓ Reduction in Scope 3 emissions
- **26%** ↓ Reduction in fleet petroleum use
- **20%** ↓ Reduction in potable water intensity
- **233%** ↑ Increase in alternative fuel use
- **15%** of electric energy from renewable sources, including 3.75% from new sources
- Completed eight sustainable building evaluations
- Diverted nearly **5,000 tons** of solid waste from landfills and diverted **81%** of all construction and demolition waste
- Led update of Interagency Task Force on Bicycling and Active Transportation report
- Demonstrated 100% compliance with sustainable acquisition goal

² This list includes ten different functional units, plus the Secretary's office which for the purposes of this plan are all referred to as Operating Administrations.

by Secretary Foxx and the CSO, these accomplishments are built on a foundation of internal partnerships and a shared vision for sustainability. The Department's successes represent the hard work and commitment of employees across all DOT OAs:

- U.S. Federal Aviation Administration (FAA)
- U.S. Federal Highway Administration (FHWA)
- U.S. Federal Motor Carrier Safety Administration (FMCSA)
- U.S. Federal Railroad Administration (FRA)
- U.S. Federal Transit Administration (FTA)
- U.S. Maritime Administration (MARAD)
- U.S. National Highway Traffic Safety Administration (NHTSA)
- U.S. Pipeline and Hazardous Materials Safety Administration (PHMSA)
- Saint Lawrence Seaway Development Corporation (SLSDC)
- Office of the Secretary of Transportation (OST)
- Office of Inspector General (OIG)

The following section describes DOT's progress on sustainability in ten focus areas: GHG emissions reduction, sustainable buildings, clean and renewable energy, water use efficiency and managements, fleet management, sustainable acquisition, pollution prevention and waste reduction, energy performance contracts, electronic stewardship and data centers, and climate change resilience.

Goal 1: Greenhouse Gas Reduction

Progress. DOT has continued to reduce its GHG footprint with a significant decrease in fiscal year (FY) 2015. DOT has used multi-pronged approaches to address all sources of emissions. Since 2008, the Department has reduced Scope 1 and Scope 2 emissions by 34 percent, and Scope 3 emissions by 31 percent, exceeding the 2020 targets five years in advance, and DOT is on track to achieve the 2025 targets.

Challenges. DOT has implemented many no- or low- cost tactics. Continuing to exceed the GHG reduction targets will become increasingly difficult as remaining emissions are driven by mission-critical activities.

Lessons Learned. Encouraging the use of telework and alternative work schedule (AWS) opportunities, along with technology solutions to support telework and virtual meetings has continued to be an effective strategy to reduce Scope 3 GHG emissions.

Successful Evaluation Measures. DOT measures its progress through its annual

Advancing Vehicle Fuel Efficiency: National Highway Traffic Safety Administration

In FY 2015 **NHTSA**, with the U.S. Environmental Protection Agency (EPA), jointly released proposed standards for medium- and heavy- duty vehicles. The proposal conveyed NHTSA's commitment to:

- Increase fuel efficiency
- Cut carbon emissions
- Reduce climate change impacts
- Bolster energy security
- Spur manufacturing innovation

Additionally, NHTSA continues to promote vehicle fuel efficiency and innovation with its annual "Advanced Fuel-Efficiency Vehicle Showcase for DOT's Earth Day" and Corporate Average Fuel Economy program.

Continuing Petroleum Reduction: Pipeline and Hazardous Materials Safety Administration

In accordance with EO 13693's target to reduce Scope 1 GHG emissions, **PHMSA** aimed to reduce emissions from its petroleum vehicle fleet. To date, PHMSA reduced its petroleum usage from vehicles by **21%**.

GHG inventory. DOT tracks quarterly Scope 1 and Scope 2 emissions through building and fleet energy consumption, while it estimates Scope 3 emissions by tracking commuting days and business travel. In addition, many other performance measures the Department tracks contribute to GHG emission reductions, including energy intensity, clean and renewable energy, waste diversion, and fleet-wide GHG emissions metrics.

Integration. Reducing GHG emissions is a primary driver of many of DOT's sustainability efforts. DOT completes annual GHG emissions data collection and reporting that enables the Department to measure its performance for many linked aspects of DOT's sustainability efforts.

Strategies and Planned Actions. DOT will continue to support strategies that encourage the effective use of telework and use alternate work schedules. DOT will continue to deploy operations and management best practices for energy consuming and emission generating equipment (i.e. upgrading motors, boilers, heating, ventilation, air conditioning systems, and chillers). In addition, implementation of PBCs and on-site renewable energy projects will reduce the Department's GHG emissions, while maintaining mission-critical activities.

Goal 2: Sustainable Buildings

Progress. In FY 2015, DOT continued to complete projects resulting in significant energy and sustainable performance improvements. DOT works to enhance the sustainability of its owned facilities by using environmental management systems and partners with the Federal Energy Management Program (FEMP) to implement energy PBCs. Since July 2015, the Department has evaluated 73.1 percent of Energy Independence and Security Act (EISA) covered facilities and reported implemented projects in the Compliance Tracking System. DOT has also completed eight sustainable building evaluations and developed a metering and benchmarking plan. DOT tracks building energy intensity and reports quarterly to senior management.

Challenges. In FY 2015, DOT was awaiting guidance on E.O. 13693's new requirements. The

Sustainable Buildings Highlight: Federal Highway Administration

FHWA's Brian Kerr worked to make the Turner-Fairbank Highway Research Center in McLean, VA one of the key buildings within the DOT's real property portfolio to lead the implementation of the *Guiding Principles*.



Image of FHWA Turner-Fairbank Research Center

The six *Guiding Principles* apply to existing buildings and new construction/modernization to:

1. Employ integrated design
2. Optimize energy performance
3. Protect and conserve water
4. Enhance indoor environmental quality
5. Reduce environmental impact of materials
6. Assess and consider climate change risks

delay in the release of the new *Guiding Principles for Sustainable Federal Buildings (Guiding Principles)* slowed the Department's progress. The vast majority of the more than 10,000 DOT-owned buildings contain mission critical equipment that have high energy demands and operate 24 hours a day to support the national airspace system. Budget and resource constraints continue to be barriers to progress.

Lessons Learned. Partnering with other agencies, such as the U.S. Department of Energy (DOE) and the U.S. General Services Administration (GSA), is a useful approach in overcoming challenges for this goal. Also, while PBCs are promising strategies, hidden administrative costs may offset projected benefits.

Successful Evaluation Measures. DOT uses Federal systems such as the Compliance Tracking System and the ENERGY STAR® Portfolio Manager (ESPM) to measure performance. In addition, many performance measures tracked by the Department support sustainable building performance goals, including energy intensity, clean and renewable energy, and waste diversion.

Integration. DOT incorporates *Guiding Principles* into its processes for new buildings, major renovations, and leases. In addition, DOT's new Office Space Design Policy is part of the "Reduce the Footprint" initiative.

Strategies and Planned Actions. DOT will work to identify innovative solutions to overcome challenges to meeting this goal. DOT will also incorporate the *Guiding Principles* and sustainable location considerations into new construction and renovations, while improving building data quantity and quality. In addition, DOT will support training for facilities staff to expand internal sustainable buildings expertise.

Goal 3: Clean and Renewable Energy

Progress. In FY 2015, the Department increased its use of renewable energy by adding on-site renewable energy systems and continued to purchase renewable energy certificates (RECs). The Department used renewable energy for 15.3 percent of all electric energy consumed in FY 2015, exceeding the 7.5 percent target.

Challenges. Many Department-owned buildings have limited options for renewable energy integration due to their small size or mission-related energy requirements, combined with technological limitations of available renewable energy options. Budget and resource constraints continue to be barriers to progress.

Supporting Pollinator Health: Maritime Administration

In 2016 **MARAD** made significant progress toward promoting pollinator health in accordance with the Presidential Memorandum "Creating a Federal Strategy to Promote the Health of Honey Bees and Other Pollinators" (2014). In spring 2016, MARAD planted a pollinator garden with over 20 native species at the U.S. Merchant Marine Academy (USMMA).



Image of MARAD Pollinator Garden

An inauguration ceremony will be scheduled before the end of the year, and will be open to community members and USMMA staff and students.

Lessons Learned. There are many methods to contract and install renewable energy generation, but suitability and eligibility for each varies based on site circumstances. To mitigate this issue, MARAD developed a matrix comparing various contracting mechanisms. The matrix addresses limitations, benefits, eligibility, and feasibility with respect to each site.

Successful Evaluation Measures. The Department evaluates its performance primarily with the percentage of renewable energy used in relation to total electrical power consumption.

Highlights. FHWA entered into contractual obligations with a local electrical supplier to purchase green power blocks of RECs in set monthly levels, which combined with other electricity savings projects, resulting in 66 percent of electrical energy purchased originating from new renewable energy sources.

Integration. The Department has leveraged DOE grant opportunities and assistance to both evaluate and implement several renewable energy projects. Renewable energy is also a key component of the PBC program.

Strategies and Planned Actions. DOT is working to install more on-site renewable energy generation capacity. Multiple OAs have projects in various stages of completion, from preliminary feasibility analysis (four sites), to procurement (four sites), to implementation (seven sites). Where on-site installations are not possible due to technological limitations, mission requirements, or resource constraints, DOT will purchase renewable electricity directly or purchase RECs to achieve Federal renewable energy goals.

Benchmarking for Success: Saint Lawrence Seaway Development Corporation

Benchmarking is a critical component to promoting building energy conservation, efficiency, and management. **SLSDC** maintains membership with the [Green Marine](https://www.green-marine.org/) (<https://www.green-marine.org/>) environmental certification program for North American marine industry entities. **SLSDC** annually receives evaluations and biennial audits pertaining to Green Marine's 12 environmental performance categories. **SLSDC** received an average score of **five out of five** in the Environmental Leadership category.

Goal 4: Water Use Efficiency and Management

Progress. DOT continues to make water conservation and management progress through improved tracking of water data, refining operational water efficiency, and implementing new water technologies. As of January 2016, DOT has improved water use efficiency by 20 percent and is on track to meet the water reduction target of 26 percent by 2020.

Challenges. The Department has implemented water conservation measures, but high-impact technology replacements such as cooling towers require additional funding.

Lessons Learned. DOT found that some

Implementation of New Sustainable Technologies: Federal Railroad Administration

FRA assessed a variety of building efficiency-related functions to replace technologies with more sustainable systems. The replacements included:

- Diesel boilers with propane boilers
- Mercury vapor lights and metal halide lights with LED fixtures
- Pneumatic controls and thermostats with an electronic energy management system; and
- High bay single pane windows with high efficiency, double pane windows

available water conservation measures are not financially feasible in the short-term.

Successful Evaluation Measures. DOT measures its performance through quarterly water efficiency reporting. DOT shares performance data with senior leadership as part of DOT's internal performance management review process. DOT annually compiles data and reports its performance to OMB and the Council on Environmental Quality (CEQ).

Highlights. Replacement of fixtures for custodial (e.g., urinals, faucets, and showers) and landscaping (e.g., rain sensors) purposes has proven successful in improving water efficiency. The Department is exceeding water reduction targets at several sites.

Integration. DOT integrates water management strategies in other sustainability initiatives, including the annual GHG Inventory and the OMB Sustainability Scorecard.

Strategies and Planned Actions. DOT will improve data management and install water-efficient fixtures and irrigation systems for water usage. Where possible, DOT will identify ways to better monitor water usage data.

Goal 5: Fleet Management

Progress. In FY 2015, DOT's fleet achieved a petroleum use reduction of 25.9 percent relative to a FY 2005 baseline. This progress exceeds the Federal goal of 20 percent reduction for FY 2015 by 25 percent. In addition, DOT reduced fleet-wide per mile GHG emissions by 2.1 percent compared to 2014, putting the Department on track for the E.O. 13693 requirement to reduce fleet-wide per mile GHG emissions four percent by 2017. Alternative fuel use increased by 233 percent, exceeding the requirement to increase alternative fuel use 159.4 percent relative to 2005.

Challenges. DOT's efforts to eliminate petroleum use in some vehicles through the acquisition of zero emission vehicles (ZEVs) include lack of availability of ZEVs on the GSA schedule and difficulty identifying geographic locations with supporting EV charging infrastructure.

Lessons Learned. Continuous, careful tracking of low mileage vehicles, alternative fuel use, and fleet fuel consumption is key to reaching the fleet goals.

Successful Evaluation Measures. DOT evaluated monthly organizational trend reports that display missed opportunities for alternative fuel use. This played a key role in supporting DOT's progress against the fleet targets. Specifically, DOT used the National Renewable Energy Laboratory's Fleet Sustainability Dashboard (FleetDASH) to develop reports and improve awareness about missed opportunities. In addition, DOT has used GSA and internal systems to track and analyze fuel use.

Joining the Workplace Charging Challenge

DOT is the first Federal agency to join the DOE Workplace Charging Challenge (WCC). WCC aims to increase the number of U.S. employers offering workplace charging (WPC) for PEV tenfold by 2018.

DOT's goal is to provide 500 electric vehicle supply equipment by 2025.



Image of DOE Workplace Charging Challenge

Highlights. The Department is ahead of schedule in reducing petroleum use for fleet vehicles and increasing alternative fuel use.

Integration. The Department identified the GSA leasing program as an opportunity to replace existing, less efficient vehicles with electric and other zero emitting vehicles. DOT will conduct outreach to ensure DOT OAs are aware of this opportunity as they plan for next year's vehicle leases.

Strategies and Planned Actions. DOT will build on the past year's success by continuing to monitor and measure progress, ensuring the fleet is accurately inventoried, maximizing opportunities for acquiring more fuel efficient vehicles, and identifying opportunities to increase alternative fuel use.

Goal 6: Sustainable Acquisition

Progress. In FY 2015, DOT continued to meet its sustainable acquisition targets. The Department ensured that at least 95 percent of eligible contract actions include clauses for sustainable and/or biobased products and language in the statement of work about sustainable and/or biobased products (based on a quarterly five percent sample of contracts awarded).

Challenges. Training and a coordinated agency-wide effort can be challenging and are necessary to ensure that acquisition staff are aware of updates to sustainable acquisition requirements.

Lessons Learned. Federal Strategic Sourcing Initiatives such as the FAA SAVES Contract and DOT Blanket Purchase Agreements are important approaches to improve sustainable acquisition and DOT will work to expand their use in the coming year.

Successful Evaluation Measures. OAs sample at least five percent of all contracts on a quarterly basis to ensure sustainable acquisition and biobased requirements have been appropriately incorporated.

Highlights. DOT continues to exceed its goals for sustainable acquisition and update its acquisition policy, guidance, and contract clauses to further promote sustainable acquisition requirements.

Integration. DOT increased the use of GSA's Green Procurement Tool to identify the best vehicles for office supplies and developed a sustainable acquisition training course for personnel involved in or responsible for procurement actions. FAA expanded the use of Federal Strategic Sourcing Initiatives such as the SAVES Contract, DOT Blanket Purchase Agreements, and Staples Link.

Strategies and Planned Actions. DOT will raise awareness about sustainable acquisition and biobased

Contracting for Opportunity: Federal Transit Administration

For three leased, regional offices greater than 10,000 GSF, **FTA** updated its leases with language requiring the lessor to disclose all energy consumption and carbon emissions data for the facilities.

FTA also released a Notice of Funding Opportunity soliciting proposals for their Low or No Emission Vehicle Deployment Program, which provides funding to transit agencies for:

- Capital acquisitions and leases of zero emission and low-emission transit buses; and
- Acquisition, construction, and leasing of required supporting facilities (e.g., recharging, refueling, and maintenance).

purchasing requirements through policy and tools such as training, messaging and other distribution channels, and continued use of existing tools such as Federal Strategic Sourcing Initiatives.

Goal 7: Pollution Prevention and Waste Reduction

Progress. The Department has made waste reduction a priority by successfully diverting and reducing waste generated by its operations and increasing recycling of construction and demolition (C&D) materials. In FY2015, the Department diverted nearly 5,000 tons of solid waste and 81 percent of C&D waste from landfills.

Challenges. Obtaining waste diversion data for several local sites where waste collection is comingled with other non-agency entities remains a key challenge. The Department continues to work closely with waste management contractors to ensure accurate information and efficient practices are occurring.

Lessons Learned. DOT acquisitions staff were trained on sustainable measures to ensure pollution prevention and waste reduction-related contracts, such as custodial and janitorial services, include requirements for recycling, green purchasing, and non-hazardous practices where plausible.

Successful Evaluation Measures. DOT measures its performance through quarterly waste diversion and recycling reporting. Performance data is shared with senior leadership as part of the Department’s internal sustainability scorecard and waste report. In addition, data is compiled annually and used to report DOT’s performance to OMB and CEQ.

Highlights. The Department is forming collaborations with stakeholders at multiple levels (employees, managers, and senior leadership) to create communication plans to promote recycling.

Integration. DOT has integrated waste diversion activities with other sustainability programs. For example, DOT has provided landscaping staff with guidance for operations of integrated pest management practices.

Strategies and Planned Actions. DOT will take steps to obtain more accurate data of diverted and non-diverted waste data. DOT will continue to share knowledge with procurement and facilities

Diversion Rates on the Rise: Federal Aviation Administration

A team at the **FAA** Mike Monroney Aeronautical Center located in Oklahoma City, OK led an expansion of the facilities recycling program as well as several waste-related initiatives to achieve **68% diversion** of solid waste. The goal greatly exceeded the EO 13693 target of 50% diversion rate. The Monroney Aeronautical Center team’s efforts also resulted in a **72% diversion** rate for C&D waste, exceeding the respective EO 13693 target of 50% diversion.



Image of FAA Aeronautical Center

The team of five received the 2016 DOT “Leaner, Cleaner, and Greener” Sustainability Achievement Award for their waste pollution and prevention accomplishment.

experts on sustainable products and measures to include in contracting and operations.

Goal 8: Energy Performance Contracts

Progress. DOT uses energy PBCs to aid the adoption of innovative technologies and improve building energy and water efficiency. Since 2011, DOT has awarded six PBCs worth \$29.2 million and is currently pursuing additional contracts.

Challenges. Limited future opportunities exist for PBCs because the Department has already implemented most projects with a low cost and short term payback. In addition, many Federal High Performance Sustainable Building requirements and some renewable energy projects have poor return on investment values, and PBC usually do not offer them.

Integration. PBCs are one of the primary financing mechanisms used by DOT to achieve green buildings. These contract vehicles are recommended for use by DOT internal policy orders.

Lessons Learned. DOT has found that bundling multiple locations under one PBC creates additional risks and can be unwieldy because of the potential for significant, hidden administrative costs that may extend the payback period. It also takes longer than anticipated to identify, review, evaluate, and award contracts, increasing administrative costs borne by DOT.

Successful Evaluation Measures. DOT measures its performance by evaluating the effectiveness of PBCs for achieving energy and water savings.

Highlights. The Department has added several new projects in the pipeline, which includes one ENABLE project, and early assessments have identified potential on-site renewable projects at several sites.

Strategies and Planned Actions

DOT will fulfill existing agency commitments towards the \$40 million goal by the end of 2016 and prioritize projects with the greatest energy savings potential. Additionally, DOT has identified four new projects that will help the Department meet sustainability requirements. Going forward, DOT has targeted \$10 million in PBCs for 2017 and \$12 million for 2018. DOT is also working on opportunities for PBCs that offer the potential for on-site renewable energy and for projects that could utilize ENABLE contracts.

