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CR Continuing Resolution FTE Full Time Equivalent GF General Fund TF Trust Fund SF Special Fund FAST Fixing America's Surface Transportation Act of 2015 (P.L. 114-