Goal 9: Electronics Stewardship and Data Centers

Progress. DOT met the electronic stewardship goals in FY 2015. DOT continued to implement virtual desktop infrastructure to support the use of telework as well as virtual meeting software to enhance productivity. As in previous years,

Behavioral Change for Sustainable Thinking: Office of the Secretary of Transportation

OST's John A. Volpe National Transportation Systems Center (Volpe Center) Office of Facilities Management, Communication and Knowledge Management, and the internal Green Team joined forces to develop the strategic initiative "Sustainable Volpe."

The mission of Sustainable Volpe is to communicate the nine DOT Sustainability Policy Orders to all staff and tenants through internal published editorials and center-wide seminars to gain support and promote sustainable behavioral change by staff for the Orders' implementation.

DOT continued to purchase only EPEAT and Energy Star desktop and laptop equipment.

Challenges. Capturing data for non-computer equipment procurement (such as printers and televisions) is challenging due to the decentralized nature of this type of purchasing. Integrating multiple data centers into fewer centers has created logistical challenges in some cases.

Lessons Learned. Energy performance improved when power management settings for equipment such as printers and copiers were automatically installed on machines.

Successful Evaluation Measures. DOT evaluates its progress by tracking the percentage of electronics purchased (e.g., purchases that are EPEAT or ENERGY STAR® products) and recycled according to Federal requirements.

Highlights. DOT continues to make progress on consolidating or moving data centers to the cloud.

Integration. DOT follows Federal guidance by the EPA and DOE (such as utilizing EPEAT and ENERGY STAR® products), and coordinates with other agencies to collaborate on challenges and share best practices.

Strategies and Planned Actions. DOT anticipates additional gains in electronic stewardship by (1) ensuring power management techniques are applied to all new electronic equipment, and (2) continuing efforts to consolidate or move data centers to the cloud (i.e. using FedRAMP). DOT will also continue to strive for 100 percent ENERGY STAR®/EPEAT-certified electronics purchases and ensure recyclers are R2 or eSteward-certified.

Goal 10: Climate Change Resilience

Progress. DOT proactively integrated climate change resilience into its planning and operations, helping to strengthen its ability to support the nation's transportation system. The Department used projections from the National Climate Assessment to develop an operational climate resiliency plan. This plan addresses internal actions that the Department is taking to improve resiliency for its own assets, which includes personnel, buildings, data systems, ships, and vehicles. The Department also continued to support the climate resilience of partners, funding recipients, and stakeholders. For example, the Department provides grants and research funding through the FHWA, FTA, and other OAs to assist with climate resiliency planning.

Challenges. A common concern among operational personnel is lack of information for identifying actions to improve operational climate change resiliency. In addition, concerns about shifting climate change predictions may undermine attempts to put plans in place. DOT staff continue to look for clear, feasible actions they can take to ensure progress. Another concern as the Administration changes, priorities may change, thus resulting in inconsistent funding. Further, because of the differing views on climate change as a concept, personnel are finding site support to conduct climate resiliency practices a challenge.

Lessons Learned. Climate effects could make it difficult for mission-critical personnel to accomplish their work, which could have broad consequences for the DOT mission and programs. Maintaining continuity of operations is critical given the essential functions performed by the OAs.

Successful Evaluation Measures. DOT has initiated a comprehensive audit of major, mission-critical internal assets vulnerable to climate change, and their associated vulnerabilities. This will allow DOT to identify key gaps on a departmental level and track progress toward addressing them.

Highlights. DOT OAs synthesized key findings from studies and grant projects, such as the FHWA Gulf Coast Study Phase 2 and FTA transit agency adaptation pilot projects. DOT also initiated new studies and projects, such as a pilot study in Hampton Roads, Virginia.

Integration. OAs have started to incorporate climate risks into their overall emergency and continuity of operations planning.

Strategies and Planned Actions. DOT will continue to identify climate-related vulnerabilities for major mission-critical agency-owned assets. In 2016, the Department will identify all remaining facilities of interest and begin analyzing ways to determine their projected climate vulnerabilities.

Progress on Administration Priorities

DOT continues to incorporate requirements into its operations related to specific Administration priorities, including the President's Performance Contracting Challenge (PPCC), EVs and ZEVs, and climate preparedness and resilience.

President's Performance Contracting Challenge. DOT is committed to fulfilling existing agency

Highlight: Presidential GreenGov Awards

At the 2015 Presidential GreenGov Awards, FHWA received the "Good Neighbor" award. Scott Allen and Corbin Davis formed collaborations with local universities, the Memphis MPO, Tennessee DOT, NGOs, and other Federal agencies to facilitate the creation of new statewide programs that improve transportation services in the communities. Achievements included investments for infrastructure facilities, improved multimodal transportation, weather vulnerability assessments, and planning for sustainable transportation.



Image of award winners, from left to right: Tony Furst, Pam Kordenbrock, Christy Goldfuss, Corbin Davis, Scott Allen, and Jeff Marootian.

commitments towards its \$40 million goal by the end of the PPCC in December 2016. To date, DOT has awarded over \$29 million in PBCs. In the last year, the Department has added several new projects in the pipeline, including one ENABLE project. Going forward, DOT will prioritize projects with the greatest energy savings potential, but many low-cost, low level-of-effort projects with a short term payback have been already been implemented. For the second phase of the President's Challenge, all corresponding DOT projects have completed the investment grade audit phase of the performance contracting process. Additional on-site renewal energy projects are in the preliminary assessment phase.

Electric and zero emission vehicles. The Department is committed to making progress on the replacement of conventional vehicles with electric and ZEVs. During the annual replacement cycle, DOT will identify the current fleet that can be replaced with ZEVs. In FY 2017 DOT plans to replace 12 percent of its total passenger vehicle fleet with ZEVs and plug-in hybrid electric vehicles (PHEVs) through the GSA leasing program. In addition, DOT will identify potential locations where it can successfully integrate ZEV/PHEV vehicles into the fleet inventory to support the Department's mission and consider these vehicles during the FY 2017 GSA Leased Vehicle Replacement Season. DOT plans to replace more internal combustion engine powered vehicles with electric and ZEVs in 2018 and 2019: DOT will reassess its ZEV/PHEV replacement strategy each year, through FY 2020. Additionally, the Department is exploring employee EV WPC opportunities in its buildings. DOT was the first Federal agency to join DOE's Workplace Charging Challenge (WCC). WCC aims to increase the number of U.S. employers offering WPC for (PEV) tenfold by 2018.

Climate Resiliency. DOT has made key strides in assessing and responding to climate change impacts, which is critical to support the national transportation system. For example, DOT prepared its first operational climate resiliency plan. As part of the operational climate resiliency plan, DOT has assessed the vulnerabilities of many agency-owned assets and has developed a plan and timeline for inventorying and assessing the remaining major, mission-critical assets and vulnerabilities. In addition, OAs are taking measures to ensure the resiliency of new agency-owned facilities in the planning stage. This includes the incorporation of materials, designs, and processes demonstrated to improve resiliency, such as flood-resistant facilities and new roofing systems. OAs are also working to ensure that design and construction contracts include language stipulating that contractors will incorporate climate-resilient components.

The operational climate resiliency plan addresses internal actions that the Department is taking to improve resiliency for its own assets which includes personnel, buildings, data systems, ships, and vehicles. This complements the DOT adaptation plan, most recently updated in 2014 (available at: <https://www.transportation.gov/mission/sustainability/2014-dot-climate-adaptation-plan>), which addresses DOT's broader strategic efforts to further climate adaptation in the Nation's transportation system. See DOT's Operational Climate Resiliency Plan (Appendix C) for more information.

Size & Scope of Agency Operations

Agency Size and Scope	FY 2014	FY 2015
Total Number of Employees as Reported in the President's Budget	54,132	54,324
Total Acres of Land Managed	152,256	155,565
Total Number of Buildings Owned	10,188	9,831
Total Number of Buildings Leased (GSA and Non-GSA Lease)	1,399	1,366
Total Building Gross Square Feet (GSF)	32,570,700	32,241,745
Operates in Number of Locations Throughout U.S.	51	51
Operates in Number of Locations Outside of U.S.	9	10
Total Number of Fleet Vehicles Owned	405	333
Total Number of Fleet Vehicles Leased	5,725	5,714
Total Number of Exempted-Fleet Vehicles (Tactical, Law Enforcement, Emergency, Etc.)	125	117
Total Amount Contracts Awarded as Reported in FPDS (\$Millions)	\$6,191	\$6,108

Agency Progress and Strategies to Meet Federal Sustainability Goals

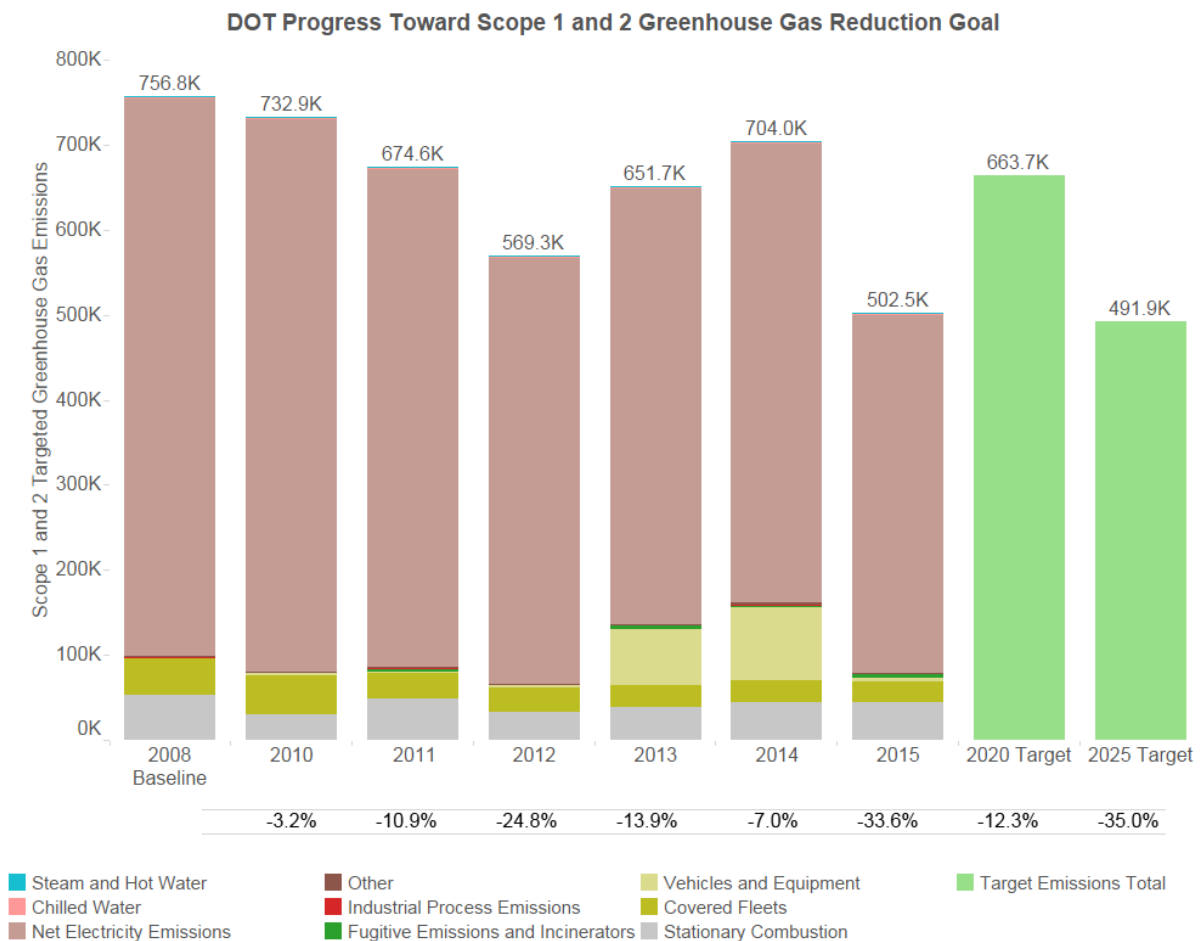
This section provides an overview of progress through FY 2015 on sustainability goals contained in E.O. 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*, and agency strategies to meet the new and updated goals established by E.O. 13693, *Planning for Federal Sustainability in the Next Decade*.

Goal 1: GHG Reduction

Scope 1 & 2 GHG Reduction Goal

E.O. 13693 requires each agency to establish a Scope 1 & 2 GHG emissions reduction target to be achieved by FY 2025 compared to a 2008 baseline. DOT's 2025 Scope 1 & 2 GHG reduction target is 35 percent.

Chart: Progress Toward Scope 1 & 2 GHG Reduction Goal



DOT significantly reduced Scope 1 & 2 GHG emissions, exceeding the 2020 reductions target by over 20 percent and making great progress towards the 2025 reduction target. DOT will continue to focus on multi-pronged strategies to maintain these reductions, while meeting mission-critical energy use requirements.

Scope 1 & 2 GHG Reduction Strategies

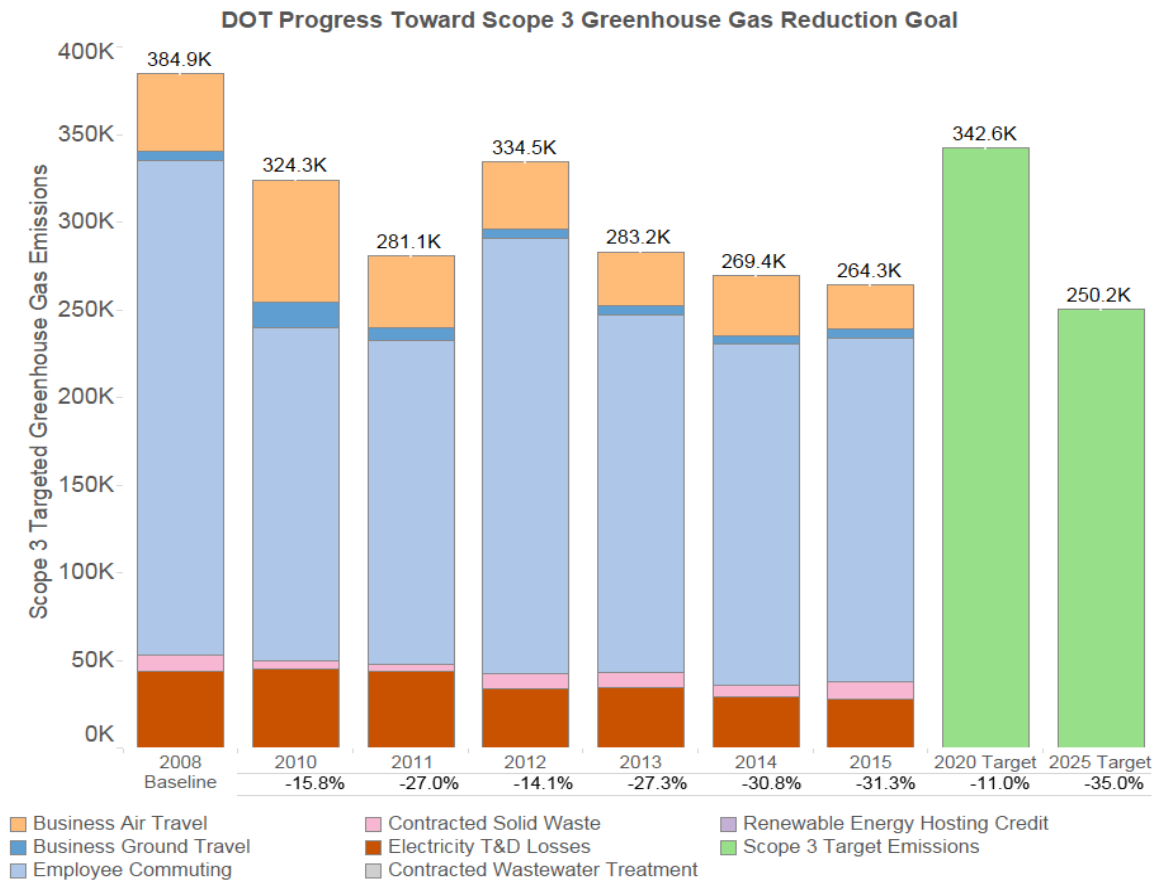
Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Use the Federal Energy Management Program (FEMP) GHG emission report to identify/target high emission categories and implement specific actions to address high emission areas identified.	Yes	DOT will continue to inventory and report GHG emissions to understand and manage DOT's carbon footprint.	Review GHG emission report, identify any high emission categories, and provide an annual summary by Q3 of each year to each OA to develop corrective action plans.
Identify and support management practices or training programs that encourage employee engagement in addressing GHG reduction.	Yes	DOT will continue to announce trainings and offer guidance through its monthly sustainability meetings and highlight training opportunities on the Office of Sustainability and Safety Management (OSSM) webpage.	Provide monthly updates of FEMP and other training opportunities to OAs, and encourage employees involved with monitoring/managing GHG emissions to complete at least two online trainings per year and to attend DOE Energy Exchange and GreenGov events when feasible.
Determine unsuccessful programs or measures to be discontinued to better allocate agency resources.	Yes	DOT will continue to review programs to ensure it is allocating resources efficiently.	Review programs and measures annually to ensure DOT efficiently allocates resources and discontinues unsuccessful programs.
Given agency performance to date, determine whether current agency GHG target should be revised to a more aggressive/ambitious target.	No	DOT carefully evaluated current targets, and no further change is required; this is not a priority strategy at this time.	
Employ operations and management (O&M) best practices for emission generating and energy consuming equipment.	Yes	DOT will continue efforts to ensure equipment is optimally maintained and select energy efficient replacement equipment where feasible and cost effective.	Distribute annual summaries of O&M best practices for equipment maintenance to facility managers and ensure that purchased replacement equipment meets the highest applicable energy-efficiency rating when feasible and cost effective.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Identify additional sources of data or analysis with the potential to support GHG reduction goals.	Yes	DOT will complete energy audits and use data to assess opportunities to reduce on-site fossil fuel consumption and develop energy conservation projects.	Strive to complete ten or more energy audits and continue to improve on utility data collection and reporting in ESPM.

Scope 3 GHG Reduction Goal

E.O. 13693 requires each agency to establish a Scope 3 GHG emission reduction target to be achieved by FY 2025 compared to a 2008 baseline. DOT's 2025 Scope 3 GHG reduction target is 35 percent.

Chart: Progress Toward Scope 3 GHG Reduction Goal



The Department continues to encourage the use of telework and AWS opportunities, along with technology solutions to support telework and virtual meetings to reduce Scope 3 GHG emissions. Employee commuting remains the largest contribution to the Department’s Scope 3 GHG emissions. Reducing this component by continuing to support AWS and teleworking, along with promoting alternative commute options, will remain a primary focus of DOT’s sustainability efforts.

Scope 3 GHG Reduction Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Reduce employee business ground travel.	No	DOT has incorporated this strategy into its efforts to reduce employee business air travel.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Reduce employee business air travel.	Yes	DOT will implement practices to support a reduction in business travel (ground and air) including maintaining travel budget restrictions, installing technologies to facilitate remote meetings, and adding language to travel request forms to ensure that alternatives to travel are considered.	Continue to track travel related emissions and additional metrics annually, to ensure DOT meets its 2025 Scope 3 reduction goal.
Develop and deploy an employee commuter emissions reduction plan.	Yes	DOT's plan will support a telework program, encourage AWS, and seek to expand support for bike-share programs, transit benefits, and bicycle commuter benefits.	Deploy a preliminary employee commuter emissions reduction plan in FY 2017. Evaluate success by continuing to track commuting days avoided and use of AWS via the Department's time and attendance system. Increased use of commuter benefits annually are tracked in TRANServe.
Use an employee commuting survey to identify opportunities and strategies for reducing commuter emissions.	No	DOT will continue to complete a commuter survey every-other year; however, this is not a priority strategy at this time.	
Track the number of employees eligible for telework and/or the total number of days teleworked.	No	Addressed as part of DOT's employee commuter emissions reductions plan strategy above.	

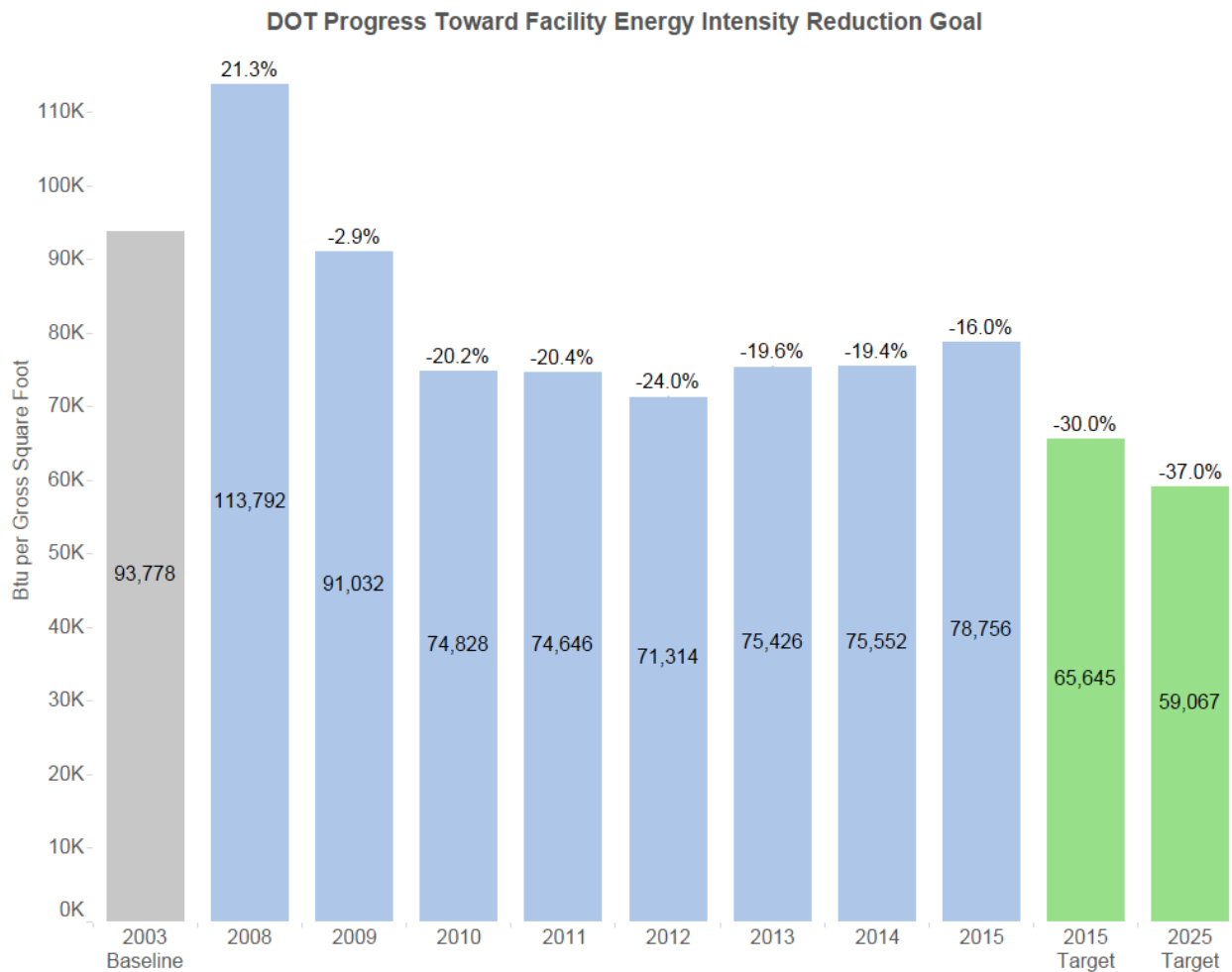
Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Develop and implement a program to support alternative/zero emissions commuting methods and provide necessary infrastructure.	Yes	DOT is promoting Federal employee participation in the Capital Bikeshare Program (via OST), and the Active Bicycle Commuting Subsidy (ABC), and will evaluate opportunities to expand these efforts.	Distribute periodic communications to promote bicycle commuting benefits, and increase bike infrastructure at DOT offices nationwide.
Establish policies and programs to facilitate workplace charging for employee electric vehicles.	Yes	DOT is promoting involvement in pilot programs to develop WPC sites and will develop guidance.	As guidance becomes clear, increase charging capabilities across DOT offices nationwide in FY 2017.
Include requirements for building lessor disclosure of carbon emission or energy consumption data and report Scope 3 GHG emissions for leases over 10,000 rentable square feet.	Yes	DOT will work with GSA and private lessors to track and report Scope 3 GHG emissions energy consumption for leases over 10,000 rentable square feet.	Provide GHG and energy consumption data for the annual GHG and Sustainability Data Report for leases over 10,000 rentable square feet.

Goal 2: Sustainable Buildings

Building Energy Conservation Goal

The Energy Independence and Security Act of 2007 requires each agency to reduce energy intensity 30 percent by FY 2015 as compared to a FY 2003 baseline. Section 3(a) of E.O. 13693 requires agencies to promote building energy conservation, efficiency, and management and reduce building energy intensity by 2.5 percent annually through the end of FY 2025, relative to a FY 2015 baseline and taking into account agency progress to date, except where revised pursuant to Section 9(f) of E.O. 13693.

Chart: Progress Toward Facility Energy Intensity Reduction Goal



The Department has continued to pursue PBCs as a strategy to improve efficiency and reduce energy intensity. While some OAs have successfully reduced energy intensity, most OAs continue to face challenges with achieving the energy intensity goals. The majority of DOT's buildings contain mission critical equipment, such as supporting the national airspace system, that have high energy demands and operate 24 hours a day. Reducing electricity consumption by continuing to implement sub-metering systems, replacing aging and deteriorating equipment and infrastructure with energy efficient

alternatives, and awarding additional PBCs are the Department's priorities to support E.O. 13693 energy intensity reduction goals.

Building Energy Conservation Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Make energy efficiency investments in agency buildings.	Yes	DOT will continue to implement energy and water efficiency upgrades as part of PBCs, continue implementation of previously awarded contracts, and evaluate opportunities to solicit new projects.	Evaluate and implement energy conservation measures, where life-cycle cost-effective and feasible in at least six facilities in FY 2016 and FY 2017. Complete assessments of opportunities for Utility Energy Savings Contract (UESC) agreements at two to three locations.
Use remote building energy performance assessment auditing technology	No	DOT is exploring using remote building energy performance auditing technology; however, this is not a priority strategy at this time.	
Participate in demand management programs.	No	DOT is exploring demand management programs; however, this is not a priority strategy at this time.	
Incorporate Green Button data access system into reporting, data analytics, and automation processes.	No	DOT is exploring options to use Green Button data; however, this is not a priority strategy at this time.	
Redesign interior space to reduce energy use through daylighting, space optimization, and sensors and control systems.	No	DOT is exploring options to reduce energy use through daylighting, space optimization, sensors, and control systems; however, this is not a priority strategy at this time.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Identify opportunities to transition test-bed technologies to achieve energy reduction goals.	No	DOT is exploring opportunities to transition test-bed technologies; however, this is not a priority strategy at this time.	
Follow city energy performance benchmarking and reporting requirements.	No	DOT is exploring opportunities to adopt state programs; however, this is not a priority strategy at this time.	
Install and monitor energy meters and sub-meters.	Yes	DOT will continue efforts to install building level utility meters across owned facilities.	Update advanced meters in approximately 40 buildings and install new advanced meters in six additional buildings in FY 2016. Include advanced meters in all new construction and major renovations in accordance with the established advanced electric metering specifications in FY 2016 and FY 2017.
Collect and utilize building and facility energy use data to improve building energy management and performance.	Yes	DOT plans to utilize the Energy Management System established for owned facilities as the framework to execute, monitor, and track sustainability program efforts.	In FY 2016, complete the pilot development of a systematic metering analysis database in order to capture and manage information for daily operational controls. Utilize DOT's quarterly internal scorecard report to measure progress and monitor the effectiveness of initiatives to improve energy performance.
Ensure that monthly performance data is entered into the EPA ENERGY STAR Portfolio Manager.	Yes	DOT will continue to regularly input applicable field office data (for building GSF >5,000) into ESPM to track monthly performance.	Where available, enter monthly utility data into ESPM for all metered buildings on a quarterly basis.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Reduce on-site fossil-fuel and grid-supplied electricity consumption by installing more efficient boilers, generators, furnaces, etc. and/or use renewable fuels.	Yes	Continue efforts to select energy efficient equipment where feasible and cost effective and award PBCs to reduce grid-supplied electricity consumption.	Award two to three PBCs in FY 2017 that include energy conservation measures to reduce grid-supplied electricity consumption.

Building Efficiency, Performance, and Management Goal

Section 3(h) of E.O. 13693 states that agencies will improve building efficiency, performance, and management and requires that agencies identify a percentage of the agency's existing buildings above 5,000 gross square feet intended to be energy, waste, or water net-zero buildings by FY 2025 and implementing actions that will allow those buildings to meet that target.

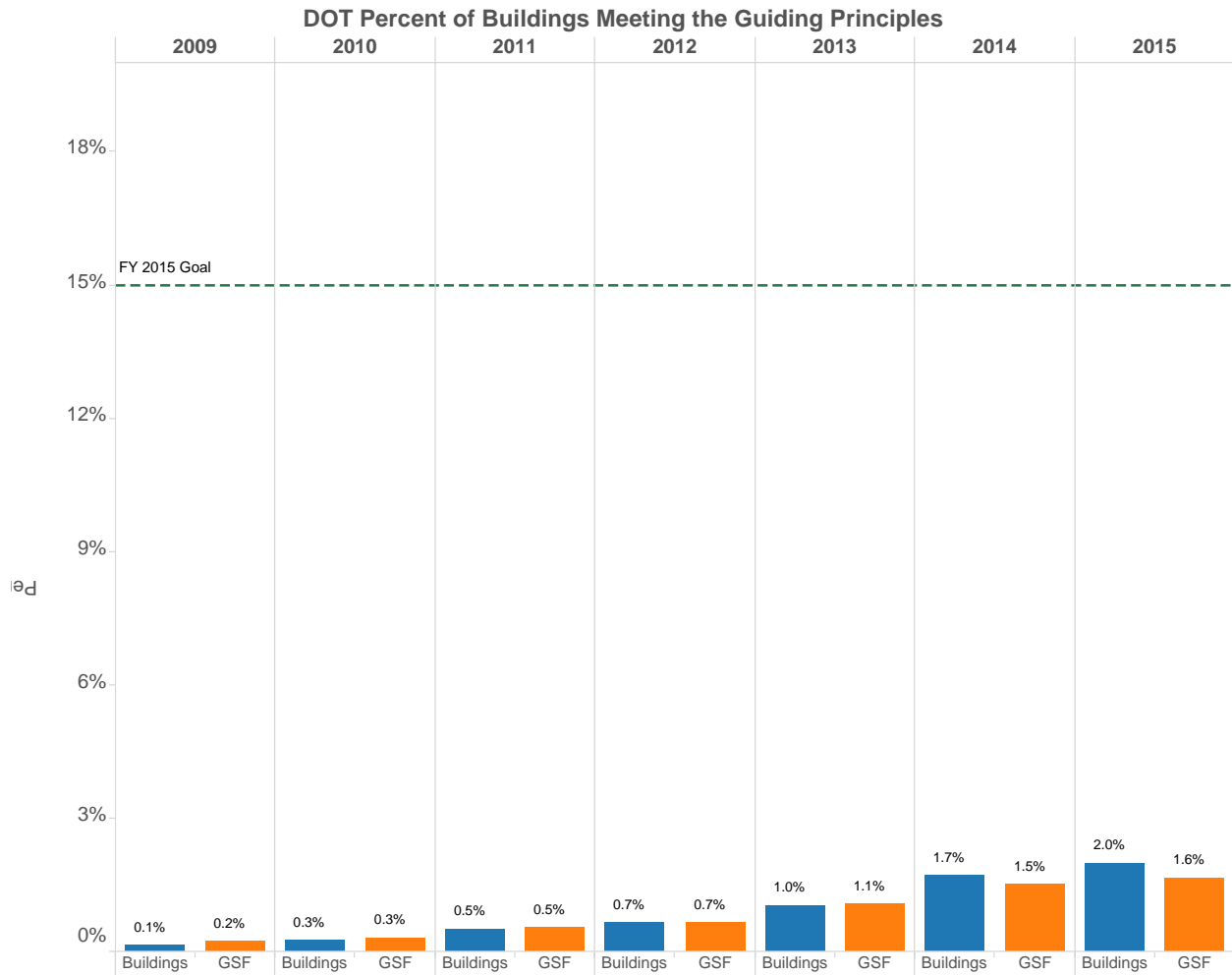
DOT's 2025 target is 5 percent of the Department's owned buildings over 5,000 GSF.

Guiding Principles for Sustainable Federal Buildings

Section 3(h) of E.O. 13693 also states that agencies will identify a percentage, by number or total GSF, of existing buildings above 5,000 GSF that will comply with the *Guiding Principles Federal Guiding Principles* by FY 2025.

DOT's FY 2025 target is 15 percent of the Department's owned buildings over 5,000 GSF.

Chart: Percent of Buildings Meeting the *Guiding Principles*



Although OAs have strived to meet the *Guiding Principles* requirements, DOT has had limited Department-wide success in fully accomplishing the requirements for most of its owned buildings. The updated *Guiding Principles* offer more flexibility for older buildings and may present an opportunity for DOT to more successfully reach the target of compliance in at least 15 percent of existing buildings by 2025. However, the new guidelines were only recently released so further assessment is needed.

Sustainable Buildings Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Include climate resilient design and management into the operation, repair, and renovation of existing agency buildings and the design of new buildings.	Yes	DOT will continue efforts to identify vulnerabilities to major mission critical infrastructure and assets, and to use this information to incorporate climate resilient design into the repair and renovation of Department buildings.	Distribute results of completed infrastructure assessments for DOT facilities in FY 2016.
In planning new facilities or leases, include cost-effective strategies to optimize sustainable space utilization and consideration of existing community transportation planning and infrastructure, including access to public transit.	No	DOT continues to address sustainable space utilization and access to public transit when planning new facilities or leases; however, this is not a priority strategy at this time.	
Ensure all new construction of Federal buildings greater than 5,000 GSF that enters the planning process be designed to achieve energy net-zero and, where feasible, water or waste net-zero by FY 2030.	No	DOT will take the first steps to incorporate these requirements into its policies; however, this is not a priority strategy at this time.	
Include criteria for energy efficiency as a performance specification or source selection evaluation factor in all new agency lease solicitations over 10,000 rentable square feet.	No	DOT is incorporating these requirements into its policies; however, this is not a priority strategy at this time.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Incorporate green building specifications into all new construction, modernization, and major renovation projects.	Yes	DOT will continue to evaluate and implement, where lifecycle cost-effective, green building measures as part of building design reviews for major renovations and new buildings.	(1) Review all new construction and major renovation projects initiated in FY 2017 for opportunities to include green building specifications. (2) FAA will complete design reviews of two new control towers and modernizations for green building specifications and revise required training to include the new <i>Guiding Principles</i> by May 2017.
Implement space utilization and optimization practices and policies.	No	DOT is exploring options to implement space optimization; however this is not a priority strategy at this time.	
Implement programs on occupant health and well-being in accordance with the <i>Guiding Principles</i> .	No	DOT is exploring additional opportunities to implement programs on occupant health and well-being; however, this is not a priority strategy at this time.	
Include in every construction contract all applicable sustainable acquisition requirements for recycled, biobased, energy efficient, and environmentally preferable products	Yes	DOT has implemented contract language that requires the contractor to use biobased energy efficient and environmentally preferable products.	DOT will continue to include language in 100 percent of applicable contracts.
Develop and deploy energy and sustainability training for all facility and energy managers	Yes	DOT plans to expand programs where facility operations managers' Individual Development Plans identify industry training that supports sustainability initiatives.	Review option to include sustainability training as an element in facility and energy manager's performance plans. Send quarterly summaries of relevant training opportunities, to regional offices and facilities.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Utilize performance based contracts to achieve green buildings	Yes	DOT will complete preliminary energy analyses and evaluate the results for opportunities to implement projects that incorporate measures to meet green building criteria.	Assess opportunities for initiating additional Energy Savings Performance Contract (ESPC), ESPC ENABLE, or UESC efforts, ensuring green building criteria are evaluated in project scope at several sites.

Goal 3: Clean & Renewable Energy

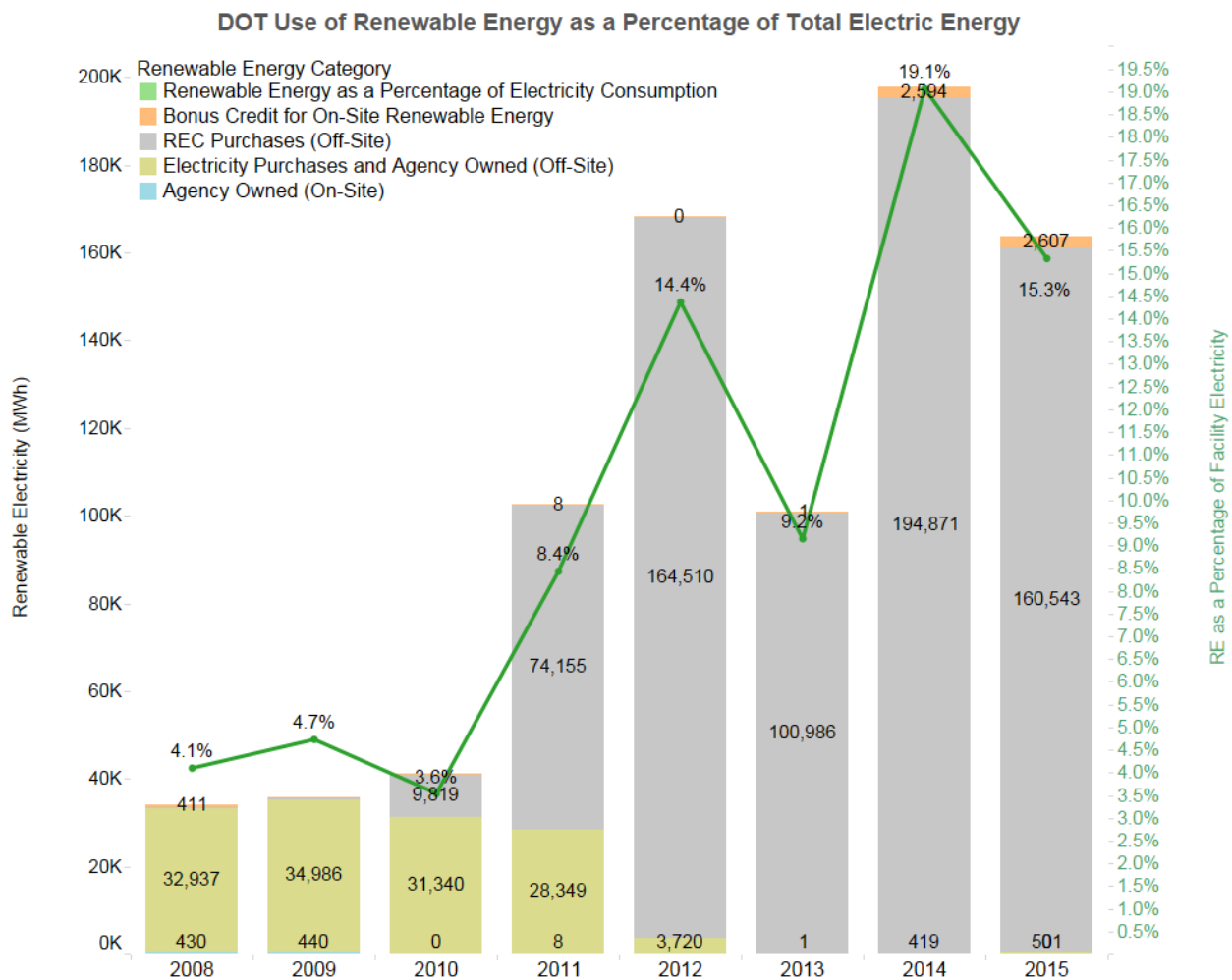
Clean Energy Goal

E.O. 13693 Section 3(b) requires that, at a minimum, the percentage of an agency's total electric and thermal energy accounted for by renewable and alternative energy shall be not less than: 10 percent in FY 2016-17; 13 percent in FY 2018-19; 16 percent in FY 2020-21; 20 percent in FY 2022-23; and 25 percent by FY 2025.

Renewable Electric Energy Goal

E.O. 13693 Section 3(c) requires that renewable energy account for not less than 10 percent of total electric energy consumed by an agency in FY 2016-17; 15 percent in FY 2018-19; 20 percent in FY 2020-21; 25 percent in FY 2022-23; and 30 percent by 2025.

Chart: Use of Renewable Energy as a Percentage of Total Electric Energy



DOT strives to obtain a high percentage of electric and thermal energy from clean and renewable energy, and recent performance exceeds the near term targets in E.O. 13693. The Department continues to include more on-site renewable energy generation where feasible and cost effective. Multiple OAs have on-site renewable energy projects in various stages of completion, from preliminary feasibility analysis (four sites), to procurement (four sites), to implementation (seven sites).

Clean and Renewable Energy Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Install agency-funded renewable on-site and retain corresponding renewable energy certificates.	Yes	DOT will continue to prioritize on-site renewable energy generation where feasible and cost effective.	Begin implementation of photovoltaic installations at seven sites and develop a request for proposals for renewable energy at four other sites in FY 2017.
Contract for the purchase of energy that includes installation of renewable energy on or off-site and retain RECs or obtain replacement RECs.	No	DOT is pursuing on-site renewable energy programs; however, this is not a priority strategy at this time.	
Purchase electricity and corresponding RECs or obtain equal value replacement RECs.	No	DOT will continue to prioritize direct purchase of renewable energy in combination with RECs where on-site renewable energy generation is not feasible; however, this is not a priority strategy at this time.	
Purchase RECs to supplement installations and purchases of renewable energy, when needed to achieve renewable goals.	Yes	DOT will continue to prioritize the direct purchase of renewable energy in combination with RECs where on-site renewable energy generation is not feasible.	Utilize a combination of direct renewable electricity purchases and REC purchases to ensure that at least 10 percent of total electricity consumed by DOT annually comes from renewable sources.
Install on-site thermal renewable energy and retain corresponding renewable attributes or obtain equal value replacement RECs.	No	DOT is pursuing on-site thermal renewable energy at several sites; however, this is not a priority strategy at this time.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Install on-site combined heat and power processes.	No	DOT is evaluating the feasibility of on-site combined heat and power processes at several sites; however, this is not a priority strategy at this time.	
Identify opportunities to install on-site fuel cell energy systems.	No	DOT is exploring opportunities to install on-site fuel cell energy systems; however, this is not a priority strategy at this time.	
Identify opportunities to utilize energy that includes the active capture and storage of carbon dioxide emissions associated with energy generation.	No	DOT is exploring opportunities to utilize energy that includes carbon capture; however, this is not a priority strategy at this time.	
Identify and analyze opportunities to install or contract for energy installed on current or formerly contaminated lands, landfills, and mine sites.	No	DOT is exploring opportunities to utilize formerly contaminated lands for energy generation; however, this is not a priority strategy at this time.	
Identify opportunities to utilize energy from small modular nuclear reactor technologies.	No	Utilizing small modular nuclear reactor technologies is not a priority strategy for DOT at this time.	
Utilize performance contracting methodologies for implementing ECMs and increasing renewable energy	Yes	DOT will continue efforts to award PBCs in support of E.O. 13693 requirements, including renewable energy requirements.	Award up to four ESPCs, issue one RFP for a Power Purchase Agreement (PPA), and assess opportunities for starting additional ESPC, ESPC ENABLE, PPA, or UESC efforts by FY 2017.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Implement strategies to meet more aggressive renewable energy goals at sub-organizational levels.	Yes	DOT will continue site assessments to identify opportunities for renewable energy generation and initiate projects where feasible and cost-effective.	Initiate contracting process for at least one DOT site where preliminary assessments indicate a significant portion of energy demand may be met using renewable energy generation.
Make more economical renewable energy purchases through partnerships.	Yes	DOT will work with other agencies to create volume discount incentives for increased renewable energy purchases.	Reach out to GSA, U.S. Department of Defense, and potentially other agencies to explore this opportunity.

Goal 4: Water Use Efficiency & Management

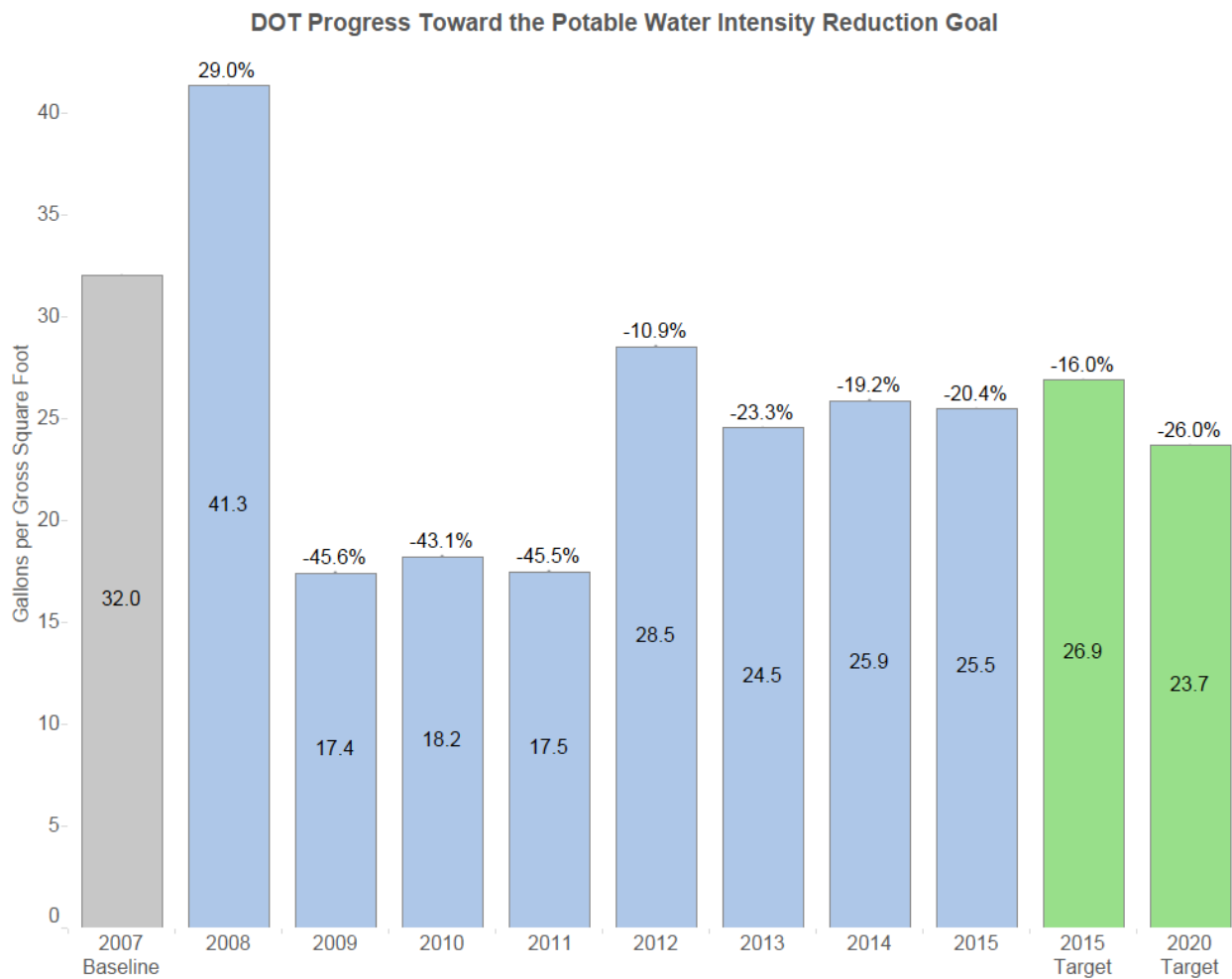
Potable Water Consumption Intensity Goal

E.O. 13693 Section 3(f) states that agencies must improve water use efficiency and management, including stormwater management, and requires agencies to reduce potable water consumption intensity, measured in gallons per square foot, by two percent annually through FY 2025 relative to a FY 2007 baseline. A 36 percent reduction is required by FY 2025.

Industrial, Landscaping and Agricultural (ILA) Water Goal

E.O. 13693 section 3(f) also requires that agencies reduce industrial, landscaping and agricultural (ILA) water consumption, measured in gallons, by two percent annually through FY 2025 relative to a FY 2010 baseline.

Chart: Progress Toward the Potable Water Intensity Reduction Goal



DOT continues to make water use efficiency and management progress toward reaching the E.O. 13693 reduction target. In FY 2015, DOT achieved a 20.4 percent reduction compared to the 2007 baseline. Water management improved from better data and conservation measures that were incorporated at site locations throughout the Department. One of these measures included water meter implementation, which was a top priority last year; the information from metering systems will assist OAs in determining points where efficiency can progress toward meeting the E.O. reduction target.

Water Use Efficiency & Management Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Install green infrastructure features to assist with storm and wastewater management.	Yes	DOT will evaluate storm and wastewater management options to determine the feasibility of implementing relevant infrastructure.	Evaluate feasibility and cost effectiveness of incorporating green infrastructure features into paving and other landscaping and exterior buildings projects initiated in FY 2016 and FY 2017.
Install and monitor water meters and utilize data to advance water conservation and management.	Yes	DOT will ensure design specifications for new construction and major renovations including installation of water meters and related monitoring systems.	As appropriate, install water meters in all new construction and major renovation projects.
Install high efficiency technologies, e.g. WaterSense fixtures.	Yes	Assess opportunities to install water efficient technologies at DOT facilities, including low-flow equipment, aerators, and new technologies on cooling towers.	At least five OAs will replace existing technologies, such as toilets and sink aerators, with low flow, high-efficiency technologies.
Prepare and implement a water asset management plan to maintain desired level of service at lowest life cycle cost.	No	DOT will take the first steps towards preparing an asset management plan; however, this is not a priority strategy at this time.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Minimize outdoor water use and use alternative water sources as much as possible.	Yes	DOT will continue to use timed irrigation systems, evaluate rainwater harvesting and stormwater management options, and educate employees on strategies for conserving potable water.	Complete analyses of water reuse options and replace two to four outdated irrigation systems with high efficiency systems with integrated controls. Reevaluate new vegetation and landscaping projects to incorporate drought tolerant and low-water-need plants where feasible.
Design and deploy water closed-loop, capture, recharge, and/or reclamation systems.	No	One OA has implemented a closed closed-loop water system; however, this is not a priority strategy at this time.	
Install advanced meters to measure and monitor potable and ILA water use.	No	DOT will continue to install advanced water meters; however, this is not a priority strategy at this time.	
Develop and implement programs to educate employees about methods to minimize water use.	No	DOT will continue efforts to educate employees about methods to minimize water use; however, this is not a priority strategy at this time.	
Assess the interconnections and dependencies of energy and water on agency operations, particularly climate change's effects on water which may impact energy use.	No	DOT is exploring interconnections and dependencies of energy and water; however, this is not a priority strategy at this time.	
Consistent with State law, maximize use of grey-water and water reuse systems that reduce potable and ILA water consumption.	No	DOT will take the first steps to incorporate grey-water and water reuse systems; however, this is not a priority strategy at this time.	

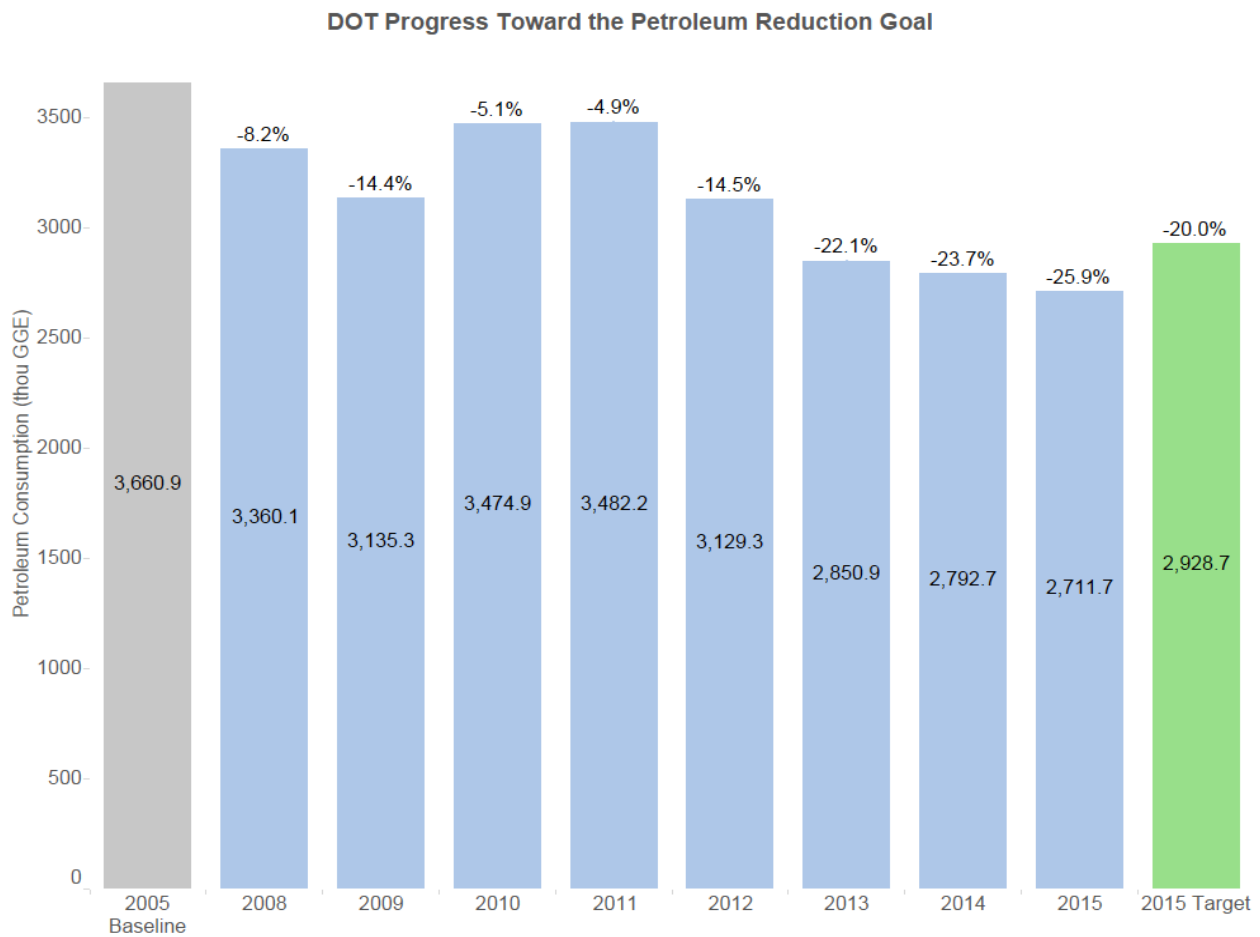
Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Consistent with State law, identify opportunities for aquifer storage and recovery to ensure consistent water supply availability.	No	DOT will evaluate opportunities for aquifer storage; however, this is not a priority strategy at this time.	
Ensure that planned energy efficiency improvements consider associated opportunities for water conservation.	Yes	As part of ongoing EISA 432 covered facility evaluations, DOT will integrate water conservation measures into energy projects where cost effective.	Complete additional energy and water audits and document water conservation measures evaluated in the Compliance Tracking System annually to meet audit requirements.
Where appropriate, identify and implement regional and local drought management and preparedness strategies that reduce agency water consumption	No	DOT will explore drought management strategies; however, this is not a priority strategy at this time.	
Develop and deploy operational controls for leak detection including a distribution system audit, leak detection, and repair programs	No	DOT is taking the first steps to implement operational controls for leak detection; however, this is not a priority strategy at this time.	

Goal 5: Fleet Management

Fleet Petroleum Use Reduction Goal

E.O. 13514 and the EISA required that by FY 2015 agencies reduce fleet petroleum use by 20 percent compared to a FY 2005 baseline.

Chart: Progress Toward the Petroleum Reduction Goal



Fleet Alternative Fuel Consumption Goal

Agencies should have exceeded an alternative fuel use that is at least five percent of total fuel use. In addition, E.O. 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, required that agencies increase total alternative fuel consumption by 10 percent annually from the prior year starting in FY 2005. By FY 2015, agencies must have increased alternative fuel use by 159.4 percent, relative to FY 2005.

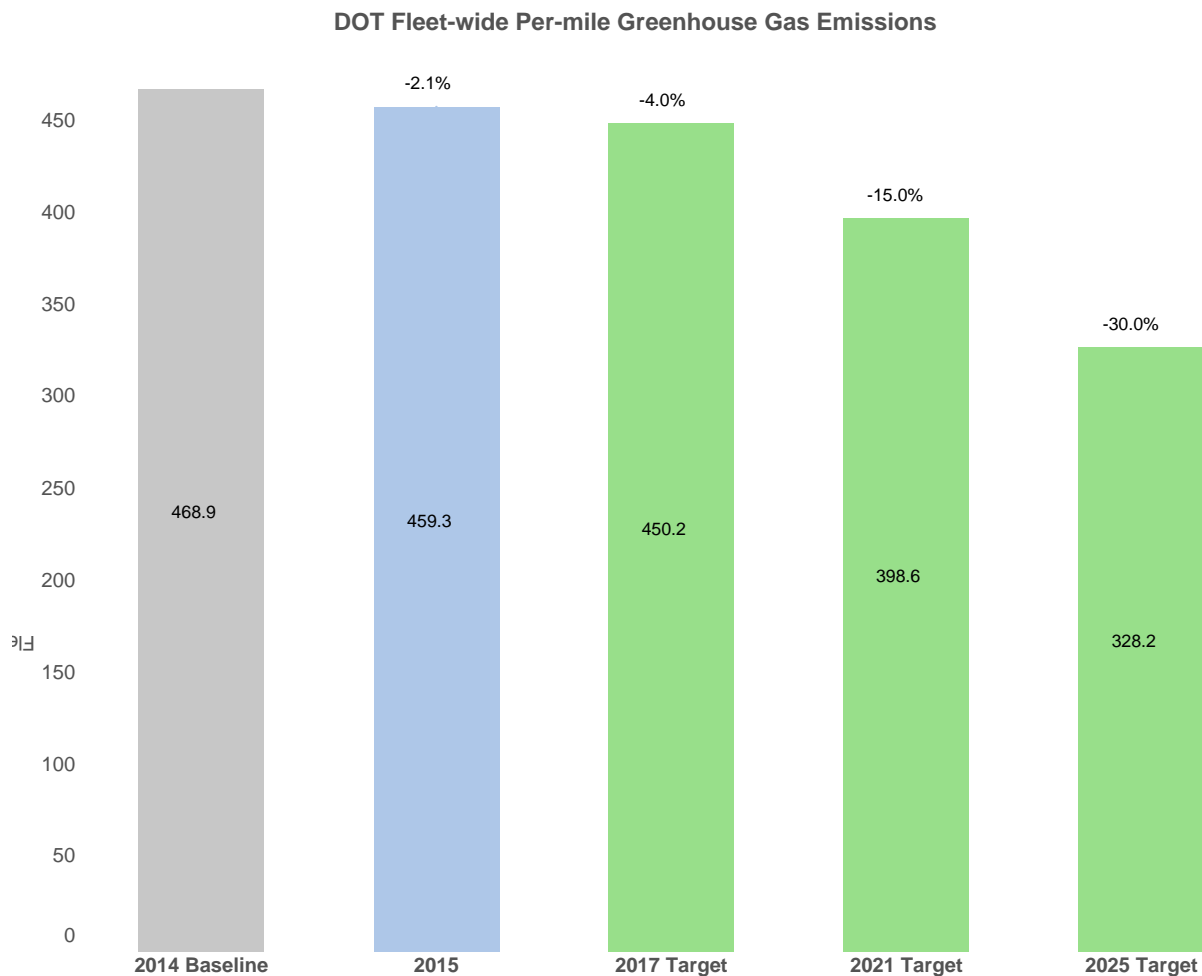
In FY 2015, DOT's use of alternative fuel equaled 7.7 percent of total fuel use. DOT has increased its alternative fuel use by 233 percent since FY 2005, exceeding the target of 159.4 percent.

Fleet Per-Mile Greenhouse Gas (GHG) Emissions Goal

E.O. 13693 Section 3(g) states that agencies with a fleet of at least 20 motor vehicles will improve fleet and vehicle efficiency and management. E.O. 13693 section 3(g)(ii) requires agencies to reduce fleet-wide per-mile GHG emissions from agency fleet vehicles relative to a FY 2014 baseline and sets new goals for percentage reductions: not less than 4 percent by FY 2017; not less than 15 percent by FY 2020; and not less than 30 percent by FY 2025.

E.O. 13693 Section 3(g)(i) requires that agencies determine the optimum fleet inventory, emphasizing elimination of unnecessary or non-essential vehicles. The Fleet Management Plan (FMP) and Vehicle Allocation Methodology (VAM) Report are included as appendices to this plan.

Chart: Fleet-wide Per-mile GHG Emissions



DOT continued to exceed its fleet petroleum reduction and alternative fuel use targets and reduced per-mile GHG emissions 2.1 percent from the FY 2014 baseline, on track for the new E.O. reduction target.

DOT's sustained fleet performance is attributed to the aggressive use of the Missed Fueling Opportunities Report developed from the DOE FleetDASH, transparent fuel consumption reporting on internal fleet website, and incorporation of fuel targets in departmental business plans.

Fleet Management Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Collect and utilize agency fleet operational data through deployment of vehicle telematics.	No	DOT has tested vehicle telematics and continues to explore utilization options; however, this is not a priority strategy at this time	
Ensure that agency annual asset-level fleet data is properly and accurately accounted for in a formal Fleet Management Information System as well as submitted to the Federal Automotive Statistical Tool (FAST) reporting database, the Federal Motor Vehicle Registration System, and the Fleet Sustainability Dashboard (FleetDASH) system.	Yes	Ensure agency-owned and GSA leased vehicles' data are accurate and are incorporated into the Integrated Logistics Management System (ILMS) for FAST reporting and GSA's Federal FMVRS.	Transfer agency-owned vehicle fleet data file monthly to the Integrated Logistics Management System (ILMS). Validate owned vehicle data accuracy by reconciling FMVRS with OAs fleet managers semi-annually.
Increase acquisitions of zero emission and plug-in hybrid vehicles.	Yes	Identify potential locations where ZEV/PHEV vehicles can be successfully integrated into the fleet inventory to support DOT's mission and consider purchasing ZEV/PHEVs during the FY 2017 GSA Leased Vehicle Replacement Season.	In FY 2017 replace 12 percent of the total passenger vehicle fleet with ZEV/PHEV through the GSA leasing program.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Issue agency policy and a plan to install appropriate charging or refueling infrastructure for zero emission or plug-in hybrid vehicles and opportunities for ancillary services to support vehicle-to-grid technology.	No	DOT is exploring the development of agency policy and a plan to install charging or refueling infrastructure; however, this is not a priority strategy at this time.	
Optimize and right-size fleet composition, by reducing vehicle size, eliminating underutilized vehicles, and acquiring and locating vehicles to match local fuel infrastructure.	Yes	Collaborate with each OA to optimize and right-size fleet composition by identifying underutilized vehicles to reduce the current fleet inventory in FY 2017.	Require OAs to identify and dispose of any underutilized vehicles along with using the DOE fuel finder/locator to match replacement vehicles with the local alternative fuels.
Increase utilization of alternative fuel in dual-fuel vehicles.	Yes	Continue using the National Renewable Energy Laboratory's FleetDASH tool to identify and reduce the number of missed opportunities. Increase awareness of fleet missed alternative fuel opportunities with fleet managers.	Post monthly missed opportunities on fleet management website. Review monthly fuel transaction reports to determine the effectiveness of efforts to increase utilization of alternative fuel.
Use Fleet Management Information System to track real-time fuel consumption throughout the year for agency-owned, GSA-leased, and commercially-leased vehicles.	Yes	Download GSA fleet data and input agency's vehicle data into the ILMS. Remove any anomalies from the data.	Compile monthly and quarterly fleet data and generate monthly reports that track petroleum consumption, alternative fuel consumption, and evaluate progress toward meeting fleet requirements. Create GHG per-mile emission scorecard comparing FY 2014 baseline to FY 2016 to incorporate into the FY 2017 Business Plans.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Implement vehicle idle mitigation technologies.	No	DOT is exploring the use of vehicle idle mitigation technologies; however, this is not a priority strategy at this time.	
Minimize use of law enforcement exemptions by implementing GSA Bulletin FMR B-33, <i>Motor Vehicle Management, Alternative Fuel Vehicle Guidance for Law Enforcement and Emergency Vehicle Fleets</i> .	No	DOT is supportive of GSA Bulletin FMR B-33; however, this is not a priority strategy at this time.	
Where State vehicle or fleet technology or fueling infrastructure policies are in place, meet minimum requirements.	No	DOT is supportive of state policies; however, this is not a priority strategy at this time.	
Establish policy/plan to reduce miles traveled, e.g. through vehicle sharing, improving routing with telematics, eliminating trips, improving scheduling, and using shuttles, etc.	No	DOT is exploring the development of a policy or plan to reduce miles traveled; however, this is not a priority strategy at this time.	

Goal 6: Sustainable Acquisition

Sustainable Acquisition Goal

E.O. 13693 section 3(i) requires agencies to promote sustainable acquisition by ensuring that environmental performance and sustainability factors are considered to the maximum extent practicable for all applicable procurements in the planning, award and execution phases of acquisition.

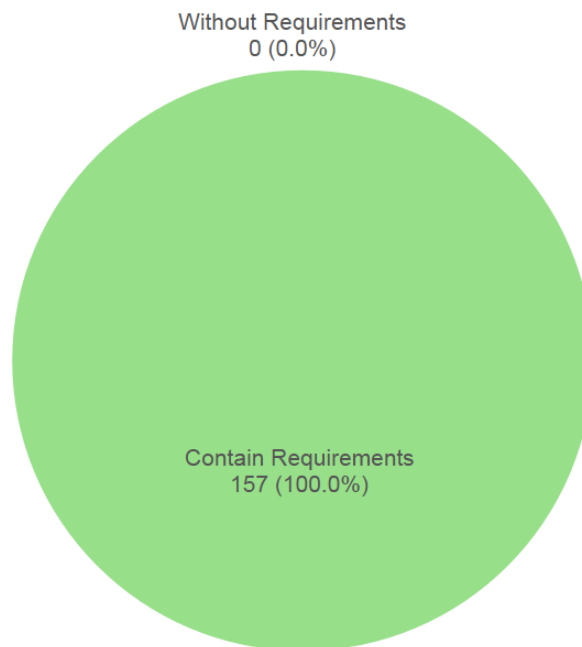
Biobased Purchasing Targets

The Agricultural Act of 2014 requires that agencies establish a targeted biobased-only procurement requirement. E.O. 13693 section 3(iv) requires agencies to establish an annual target for increasing the number of contracts to be awarded with BioPreferred and biobased criteria and the dollar value of BioPreferred and biobased products to be delivered and reported under those contracts in the following fiscal year.

For FY 2017, DOT has established a target of at least 25 contracts and \$21 million in products to be delivered.

Chart: Percent of Applicable Contracts Containing Sustainable Acquisition Requirements

DOT Percent of Applicable Contracts Containing Sustainable Acquisition Requirements
(FY 2015 Goal: 95%)



Total Number of Contracts Reviewed: 157

Based on agency-reported results of quarterly reviews of at least 5% of applicable contract actions

DOT has made considerable progress in meeting its sustainable acquisition goals. All 157 contracts reviewed as part of the process to assess 2015 compliance for this goal, including janitorial services, operations and maintenance, and other contracts included sustainable acquisition requirements. In addition, 95 percent of eligible contract actions included clauses for biobased products and language in the statement of work about biobased products (based on a quarterly sample of five percent of contracts awarded).

Sustainable Acquisition Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Establish and implement policies to meet statutory mandates requiring purchasing preference for recycled content products, ENERGY STAR qualified and FEMP-designated products, and Biopreferred and biobased products designated by USDA.	Yes	Update acquisition policy and guidance related to sustainable purchasing preferences, based on E.O. 13693 requirements.	Review and make all necessary updates to DOT policy to ensure consistency with Federal statutes and regulations, and to heighten the visibility of sustainable acquisition requirements in FY 2017.
Establish and implement policies to purchase sustainable products and services identified by EPA programs, including SNAP, WaterSense, Safer Choice, and Smart Way.	Yes	Update acquisition policy and guidance for the purchase of sustainable products and services using EPA programs, to meet E.O. 13693 requirements.	Review and make all necessary updates to DOT acquisition policies ensure consistency with Federal statutes and regulations, and to heighten the visibility of sustainable acquisition requirements in FY 2017.
Establish and implement policies to purchase environmentally preferable products and services that meet or exceed specifications, standards, or labels recommended by EPA.	No	DOT considers this a sub- strategy of the second strategy listed above and will approach it in a comprehensive way.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Use Category Management Initiatives and government-wide acquisition vehicles that already include sustainable acquisition criteria.	Yes	Federal Strategic Sourcing Initiatives and DOT Blanket Purchase Agreements, such as the FAA SAVES Contract, are important approaches to improve sustainable acquisition and their use will be expanded in the coming year.	Increase the use of sustainable products by at least 5-10 percent through Strategic Sourcing vehicles and use strategically sourced vendors for all or most office supplies in FY 2017.
Ensure contractors submit timely annual reports of their BioPreferred and biobased purchases.	No	DOT has written this into its policies; therefore, this is not a priority strategy at this time.	
Reduce copier and printing paper use and acquiring uncoated printing and writing paper containing at least 30 percent postconsumer recycled content or higher.	No	DOT has written this into its policies; therefore, this is not a priority strategy at this time.	
Identify and implement corrective actions to address barriers to increasing sustainable acquisitions.	No	DOT is addressing barriers to increasing sustainable acquisitions; however, this is not DOT priority strategy at this time.	
Improve quality of data and tracking of sustainable acquisition through the Federal Procurement Data System (FPDS).	No	DOT is exploring ways to improve quality of data and tracking of sustainable acquisition; however, this is not a priority strategy at this time.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Incorporate compliance with contract sustainability requirements into procedures for monitoring contractor past performance and report on contractor compliance in performance reviews.	No	DOT is exploring ways to incorporate compliance with contract sustainability requirements into contract performance monitoring procedures; however, this is not a priority strategy at this time.	
Review and update agency specifications to include and encourage products that meet sustainable acquisition criteria.	Yes	Update DOT contract writing systems as needed and issue guidance to ensure consistency in implementation of sustainable acquisition policy.	(1) Complete review of DOT contract writing systems in FY 2017; and (2) Increase the visibility of sustainability requirements for acquisition through policy and tools such as training and messaging.
Identify opportunities to reduce supply chain emissions and incorporate criteria or contractor requirements into procurements.	No	DOT is exploring opportunities to reduce supply chain emissions and to incorporate requirements into procurements; however, this is not a priority strategy at this time.	
Promote training for all personnel involved with acquisition	Yes	The sustainability and procurement policy offices will work together to educate the DOT workforce on all new requirements in E.O. 13963, ensuring that employees involved in acquisitions follow the new requirements.	(1) Update departmental communication documents to reflect the new E.O. 13693 requirements in FY 2016; (2) provide OA-level updates to acquisition policies and procedures in FY 2017; and (3) FAA will make sustainable acquisition training available by May 2017.

Goal 7: Pollution Prevention & Waste Reduction

Pollution Prevention & Waste Reduction Goal

E.O. 13693 section 3(j) requires that Federal agencies advance waste prevention and pollution prevention and to annually divert at least 50 percent of non-hazardous construction and demolition debris. Section 3(j)(ii) further requires agencies to divert at least 50 percent of non-hazardous solid waste, including food and compostable material, and to pursue opportunities for net-zero waste or additional diversion.

Reporting on progress toward the waste diversion goal will begin with annual data for FY 2016.

Pollution Prevention & Waste Reduction Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Report in accordance with the requirements of sections 301 through 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C 11001-11023).	No	DOT has included a requirement to report in accordance with sections 301 through 313 in internal policy orders; however, this is not a priority strategy at this time.	
Reduce or minimize the quantity of toxic and hazardous chemicals acquired, used, or disposed of, particularly where such reduction will assist the agency in pursuing agency greenhouse gas reduction targets.	No	DOT has included this requirement in the Department's internal policy order governing pollution prevention and waste management; however, this is not a priority strategy at this time.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Eliminate, reduce, or recover refrigerants and other fugitive emissions.	Yes	DOT is including proper O&M procedures and periodic system checks to reduce refrigerants and other fugitive emissions as part of its internal policy. In addition, the Department is utilizing licensed personnel for onsite equipment operations to ensure proper recovery operations.	(1) Reduce procurement refrigerants and phase-out chlorofluorocarbon-based refrigerants in FY 2017; (2) strive to capture all refrigerants during routine operations and maintenance of equipment; and (3) continue to comply with Title 5 of the Clean Air Act to achieve zero air permit violations in FY 2017.
Reduce waste generation through elimination, source reduction, and recycling.	Yes	DOT continues to divert non-hazardous municipal solid waste and C&D (C&D) materials and debris, and educate employees on the importance of waste reduction.	Fully implement recycling programs at 1-2 additional facilities where feasible and cost effective. Integrate recycling requirements into existing janitorial and waste management contracts where necessary for program implementation.
Implement integrated pest management and improved landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals and materials.	Yes	DOT continues to use integrated pest management programs, reduce chemical use, or replace landscape chemicals with biopreferred products. DOT is reducing pesticide use by the introduction of native species and by following EPA guidance for applying pesticides.	Calculate and track pesticide usage for each FY to identify trends and opportunities to reduce pesticide use. Include biobased language in landscaping and pest control contracts in FY 2017.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Develop or revise Agency Chemicals Inventory Plans and identify and deploy chemical elimination, substitution, and/or management opportunities.	No	DOT has developed a tracking system and is working with OAs to improve implementation; therefore, this is not a DOT priority strategy at this time.	
Inventory current HFC use and purchases.	No	DOT completes inventories in support of the annual GHG report; however, this is not a priority strategy at this time.	
Require high-level waiver or contract approval for any agency use of HFCs.	No	DOT is exploring an option to require a high-level waiver or contract approval for any agency use of HFC; however, this is not a priority strategy at this time.	
Ensure HFC management training and recycling equipment are available.	No	DOT is exploring opportunities to provide HFC management training; however, this is not a priority strategy at this time.	
Establish a tracking and reporting system for construction and demolition debris elimination	Yes	DOT is including tracking and reporting requirement language in waste-related contracts and is adding C&D information in waste collection templates.	Some OAs maintain documentation of all waste streams from each site for benchmarking and operational management controls, and send quarterly reminders on C&D requirements.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Improve data collection process for solid waste diversion.	Yes	Collaborate with local vendors to ensure all trucks have operable scales when picking up waste from the facility. Be strategic in choosing waste hauling contractors that meet or exceed OA- and DOT-wide waste requirements, such as incorporation certified scales on all trucks and generation of monthly reports.	Generate a monthly report on waste amounts to minimize discrepancies.

Goal 8: Energy Performance Contracts

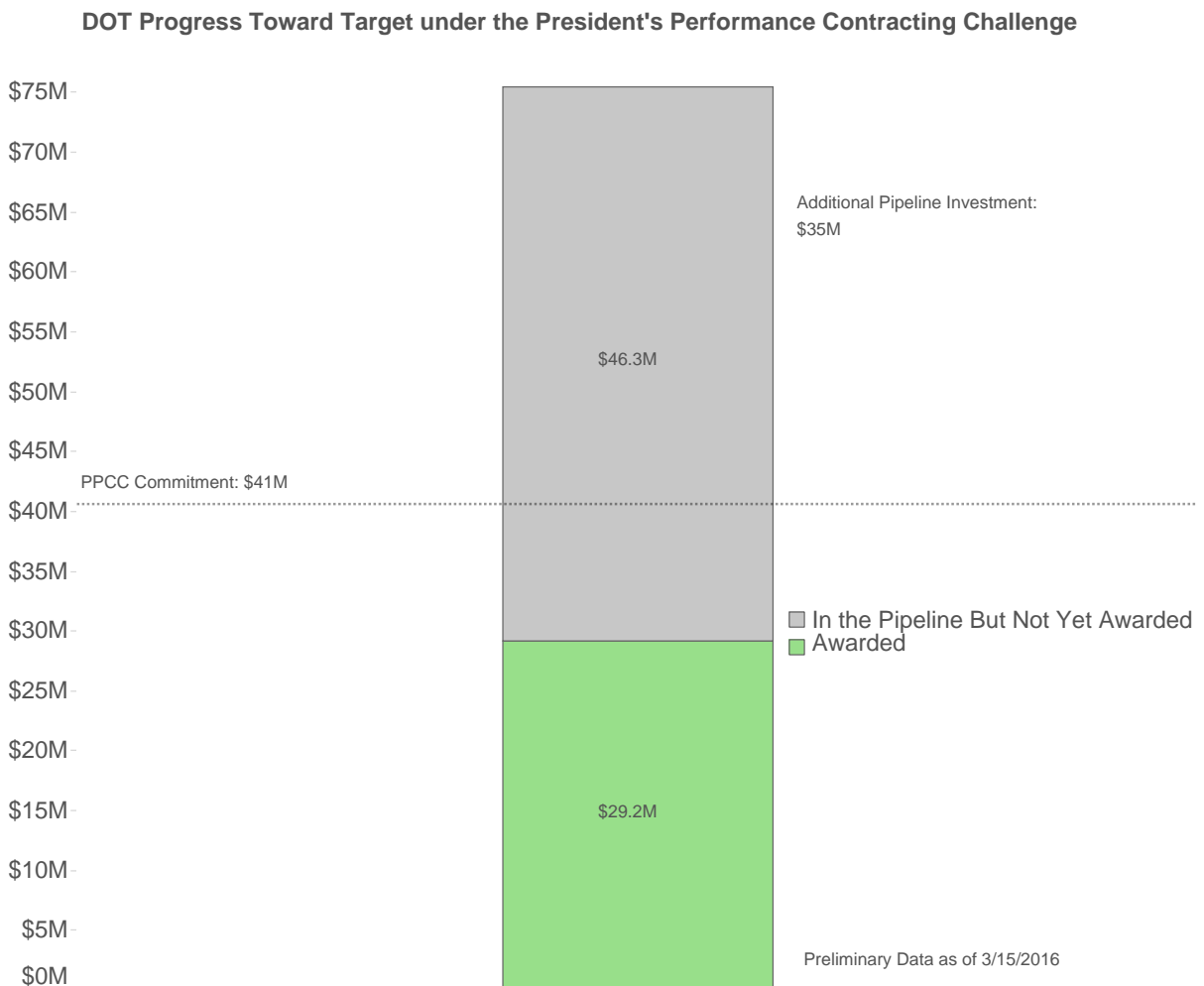
Performance Contracting Goal

E.O. 13693 section 3(k) requires that agencies implement performance contracts for Federal buildings. E.O. 13693 section 3(k)(iii) also requires that agencies provide annual agency targets for performance contracting. DOT's commitment under the President's Performance Contracting Challenge is \$40.6 million in contracts awarded by the end of calendar year 2016. DOT's targets for the next two fiscal years are:

FY 2017: \$10 million
 FY 2018: \$12 million

These targets are based on preliminary research already conducted as well as future planned assessments.

Chart: Progress toward Target under the President's Performance Contracting Challenge



The Department is well on its way toward achieving the PPCC of \$40.6 million by the conclusion of FY 2016. Although the awarded contracts as of March 2016 are slightly below the target, the total amount of contracts in progress greatly surpasses the goal. DOT has targeted to pursue even more performance contracts in FY 2017 and FY 2018, and has begun preliminary research to identify future opportunities.

Performance Contracting Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Utilize performance contracting to meet identified energy efficiency and management goals while deploying life-cycle cost effective energy and clean energy technology and water conservation measures.	Yes	DOT is prioritizing, funding, and executing initiatives to advance goals and objectives that maximize economic, environmental, and social benefits.	DOT will continue in FY 2017 to pursue performance contracts such as PPAs, ESPCs, and UESCs where feasible. In prioritizing competing actions, DOT will take a holistic view of building systems, occupants, the environment, energy sources, operating policy, and capital and operating expenses.
Fulfill existing agency target/ commitments towards the PPCC by the end of CY 2016.	Yes	DOT will continue to prioritize existing performance tracking commitments through its internal project management scorecard.	Report performance on a quarterly basis to senior leadership.
Evaluate 25 percent of agency's most energy intensive buildings for opportunities to use ESPCs/UESCs to achieve goals.	No	DOT is pursuing ESPC/UESC projects for the most energy intensive buildings; however, this is not a priority strategy at this time.	
Prioritize top ten portfolio wide projects which will provide greatest energy savings potential.	No	DOT is pursuing projects that provide the greatest energy savings potential, rather than only focusing on the largest projects; however, this is not a priority strategy at this time.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Identify and commit to include onsite renewable energy projects in a percentage of energy performance contracts.	Yes	DOT has conducted preliminary assessments and has identified promising onsite renewable projects at multiple sites.	In FY 2017, DOT will continue to research opportunities and constraints of onsite renewable energy projects, and will begin to implement projects wherever feasible, either as stand-alone or combined contracts, with plans to award up to four performance contracts with renewable energy elements.
Submit proposals for technical or financial assistance to FEMP and/or use FEMP resources to improve performance contracting program.	No	Some DOT OAs are utilizing FEMP resources to improve performance contracting programs; however, this is not a priority strategy at this time.	
Work with FEMP/USACE to cut cycle time of performance contracting process, targeting a minimum 25 percent reduction.	No	DOT is exploring opportunities to cut the cycle time of performance contracting processes; however, this is not a priority strategy at this time.	
Ensure agency legal and procurement staff are trained by the FEMP ESPC/UESC course curriculum.	Yes	Ensure contracting officers executing PBCs complete appropriate DOE FEMP courses.	DOT will ensure 100 percent of applicable staff involved with the DOE ESPC/UESC procurement process will participate in appropriate DOE FEMP training in FY 2017.
Provide measurement and verification data for all awarded ESPC projects	Yes	DOT will continue to provide measurement and verification data for all awarded ESPC and UESC projects.	DOT will submit appropriate measurement and verification data for all awarded PBCs in FY 2017.

Goal 9: Electronics Stewardship & Data Centers

Electronics Stewardship Goals

E.O. 13693 Section 3(l) requires that agencies promote electronics stewardship, including procurement preference for environmentally sustainable electronic products; establishing and implementing policies to enable power management, duplex printing, and other energy efficient or environmentally sustainable features on all eligible agency electronic products; and employing environmentally sound practices with respect to the agency's disposition of all agency excess or surplus electronic products.

Agency Progress in Meeting Electronics Stewardship Goals

Procurement Goal:

At least 95 percent of monitors, PCs, and laptops acquired meet environmentally sustainable electronics criteria (EPEAT registered).

FY 2015 Progress: 100 percent

Power Management Goal:

100 percent of computers, laptops, and monitors have power management features enabled.

FY 2015 Progress: 100 percent of equipment has power management enabled.
2 percent of equipment has been exempted.

End-of-Life Goal:

100 percent of electronics disposed using environmentally sound methods, including GSA Xcess, Computers for Learning, Unicorn, U.S. Postal Service Blue Earth Recycling Program, or Certified Recycler (R2 or E-Stewards).

FY 2015 Progress: 100 percent

Data Center Efficiency Goal

E.O. 13693 Section 3(a) states that agencies must improve data center efficiency at agency facilities, and requires that agencies establish a power usage effectiveness target in the range of 1.2-1.4 for new data centers and less than 1.5 for existing data centers.

In FY 2015, DOT met the electronic stewardship goals, including EPEAT, Power Management, and end-of-life goals stated in last year's SSPP. DOT continued to implement virtual desktop infrastructure to support the use of telework, as well as virtual meeting software to enhance and support productivity. As in previous years, DOT continued to purchase only EPEAT and Energy Star desktop and laptop equipment. DOT has successfully implemented virtualization of processes, along with decommissioning of processes that are no longer required.

Electronics Stewardship Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Use government-wide strategic sourcing vehicles to ensure procurement of equipment that meets sustainable electronics criteria.	Yes	Continue to utilize government-wide sourcing contract vehicles to ensure purchase of equipment that meets sustainable requirements, such as the FAA SAVES contract to acquire personal computer products, imaging equipment, televisions, and office products.	DOT will continue to ensure 100 percent acquisition of EPEAT-registered and 100 percent ENERGY STAR-qualified and FEMP-designated electronic office products. DOT will also increase green purchasing through the SAVES office supply contract by 10 percent and increase the percentage of EPEAT certified imaging equipment purchased to 99 percent by the end of FY 2016.
Enable and maintain power management on all eligible electronics; measure and report compliance.	Yes	DOT will continue to ensure that environmentally preferable options and features are enabled, including power management, and that requirements are formalized within policy.	Maintain, review, and evaluate policies. At the OA level: communicate with IT and other administrators to ensure correct power management settings for equipment; correct deviations from policy. Maintain 100 percent compliance with power management requirement on all 'eligible' computers and report performance annually.
Implement automatic duplexing and other print management features on all eligible agency computers and imaging equipment; measure and report compliance.	Yes	DOT will continue to ensure that environmentally preferable options and features are enabled, including duplex printing and other print management features, and that requirements are formalized within policy.	Maintain, review and evaluate policies. At the OA level: communicate with IT and other administrators to ensure correct settings for equipment; consolidate printers and scanners for shared use; correct deviations from policy and report performance annually.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Ensure environmentally sound disposition of all agency excess and surplus electronics, consistent with Federal policies on disposal of electronic assets, and measure and report compliance.	Yes	DOT will continue efforts to ensure the use of R2 and eSteward recyclers.	DOT will continue to monitor the use of R2 and eSteward recyclers; educate Personal Property managers that all surplus electronic assets must be recycled through an R2 or e-Steward-certified recycler; and report compliance.
Improve tracking and reporting systems for electronics stewardship requirements through the lifecycle: acquisition and procurement, operations and maintenance, and end-of-life management.	Yes	DOT will continue use of a tracking system to capture all the available information and status of equipment, including purchase, warranty, and disposition dates.	DOT has established an annual tracking report for electronics stewardship.

Data Center Efficiency Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Develop, issue and implement policies, procedures and guidance for data center energy optimization, efficiency, and performance.	No	DOT is accomplishing this strategy through the CIO strategy described below.	
Install and monitor advanced energy meters in all data centers (by FY 2018) and actively manage energy and power usage effectiveness.	Yes	Continue efforts to install advanced energy meters and actively manage energy usage in DOT data centers.	Request quote from PMO by July 2016, for individual energy metering for installation in DOT HQ Data Centers and for defining electrical and chilled water consumption per data center.
Minimize total cost of ownership in data center and cloud computing operations.	No	DOT is addressing this strategy using the strategy focused on virtualization and Cloud Utilization provided below.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Identify, consolidate and migrate obsolete, underutilized and inefficient data centers to more efficient data centers or cloud providers; close unneeded data centers.	No	DOT is accomplishing this strategy using the strategy focused on virtualization and Cloud Utilization provided below.	
Improve data center temperature and air-flow management to capture energy savings.	Yes	Measure existing data center ventilation rates and adjust rates. Measure heat and humidity sensors deployed in DOT headquarter data centers and monitor through the Data Center Information Management toolset.	Complete data center survey by October 2016 and implement revised ventilation procedures. Integrate Data Center Information Management toolset and heat and humidity sensor monitoring into dashboard by July 2016. Install rear door fans to increase plenum throughput by October 2016. Identify and relocate assets to avoid overcrowding and heat spots within cabinets by October 2016.
Assign certified Data Center Energy Practitioner(s) to manage core data center(s).	No	DOT is exploring options for assigning a certified Data Center Energy Practitioner to manage core data centers; however, this is not a priority strategy at this time.	
Increase Catalog of Service to provide central platforms	Yes	Evaluate applications and hosting services for inclusion to Catalog of Services with economy on similar platforms. Continue virtualization processes. Continue decommissioning process.	Issue data call to identify multiple existing services that may be offered as a central Catalog of Services platform. Decommission/virtualize servers that are beyond end of life/ end of service.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Reduce overall operating cost through virtualization and Cloud Utilization	Yes	Evaluate applications and hosting services for inclusion to Catalog of Services with the economy on similar platforms. Continue virtualization processes. Continue decommissioning process.	Issue data call to identify multiple existing services that may be offered as a central Catalog of Services platform. Decommission/virtualize servers that are beyond end of life/end of service in FY 2017.
Ensure the agency chief information officer promotes data center energy optimization, efficiency, and performance 3(a)(ii)(A)	Yes	Ensure that all devices are in compliance with Green Star ratings; evaluate power consumption rates, convert 110v20 amp single phase inputs to 208v30 amp circuits.	Relocate high power consumption devices through strategic Parallel Distributed Systems Facility placement by October 2016. Ensure new devices meet energy constraints.

Goal 10: Climate Change Resilience

E.O. 13653, *Preparing the United States for the Impacts of Climate Change*, outlines Federal agency responsibilities in the areas of supporting climate resilient investment; managing lands and waters for climate preparedness and resilience; providing information, data and tools for climate change preparedness and resilience; and planning.

E.O. 13693 Section 3(h)(viii) states that as part of building efficiency, performance, and management, agencies should incorporate climate-resilient design and management elements into the operation, repair, and renovation of existing agency buildings and the design of new agency buildings. In addition, Section 13(a) requires agencies to identify and address projected impacts of climate change on **mission critical** water, energy, communication, and transportation demands and consider those climate impacts in operational preparedness planning for major agency facilities and operations. Section 13(b) requires agencies to calculate the potential cost and risk to mission associated with agency operations that do not take into account such information and consider that cost in agency decision-making.

DOT is taking numerous steps in both its external programs and with its internal operations to address the impacts of climate change. DOT released the Gulf Coast Study, Phase 2, which provided tools for transportation agencies to use for assessing risks and planning for more resilient infrastructure, and conducted extensive outreach and training for transportation agencies. While the project focused on the Mobile, AL area, tools are widely available. The DOT Center for Climate Change initiated a project to develop tools to evaluate the costs of transportation climate adaptation through a pilot study in the Hampton Roads, VA area. FHWA initiated pilot studies and case studies to test and build upon FHWA tools. FTA completed a synthesis of seven transit agency adaptation pilot projects. DOT developed a 2016 operational climate resiliency plan to address internal actions that the Department is taking to improve resiliency for its own assets which includes personnel, buildings, data systems, ships, and vehicles. The plan complements the DOT adaptation plan, most recently updated in 2014, which addresses DOT's broader strategic efforts to further climate adaptation in the Nation's transportation system.

Climate Change Resilience Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Strengthen agency <i>external</i> mission, programs, policies and operations (including grants, loans, technical assistance, etc.) to incentivize planning for, and addressing the impacts of climate change.	Yes	DOT will continue to encourage planning for and addressing impacts of climate change by updating programs and policies affecting communities and transportation agencies that are appropriate for integrating climate change resiliency.	Look for opportunities to improve incentives for planning for climate change and, as applicable, evaluate effectiveness of funds used for enhancing climate resilience. -Provide guidance on CEQ Guidance on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews, FY 17. -Continue to make Airport Improvement Program funds available for sustainability plans, which may include resilience elements. (FAA) FY 16-17.
Update and strengthen agency <i>internal</i> mission, programs, policies, and operations to align with the <i>Guiding Principles</i> , including facility acquisition, planning, design, training, and asset management processes, to incentivize planning for and addressing the impacts of climate change.	Yes	DOT OAs will review internal projects and plans as they are developed or updated to ensure that they have considered climate preparedness and resilience.	Review applicable projects and plans to ensure adequate treatment of climate preparedness and resilience. Seek opportunities to provide climate resiliency training to operational personnel in FY17.
Update emergency response, health, and safety procedures and protocols to account for projected climate change, including extreme weather events.	No	DOT continues to review and update emergency response procedures and protocols, as appropriate, to account for projected climate change and extreme weather events; however, this is not a priority strategy at this time.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
<p>Ensure climate change adaptation is integrated into both agency-wide and regional planning efforts, in coordination with other Federal agencies as well as state and local partners, Tribal governments, and private stakeholders.</p>	<p>Yes</p>	<p>DOT will provide resources to help transportation agency and grantee staff understand and address climate change impacts and risks and implement statutory provisions on resilience and planning.</p>	<p>Develop and make available climate science information and tools in FY 2017 for consideration and integration in planning.</p> <ul style="list-style-type: none"> - Release Hampton Roads Climate Impact Quantification Initiative, Baseline assessment and overview of economic analyses, FY 17 -Outreach on 2013-2015 Climate Resilience Pilot Program: Outcomes, Lessons Learned, and Recommendations, FY 17 (FHWA). Summary report posted July 2016. - Release Hurricane Sandy Follow-up and Vulnerability Assessment and Adaptation Analysis, FY 17 (FHWA). <p>Complete rulemaking on resilience provisions by deadlines.</p> <ul style="list-style-type: none"> -Continue technical assistance for FTA Transit Asset Management/State of Good Repair final rule, July 26, 2016, 81 FR 48889 (FTA). FY 16-17. -Complete FHWA final rule “Asset Management Plans and Periodic Evaluations of Facilities Repeatedly Requiring Repair and Reconstruction Due to Emergency Events.” FY 17.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Ensure that vulnerable populations potentially impacted by climate change are engaged in agency processes to identify measures addressing relevant climate change impacts.	No	DOT plans to update its Environmental Justice strategy, including focus on impacts of climate change, as appropriate. Climate change is one factor considered, as part of DOT's existing priority on environmental justice and community engagement, along with community and environmental impacts and Title VI of the Civil Rights Act implementation.	Complete updated Environmental Justice Strategy, Fall, 2016
Identify interagency climate tools and platforms used in updating agency programs and policies to encourage or require planning for, and addressing the impacts of climate change.	No	DOT has identified interagency tools and platforms available to address the impacts of climate change, and will continue to support the work of the Climate Data and Tools workgroup, and make DOT tools available; however, this is not a priority strategy at this time.	
Ensure agency principals demonstrate commitment to adaptation efforts through internal communications and policies	No	DOT principals will continue to demonstrate commitment to adaptation efforts through internal communications and policies, and to coordinate with program staff to meet targets for and evaluate established adaptation plans, however this is not a priority strategy at this time.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Ensure that agency climate adaptation and resilience policies and programs reflect best available current climate change science, updated as necessary	Yes	DOT will continue to incorporate the latest climate change science through literature reviews into internal and external operations as appropriate.	Conduct annual reviews of relevant programs and operations along with annual reviews of climate change science literature to identify opportunities to update or modify policies and programs. For example, propose updated DOT procedures implementing the Floodplain E.O. 11988 as updated by EO. 13690.
Identify vulnerabilities of mission critical operational facilities	Yes	DOT will prioritize and evaluate facilities for which vulnerabilities have not yet been assessed and update the Operational Climate Plan as needed.	Determine which operational facilities are considered “major” and then determine which of these “major” facilities are mission critical in FY 2016. Begin analyzing ways to identify vulnerabilities to the identified major mission critical assets in FY17.
Design and construct new or modify/manage existing agency facilities and/or infrastructure to account for the potential impacts of projected climate change	Yes	DOT will continue to incorporate resilience considerations into capital improvement plans and project implementation.	Continue to integrate resiliency into specifications and requirements for new facilities and renovations in FY 2016 and FY 2017.

Appendix A: FY 2016 Vehicle Allocation Methodology Survey Results

DOT's VAM Survey questions are categorized into four VAM objectives. Each question helps answer at least one VAM objective or requirement. Below are the four VAM objective categories and results of the survey.

1. Determine the optimal fleet inventory to meet the Agency's mission requirements.

The survey indicated that 29% of the vehicles that took the survey are low greenhouse gas models and 62% are not. It also identified 0.7% of the vehicles can be eliminated, 2% of the vehicles can be changed to smaller size vehicles, 9% can be changed to AFVs and 8% can be replaced by low greenhouse gas models.

2. Identify resources necessary to operate those fleets effectively and efficiently.

The survey results identified how DOT vehicles are being used on a daily basis: 39% of DOT vehicles transport cargo, 56% transport maintenance materials, 8% transport hazardous materials and 63% transport passengers. This identifies why DOT's fleet inventory portion of 4x4s and medium duty vehicles is a sizable portion. By reviewing the survey, we also realized that 34% of these vehicles are only assigned to one person, therefore consolidating ridership can be considered for these vehicles. Based on the results, DOT knows which vehicles can be replaced by an AFV due to availability of alternative fuel infrastructure. The VAM survey indicated that 22% of DOT vehicles are within 5 miles or 15 minutes from an E85 station and 75% are not.

3. Eliminate unnecessary or non-essential vehicles from the Agency's domestic light duty fleet inventory. The survey identified 20% of the vehicles as underutilized or non-essential vehicles that have less than 300 miles per month. These vehicles could potentially be eliminated from the fleet if further justification isn't provided.

4. Promote the cost effectiveness of maintaining the fleet throughout the lifecycle.

The survey resulted in identifying other effective and efficient transportation means and vehicle types that can replace the current vehicles. Of all surveyed government vehicle users, 10% can use personally owned vehicles, 5% can use short term rentals, 8% can use bio fueled vehicles, 8% can use hybrid vehicles, 2% can use plug in electric vehicles, 4% can use CNG/LNG/LPG fueled vehicles, 2% can use a smaller size vehicle and 0.3% can use public transportation. The survey also identified that 6.8% of vehicles used for home-to-work are in compliance with DOT's 10 mile policy requirement. The survey identified why DOT needs 4x4 vehicles: 71% go through extreme climate conditions and 72% go through off-road, unpaved or rugged terrains. Also, DOT effectively maintains these vehicles through their lifecycle through GSA's acquisitions and leasing program.

Appendix B: FY 2016 Fleet Management Plan for Department of Transportation

(A) Introduction that describes the agency mission, organization, and overview of the role of the fleet in serving agency missions.

DOT occupies a leadership role in global transportation with nearly 55,000 dedicated professionals stationed in the U.S. and around the world. Since its first official day of operation in 1967, DOT's programs have evolved to meet the social and economic demands of the Nation.

DOT's mission is described in its original enabling legislation: "The national objectives of general welfare, economic growth and stability, and the security of the United States require the development of transportation policies and programs that contribute to providing fast, safe, efficient, and convenient transportation at the lowest cost, consistent with those and other national objectives, including the efficient use and conservation of the resources of the United States."

To fulfill its mission, the DOT maintains a fleet of more than 6,100 vehicles, the majority of which are used by DOT aviation, highway, railroad, and pipelines safety inspectors and law enforcement officials across the U.S. and U.S. territories.

DOT's fleet is comprised of 140 heavy-duty vehicles, 1,122 medium-duty vehicles, 3,426 light-duty vehicles (minivans, pickup, etc.), 1,421 sedans and 2 ambulances. Employees who conduct investigations or interviews use sedans. The large passenger vehicles operate as shuttles to carry employees to central locations. The agency utilizes trucks and trailers to provide compliance inspections, maintenance and transport large equipment.

DOT is composed of the Office of the Secretary, the Surface Transportation Board, the Office of the Inspector General, and the nine operating administrations listed below:

- Federal Aviation Administration (FAA)
- Federal Highway Administration (FHWA)
- Federal Motor Carrier Safety Administration (FMCSA)
- Federal Railroad Administration (FRA)
- Federal Transit Administration (FTA)
- Maritime Administration (MARAD)
- National Highway Traffic Safety Administration (NHTSA)
- Pipeline and Hazardous Materials Safety Administration (PHMSA)
- Saint Lawrence Seaway Development Corporation (SLSDC)

(B) Criteria for justifying and assigning vehicles (including home-to-work vehicle assignments).

DOT vehicles are acquired for specific mission needs based on the following criteria: (list of justifications including mission, terrain, utilization, and much more). The majority of DOT home-to-work vehicles are field work assigned which requires a business case to accompany the request that is reviewed by a senior official before submission to the head of the agency.

On September 15, 2009, the DOT Assistant Secretary for Administration sent a memorandum to the heads of the Operating Administrations with the subject: “Right-Sizing and Cost-Saving Initiatives for the Department Vehicle Fleet Program.” The second paragraph states, *“As the Operating Administration (OA) Senior Official, you, or your designated representative, is responsible for ensuring that your vehicle fleet program is limited to the minimum number required to meet operational requirements. Your fleet should consist of the smallest, most economical and fuel-efficient vehicles which meet your operational needs”*.

DOT OA fleet managers will work to ensure that EISA requirements are met, only the most fuel efficient vehicles are acquired, bi-fueled (CNG, E85) vehicles will not be placed in areas void of alternate fuel, and that vehicles are sized appropriately to routine mission requirements. If the OAs cannot meet the EISA requirements, they must submit a waiver request through their Associate Administrator to the Deputy Assistant Secretary for Administration for approval.

Also, on June 15, 2011, the DOT Deputy Assistant Secretary for Administration sent a memorandum to the heads of the Operating Administrations, with the subject: “Distance Limitation on Home-to-Work Eligibility.” The second paragraph states, *“Heads of Operating Administrations and OST offices must consider the location of the employee’s home in proximity to his/her work and to the locations where non-TDY travel is required.*

Participants in the home-to-work program may not participate in the program if they live within a 10 mile radius of where they work. This limitation is being implemented to avoid any perception of misuse of the program. Under no circumstances will home-to-work transportation be authorized solely on principally for the comfort or convenience of an employee. Mission security is the only condition wherein a waiver from this policy may be requested. All waivers requests will be evaluated on a case-by-case basis. This new process will be included in the upcoming DOT policy on home-to-work transportation.”

(C) Vehicle Allocation Methodology (VAM) target development and explanation for reported fleet size and cost changes or not meeting agency VAM targets.

(1) Provide information on the methods used to produce your agency’s VAM targets. (Recommendation #2 from GAO report: GAO-13-659. See FMR Bulletin B-30 for guidance on conducting a VAM study and developing VAM targets)

(a) From your most recent VAM study, what was the specific utilization criteria used to determine whether to retain or dispose of a vehicle? Provide the miles, hours, vehicle age or other means used to make this determination. If a different criterion was used in different bureaus or program areas, provide the criteria for each.

Part 3 of the DOT VAM survey is designed to eliminate unnecessary or non-essential vehicles from the Agency fleet. If a vehicle travels less than 300 miles a month, it is considered to be non-essential versus a vehicle that uses more than 300 miles a month.

(b) From your most recent VAM study, what were the questions used to conduct the VAM survey? If different questions were used in different bureaus or program areas, provide the questions for each.

We categorized all VAM survey questions into four categories below that represent “VAM objectives”.

1. Determine the optimal fleet inventory to meet the Agency's mission requirements
2. Identify resources necessary to operate those fleets effectively and efficiently
3. Eliminate unnecessary or non-essential vehicles from the Agency's domestic light duty fleet inventory
4. Promote cost effectiveness of maintaining the fleet through the lifecycle

VAM Survey Questions:

- Agency
- Vehicle Tag
- Vehicle Type
- Make
- Model
- Model Year
- Ownership Type
 - GSA Leased
 - Owned
 - Commercially Leased
- Acquisition Date (Delivery Date)(MM/DD/YYYY)
 - Acquisition Date(Delivery Date)(MM/DD/YYYY)
- Fuel Type (If dual-fuel vehicle, select two)
 - Gasoline
 - E85
 - CNG
 - Diesel
 - Biodiesel
 - Natural Gas
 - Electric
 - Hybrid Electric
- Vehicle Passenger Capacity
- Vehicle Street
- Vehicle City
- Vehicle State
- Vehicle Zip

- Vehicle Agency BOAC
 - Vehicle Agency BOAC: Choose Option
 - Specify your own value:
- What is the current mileage of the vehicle?
- Is vehicle a low greenhouse gas (GHG) model?
 - Yes
 - No
- Please select if the vehicle can be changed without jeopardizing mission requirements.
 - Vehicle can be eliminated
 - Vehicle size can be reduced
 - Vehicle can be changed to low Green House Gas model
 - Vehicle can be changed to an alternative fuel vehicle (AFV)
- What mission category is this vehicle in?
 - Administrative
 - Emergency
 - Maintenance
 - Specify your own value:
- Comments or suggestions regarding fleet optimization
- Name of the primary vehicle user
- E-mail of the primary vehicle user
- Phone of the primary vehicle user
- What type of cargo does this vehicle transport?
 - Hazardous material
 - Cargo
 - Maintenance materials
 - Passengers
 - N/A
- How many people are assigned to use this vehicle?
- Is vehicle within 5 miles or 15 minutes of a station that sells E-85(Ethanol) fuel?
 - Less than 5 miles/15 minutes
 - More than 5 miles/15 minutes
- Is this vehicle used for Law Enforcement purposes?
 - Non Law Enforcement
 - Law Enforcement
 - Undercover Law Enforcement
- Is the Primary Driver Federal or Contractor? If contractor, is this written into their contract?
 - Federal
 - Contractor. It's written into their contract.
 - Contractor. It's not written into their contract.
- What is the vehicle average vehicle miles (AVM)?
 - Less than 300 miles per month
 - More than 300 miles per month
- Lease cost per month? (e.g. \$20.50)
- Mileage Rate (Cost Per Mile)
- Is the vehicle in operable mechanical condition?
 - Yes

- No
- Which of these special conditions does the vehicle need to go through? (Select all that apply)
 - Off-road, unpaved or rugged terrains
 - Extreme climate conditions (snow, icy roads, sleet, etc.)
 - Agency official transportation requiring overnight vehicle use
- Does this vehicle have specialized installed equipment?
 - Yes
 - No
- Can work be done using the below vehicles instead of the current vehicle? Please select all that apply.
 - Personally Owned Vehicle (POV)
 - Short term GSA or other rental vehicles
 - Public transportation
 - Vehicle motor pool that shares vehicles within the Agency
 - Smaller size vehicle
 - Gas electric hybrid vehicle
 - Bio-fueled vehicle (dual-fuel E85 or biodiesel)
 - CNG/LNG/LPG fueled vehicle
 - Electric plug-in vehicle
- Is this vehicle used for Home-to-Work? If yes, Does this vehicle meet the 10 miles Home-to-Work limitation?
 - No, this vehicle is not used for Home-to-Work.
 - Yes, and the vehicle meets the 10 miles Home-to-Work requirement.
 - Yes, but the vehicle does not meet the 10 miles Home-to-Work requirement.

(2) Provide an explanation for any measurable change in fleet size and/or cost or if you are not meeting your annual VAM targets. What are the plans to correct any deficiencies, and indicate factors that hinder attainment of your annual VAM targets (e.g., budgetary, other resource issues, mission changes, etc.)?

DOT projections have been revised based on mission needs, the availability of E85 at local service stations, and availability of low greenhouse gas vehicle models. Costs were reduced in the FY2015 acquisition cycle by choosing the alternative fuel vehicles that had low incremental costs.

(D) Description of efforts to control fleet size and cost.

It is DOT policy to first acquire low-bid vehicles when available. When a new requirement has been identified, an economic analysis is conducted to determine the most economical type of vehicle to acquire. Commercial leasing shall only be authorized when there is a cost benefit.

The DOT fleet is operationally decentralized, with field activities throughout the U.S. and U.S. territories. Vehicle missions range from providing administrative support, airport, pipeline, railroad, highway inspections and improvement projects, and national airspace traffic control equipment routine and emergency maintenance.

Management of this geographically dispersed and diverse fleet operation is an ongoing challenge. DOT has put in place policies and procedures to direct its Fleet Management Council (FMC) to meet OMB goals regarding right sizing of the fleet, petroleum reduction and alternative fuels use increases. The FMC will supply the organizational leadership needed to implement the Fleet Management Plan (FMP). Through shared membership, the FMC will be linked to DOT's Chief Sustainability Officer. The organizational structure will be in place to ensure integration with the FMP and DOT's annual Strategic Sustainability Performance Plan (SSPP) by June 2015.

DOT has proposed reductions in vehicle types and will concentrate on ensuring a change in the mix of vehicles. DOT projects reductions in every vehicle category, especially trucks of all sizes. In future years, DOT plans to employ the usage of low speed electric vehicles (LSEVs). On a percentage basis, medium and light trucks face the greatest reductions. DOT will consider changes in FY2015 to its mix of vehicles, as intended by the VAM process and the Presidential Memorandum.

DOT has placed order restrictions on the Dodge Charger, Crown Victoria, Chevrolet Impala, Ford Expeditions and the Chevrolet Suburban or any similar type vehicles. The local customers in need of a waiver will submit a very strong justification to their agency fleet managers and Associate Administrators, who will request through the Department Fleet Manager to the Assistant Secretary for Administration for approval or disapproval. The Department Fleet Manager will provide the Secretary's final decision to the Agency Fleet Managers and Associate Administrators so that it will be shared with their local offices and GSA Fleet Service Representatives (GFSRs).

(E) Explanation of how law enforcement vehicles are categorized within the agency (See FMR Bulletin B- 33).

The majority of DOT law enforcement vehicles are assigned to the Office of Inspector General and National Highway Traffic Safety Administration (NHTSA), which engage in law enforcement activities such as investigations, surveillance and arrest. DOT has designated these vehicles as law enforcement (LE) vehicles because these vehicles are equipped with law enforcement equipment such as communication radios, sirens, and lighting packages. These vehicles are exempt from the 2005 Energy Policy Act fuel reporting requirement but are not exempt from the VAM requirements. DOT utilizes the LE vehicle classification system described in GSA Bulletin FMR B-33.

(F) Justification for restricted vehicles.

DOT met the requirement in the Presidential Memorandum, Fleet Performance, issued May 24, 2011 and the GSA issued FMR Bulletin B-32 by having a 100% alternative fuel executive vehicle fleet. DOT has no armored vehicles.

(G) Description of vehicle replacement strategy and results.

DOT will provided strict guidelines to GSA acquisitions outlining AFV placement. DOT will identify all potential light duty vehicles replacements by using the Department fleet management database.

DOT will work with GSA fleet acquisitions to find AFV replacements.

DOT projects it will eliminate 10% of conventional fuel vehicles from its fleet. DOT plans to continue to exchange the remaining vehicles with alternative fuel vehicles. In the past three years, DOT has surpassed the EPACT requirement of 75% of all covered light duty vehicles acquired being alternative fuel vehicles. DOT will continue to surpass this requirement in FY2016 by acquiring alternative vehicles to replace conventional vehicles in locations where biofuel (e.g., E85 or biodiesel) is available. In locations where biofuel is not available, DOT will consider acquiring AFVs that operate on other alternative fuels (e.g. electricity, natural gas, or propane), including hybrids and other low GHG-emitting vehicles. Dual-fueled vehicles capable of operating on either petroleum or alternative fuel will be placed in locations where the alternative fuel is available (to avoid the need for EPACT section 701 waivers).

DOT plans to meet E.O. 13693 which states, “agency fleet composition such that by December 31, 2020, zero emission vehicles or plug-in hybrid vehicles account for 20% of all new agency passenger vehicle acquisitions and by December 31, 2025, zero emission vehicles or plug-in hybrid vehicles account for 50% of all new agency passenger vehicles and including, where practicable, acquisition of such vehicles in other vehicle classes and counting double credit towards the targets in this section for such acquisitions; and planning for appropriate charging or refueling infrastructure or other power storage technologies for zero emission vehicles or plug-in hybrid vehicles and opportunities for ancillary services to support vehicle-to-grid technology”. DOT plan to meet this E.O. by replacing in FY17 – 12%; FY18 – 12%; FY19 – 9%; FY20 – 9%; FY21 – 7%; FY22 – 7%; FY23 – 7%; FY24 – 7%; FY25 – 7% of passenger vehicles with zero emission vehicles or plug-in hybrid vehicles. DOT would have achieved the E.O. 20% goal by FY – 19 with 24% replacement and the 50% goal by FY25 with 54% replacement.

(H) Description of the agency-wide Vehicle Management Information System (See FMR 102-34.340)

DOT has implemented a new automated fleet system called the Integrated Logistics Management System (ILMS), which enables monitoring and tracking of acquisitions/leasing of DOT vehicles. The system will also improve communication down to the user level by identifying the type of vehicle that is approved by the user’s headquarters office. The Departmental Fleet Managers will use this tool to employ early intervention measures to get and stay on track with AFV acquisitions. ILMS also has a unique feature that captures and projects petroleum increases and alternative fuel increases and displays this information in a chart to be used by Fleet Managers to determine if they are meeting the OMB scorecard requirement for fuel usage and reduction. This system, which was first developed in 2010 and updated periodically, meets most of the requirements cited in 41 CFR 102- 34.347, and GSA Bulletin FMR-15, Motor Vehicle Management. DOT is currently reviewing the capabilities of ILMS to continue to enhance its capabilities.

(I) Plans to increase the use of vehicle sharing.

DOT headquarters employees use the agency motor pool to share vehicles wherever possible. DOT is also considering motor pooling offices where Operating Administration offices are co-located. DOT employees are encouraged to use the city's public transportation system and carpooling options whenever possible. Additionally, DOT employs a shuttle system of two routes that services our locations within the national capital region. These shuttles are available to all Federal employees on a space-available basis.

(J) Impediments to optimal fleet management.

DOT's 2015 plan shows a 10% overall reduction, with reductions in every vehicle type. DOT plans to shift from larger to smaller vehicles (i.e., a greater reduction in large vehicles with increases in smaller ones with the intent to reduce in fleet size and petroleum consumption), which should be sufficient for achieving the agency's Scope 1 and 2 GHG reduction target by 2020.

In addition, there are also high incremental costs for electric vehicles and hybrids, while budgetary constraints, lack of E85 infrastructure, and also the nature of the DOT mission add specific limitations and requirements. The DOT mission plays a big part with optimizing the DOT's fleet program. OAs have maintenance and security responsibility in remote mountainous locations that require large 4X4 sport utility vehicles (SUVs) and trucks.

DOT has on several occasions replaced these large vehicles with smaller SUVs, trucks and sedans, only to later have to reacquire larger vehicles due to the need for height clearance, and lack of space and durability of the smaller vehicles in remote areas.

(K) Anomalies and possible errors.

Non – applicable at this time.

(L) Summary and contact information.

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Appendix C: FY 2016 Multimodal Access Plan

**U.S. Department of
Transportation Multimodal
Access Plan**

June 2016

Introduction

Under the *Implementing Instructions for Executive Order 13693, Planning for Federal Sustainability in the Next Decade (Implementing Instructions)*, the U.S. Department of Transportation (DOT) must develop an annual Multimodal Access Plan (MAP). This is an important way to reduce Scope 3 GHG emissions from Federal commuters to and from Federal facilities by encouraging more environmentally friendly or alternative transportation choices.

DOT is committed to enhancing sustainable commuting options for its employees. The Department has a long history of promoting sustainable commuting at its facilities and through its outward-facing work, such as through the Partnership for Sustainable Communities. Since this is the first version of the full DOT Multimodal Access Plan (MAP), the Department expects to make improvements and address any gaps in future updates.

This MAP addresses strategies within the following four areas:

- Workplace Charging
- Bicycling and other forms of Active Commuting
- Telecommuting and Teleconferencing Expansion
- Carpooling and the use of Public Transportation

Employee Workplace Charging Plan

The Fixing America's Surface Transportation Act (FAST Act) of 2015 authorizes the General Services Administration and other Federal agencies to install, operate, and maintain electric vehicle charging stations for authorized users of privately owned plug-in electric vehicles (PEVs) in parking areas in the custody, control, or administrative jurisdiction of the agency and requires the collection of fees to recover these costs.

The Department is committed to increasing employee workplace charging (WPC) opportunities across the nation where cost effective and technically feasible. DOT's goal is to provide 500 Electric Vehicle Supply Equipment (EVSEs) by 2025. The following section identifies the employee WPC actions DOT is examining over the next few years.

Summary of Strategy

- Establish partnerships to leverage WPC technical experience.
- Identify employee interest in WPC opportunities.
- Develop internal guidance or policy for WPC.
- Pilot test the use of existing unmetered, level-one (UML 1) electric vehicle (EV) charging (e.g., 120v wall outlets) at a parking facility.
- Pilot test the use of unmetered, level-two (UML 2) EV charging at sites with existing Federal EVs.

Details of Strategy

Planned Actions

The Department has identified a number of specific actions, as follows:

- Join the Department of Energy's Workplace Charging Challenge.
- Administer a limited-engagement survey of employee WPC interest.
- Consider the Council on Environmental Quality (CEQ) guidance to develop internal policy for WPC.
- Identify sites for pilot test of existing unmetered, level 1 (UML 1) EV charging.
- Identify Federal fleet sites for pilot test of existing unmetered, level 2 (UML 2) charging for employee EVs.

Roles and Responsibilities of Key Agency Personnel

The following individuals are involved with the identification, implementation, operation and maintenance and reporting of WPC within DOT:

- **DOT Chief Sustainability Officer:** Serves as the senior official responsible for the strategy development, implementation, day-to-day management, performance, and reporting of WPC.
- **DOT Assistant Secretary for Administration (ASA):** Provides departmental leadership and develops DOT policy on issues related to WPC. Also, reviews and approves OA fleet management strategies (e.g. waivers and exemptions, acquisitions of EVs, etc.).
- **DOT Senior Real Property Officer:** Oversees the siting, acquisition, and operations of DOT facilities and the integration of WPC planning initiatives at regional and local DOT facilities.
- **DOT Assistant Secretary for Budget and Programs/Chief Financial Officer (CFO):** Serves as the principal advisor to the Secretary of Transportation on the development, review, and presentation of the Department's budget resource requirements and allocations. The CFO provides oversight of the Department's program performance and is responsible for all aspects of financial management.
- **DOT Office of the Secretary of Transportation (OST), Office of Sustainability and Safety Management (OSSM):** Specific responsibilities related to WPC include the following:
 - Issues WPC policies.
 - Provides oversight, evaluation, methodology, and assistance for implementation of WPC policy.
 - Is responsible for data aggregation and assembly of WPC performance reports.
- **DOT Fleet Manager:** Specific responsibilities related to WPC include the following:
 - Ensures that the overall DOT fleet meets or exceeds all applicable fleet management requirements, including DOT-specific goals and requirements for WPC.
 - Provides support to OA fleet managers in selecting fleet management strategies including WPC implementation.
 - Provides recommendations to ASA on OA fleet management strategies (e.g. waivers and exemptions, acquisitions, WPC implementation etc.).
 - Refines fleet management strategies (including WPC implementation) based on performance and provides recommendations to ASA.
 - Analyzes and publishes to OAs the results of data collection and reporting for trends.
- **DOT Office of the General Counsel:** Interprets and provides guidance on new and existing statutes, regulations, executive orders, and other requirements addressing fleet management and WPC. Reviews contracts and ensures they meet all applicable statutes, regulations, executive orders, and other requirements.
- **OA Administrator:** Ensures OA conforms with and implements all applicable requirements for fleet sustainability including WPC. Additionally, the OA Administrator may delegate responsibilities as necessary to meet the requirements.
- **OA Fleet Manager:** Identifies and implements the optimal fleet management strategy.
- **OA Facility Manager:** Works with the OA Fleet Manager to implement fleet management strategies including WPC in DOT buildings.

- **OA Sustainability Staff:** Coordinates with OSSM on WPC policies and data aggregation in OA facilities.
- **OA Human Resources Staff and Union Representatives:** Represent employee interests and provide access to information.

Outreach to Agency Employees and Visitors

Communication and outreach initiatives are essential to the continued expansion of WPC opportunities at DOT facilities. Specific communication and outreach initiatives to Federal employees and visitors include the following:

- Post WPC human interest stories on internal DOT-wide website.
- Issue official announcements of DOT partnerships and pilot program initiatives.
- Draft policy for implementation of WPC at DOT buildings.

EV Charging Access

To expand the number of WPC opportunities at DOT buildings, the following access considerations may be implemented (dependent on site operational characteristics):

- Provide employees with information and explanation of DOT WPC pilot program (where applicable).
- Develop signs and clearly mark parking spots with access to employee WPC.
- Make employees and authorized users aware of the rates they can pay to use charging infrastructure at Federal parking facilities.

Assessing Demand for Employees and Authorized Users Workplace Charging Needs

As part of the effort to increase WPC opportunities, the Department may administer a limited-engagement survey of employee WPC interest/needs (dependent on site operational characteristics).

Ensuring Continued Success

The Department is currently considering establishing annual goals for WPC implementation which may include electric vehicle supply equipment (EVSE) installation targets in consultation with OAs. Annually, the Department may track performance and provide status reports as required by partnership agreement or other regulation/guidance documents.

Resources

- The Department of Energy's Workplace Charging Challenge (WCC) website (<http://energy.gov/eere/vehicles/ev-everywhere-workplace-charging-challenge>) has numerous resources to help guide an agency through the development of a

WPC. The DOT joined as the first Federal partner of the WCC in order to gain additional technical assistance from DOE.

- The CEQ will be issued guidance in June 2016 for unmetered, level one charging for Federal employees and authorized users (https://www.whitehouse.gov/sites/default/files/guidance_for_Federal_agency_implementation_of_workplace_charging_-_11_ch....pdf), and plans to issue subsequent guidance for metered level one, metered level two, and DC Fast Charging.

Bicycling and Active Commuter Program

The *Implementing Instructions* call for agencies to consider recommendations from the revised Interagency Task Force on Bicycling and Active Transportation report. Related CEQ guidance encourages agencies to develop a Bicycling and Active Commuter Program (BACP). DOT is committed to increasing opportunities for employees to commute via active means, such as bicycling and walking. This reduces Scope 3 emissions and improves quality of life for employees. The following section identifies the related actions DOT is examining over the next few years.

Summary of Strategy

To implement the Administration's goal of establishing a clean energy economy, DOT is pursuing efforts to establish and support bicycling and other active commuting and travel at its facilities. DOT's overarching policy is to encourage employees and other stakeholders to use low emission commuting options when feasible, which includes bicycles. DOT recognizes bicycling and other forms of active commuting as highly efficient modes of transportation, providing a wide range of benefits, including energy conservation, improved air quality, reduction in transportation, other related costs, and improved personal health.

DOT has established two subsidized initiatives independent of the Qualified Transportation Fringe Benefit (qualified bicycle commuting reimbursement). These include corporate membership with Capital Bike-share for DOT HQ employees and the Active Bicycle Commuting Subsidy (ABC). DOT created these initiatives to promote and expand the use of bicycles for commuting purposes. Additionally, these initiatives provide integrated transportation options at a low cost to riders and satisfy a need for increased mobility options. These ideas leverage what is currently available in communities while providing a level of accountability and consistency with current legislation.

Details of Strategy

Planned Actions

DOT's TRANServe Office will provide baseline data on employee commuting including active transportation. Analysis of the data will reveal the best use of resources to encourage, enhance,

or expand bicycle use, e.g., collaborate with other Federal agencies, broaden DOT bicycle interest, etc. Anticipated actions stemming from this study include:

- Draft agency BACP.
- Establish agency-wide transit and bicycle days for commuters and for local travel between meetings.
- Establish a DOT Bicycle Community of Practice to promote, advertise, inform employees of options on a scheduled basis.

Roles and Responsibilities of Key Agency Personnel

The following individuals are involved with the advancement of this strategy within DOT:

- **DOT Chief Sustainability Officer (CSO):** Responsible for development, implementation and management of the BACP.
- **DOT Director of Financial Management and Transit Benefit Programs:** Responsible for data, analysis, and recommendations to the CSO.

Outreach to Agency Employees and Visitors

Communication and outreach initiatives are essential to the continued advancement of active commuting. Specific communication and outreach initiatives include the following:

- Collaborate with the DOT Green Team to sponsor classes on bicycle safety and security tips.
- Include bicycling and other forms of active commuting as part of agency employees' available online training courses.
- Participate in challenge programs to have friendly competitions related to bicycle commuting across DOT offices.
- Provide awareness materials during new employee orientation.

Incentivizing Bicycle Usage and other Forms of Active Commuting

DOT's corporate membership with Capital Bike-share, which is currently a pilot program for only DOT HQ employees, provides an alternative form of local work travel, promotes active commuting, and supports the agency Work Life Health and Wellness Program for Headquarters employees by encouraging physical activity during the workday. DOT HQ employees are encouraged to apply through the fitness center and positively indicate they will use the membership for local work travel, active commuting, and physical activity during the workday to support Health and Wellness.

In order to further encourage sustainable commuting practices, DOT established a subsidy for use in conjunction with the transit pass as described in 26 U.S.C. 132(f). This means that an employee may travel on his or her bicycle to a local transit authority point of entry; park the bicycle and take transit to and from work riding their bicycle home to complete the commute. The employee should certify the expense and may use the Active Bicycle Commuting (ABC)

subsidy to defray bicycle travel cost by providing a bicycle related receipt. The reimbursement for the expense may be used with the transit benefit and should be recorded as a taxable event.

Assessing Demand for Bicycle and other Active Commuter Needs

DOT plans to measure participation in the recent DOT bicycle initiatives, including the Capital Bike share and the ABC to assess demand.

Ensuring Continued Success

Periodically, DOT will conduct agency self-assessments to gauge success of a BACP.

Resources

The 2010 document, *Implementing a Successful Bicycle and Active Commuting Program*, from the Inter-Agency Task Force on Bicycling and Active Transportation, provides information to support establishment of a BACP. The forthcoming update will provide more resources.

Telecommuting and Teleconferencing Support

The *Implementing Instructions* call for agencies to promote telecommuting and teleconferencing through the development of a Telecommuting and Teleconferencing Plan or other means. DOT is committed to increasing telework and teleconference opportunities where feasible, based on mission-critical duty requirements. Similar to active commuting, encouraging and supporting employee participation in telework and alternative schedules can help reduce Scope 3 emissions and can enhance quality of work and life for employees. The following section identifies the related actions DOT is examining over the next few years.

Summary of Strategy

- Encourage the use of telework and alternative work schedules (AWS) opportunities along with technology solutions to support telework and virtual meetings as a primary strategy to reduce Scope 3 GHG emissions.
- Identify and remove obstacles to telework and teleconferencing, such as lack of acceptance or information technology limitations.
- Monitor the results of the annual Federal Employee Viewpoint Survey and internal telework participation reports for information to assess progress, identify remaining barriers, and ensure continued success.
- Reduce employee business air travel, replacing it with teleconferencing and virtual meetings, where feasible.

Details of Strategy

Planned Actions

The Department has identified a number of specific actions, as follows:

- Develop and deploy a preliminary employee commuter emissions reduction plan, including support for teleworking and AWS.
- Explore resources and possibilities to support regional or local planned telework exercises. With the approval of former Secretaries of Transportation, DOT has conducted two major telework exercises in the past, both involving DOT Headquarters employees in the Washington, DC area.
- Combine the promotion of telework with other initiatives such as *Reduce the Footprint* to make a stronger business case for more employee telework.
- Mine data from the Federal Employee Viewpoint Survey to identify and address any remaining obstacles to teleworking.
- Engage with the Chief Information Officer to address any technology-related obstacles to teleworking and teleconferencing.
- Support implementing a range of practices to reduce business travel (ground and air) including maintaining travel budget restrictions, installing technologies to facilitate virtual meetings, and adding language to travel request forms to ensure that alternatives to travel are considered.

Roles and Responsibilities of Key Agency Personnel

The following individuals are involved with the advancement of this strategy within DOT:

- **DOT CSO:** Serves as the senior official responsible for coordination, strategy development, and reporting.
- **DOT Departmental Telework Program Manager:** Has responsibility for strategy development, implementation, performance, and reporting, including data, analysis, and recommendations to the CSO.
- **DOT Chief Information Officer:** Provides leadership to address information technology obstacles to telework and teleconferencing on an as-needed basis.
- **Managers:** Evaluate opportunities for employee telework and review and approve telework agreements, as appropriate.
- **Employees:** Develop and discuss telework agreements with managers.

Outreach to Agency Employees

Communication and outreach initiatives are essential to the continued advancement of telecommuting and teleconferencing. Specific communication and outreach initiatives include the following:

- Increase supervisor's awareness of the benefits from telecommuting and teleconferencing, and communicate its DOT priority status.
- Increase employees awareness of potential cost savings to them from avoided commutes.
- Distribute information regarding remote connection capabilities to support telework.
- Utilize web-based training to avoid training-related travel.

Incentivizing Management Support for Telecommuting and Teleconferencing

The Department will research and explore ways to reduce management resistance barriers to employee participation in telework. Managers and supervisors who approve telework arrangements generally must be encouraged to authorize more instances of telework for their direct reports. As mentioned, relating telework to other initiatives such as *Reduce the Footprint* may make a stronger business case for managers to approve an optimal frequency of telework for employees under their authority.

Assessing Demand for Telecommuting and Teleconferencing

DOT has assessed demand through internal surveys, Ideahub input, and the Employee Viewpoint Survey and is confident that more employees want to telework and employees who telework want to increase frequency. Future assessments will attempt to identify obstacles (supervisory approval, unreliable/slow remote network connections, etc.) that prevent employees from teleworking more. This will provide information to guide concrete solutions.

Ensuring Continued Success

DOT plans to monitor the results of the annual Federal Employee Viewpoint Survey and internal telework participation reports for information, including:

- The extent to which employees feel they have been notified of their telework-eligibility status.
- Employees' self-reported perception of how frequently they telework.
- Employee satisfaction with telework.
- The number of telework-eligible employees at DOT and their frequency of participation in telework.

Resources

- DOT plans to evaluate resources provided by the Office of Personnel Management's telework.gov site for applicability to DOT's telework support efforts.
- OAs each have technology in place to support virtual meetings through webinar rooms and teleconferences.

Carpooling and the use of Public Transportation

The *Implementing Instructions* call for agencies to consider new strategies to incentivize carpooling and the use of public transportation to and from Federal facilities. Related CEQ guidance encourages the development of a Carpooling and Transit Expansion Plan (CTEP). DOT is committed to increasing opportunities for employees to commute via carpool and public transit. Similar to active commuting, an increase in these forms of commuting will reduce Scope 3 emissions and can enhance quality of life for employees. The following section identifies the related actions DOT is examining over the next few years.

Summary of Strategy

The Department's overarching policy is to encourage employees and other stakeholders to use mass transit and low emission commuting options. The Department and TRANServe recognizes carpooling and other forms of active commuting as highly efficient modes of transportation, providing a wide range of benefits, including energy conservation, improved air quality, reduction in transportation and other related costs, etc. To implement the Administration's goal of establishing a clean energy economy, DOT will pursue efforts to establish and support carpooling, bicycling, and other active commuting and travel at its facilities. Consistent with DOT's overarching policy of urging employees and others to utilize mass transit more liberally, TRANServe has established a hierarchical parking policy that favors carpool over single-occupant vehicles.

Details of Strategy

Planned Actions

TRANServe will provide baseline data on commuting to include mass transit, van pool, carpool, bicycle, etc. Analysis of the data will reveal the best use of resources to encourage, enhance or expand carpooling and transit use. Anticipated actions stemming from this study include:

- Draft agency CTEP.
- Establish agency-wide transit and carpool days for commuters and for local travel between meetings.
- Establish a modal community of practice car-pool innovation team to inform employees of options on a scheduled basis.

Roles and Responsibilities of Key Agency Personnel

The following individuals are involved with the advancement of this strategy within DOT:

- **DOT CSO:** Responsible for development, implementation and management of the CTEP.
- **DOT Director of Financial Management and Transit Benefit Programs:** Responsible for data, analysis, and recommendations to the CSO.

Outreach to Agency Employees and Visitors

Communication and outreach initiatives are essential to the continued support of carpool and public transit commutes. Specific communication and outreach initiatives include the following:

- Continue education through DOT on-boarding efforts and annual transit benefit training.
- Conduct monthly outreach on carpooling efforts in concert with Commuter Connections.

Assessing Demand for Carpooling and Transit Services

DOT assesses transit use through the data held in the TRANServe Parking and Transit system.

Ensuring Continued Success

DOT plans to conduct agency self-assessments periodically to gauge success of a CTEP.

Resources

- The American Public Transportation Association’s publication “Evaluating Public Transportation Health Benefits” can provide Federal agencies with useful information for their employees about the health benefits of using transit.
- Commuter Connections offers ridematching for carpools and vanpools and administers the Guaranteed Ride Home program. Commuter Connections can provide the best commute options to get to work and can help employees get home in an unexpected emergency. <http://www.commuterconnections.org/>

Conclusion

DOT is committed to pursuing the strategies described within this plan, such as increasing opportunities for employees to charge EV at work, telework, commute via active means, such as bicycling and walking, or commute via green transportation, such as public transportation, carpooling and vanpooling. Each of these strategies will help the Department reduce its Scope 3 emissions and can improve quality of life for employees. DOT will seek out opportunities to improve this document in future updates. Since this is the first full version of the DOT MAP, gaps and opportunities may emerge over time. The Department looks forward to working collectively to address those gaps and capitalize on those opportunities.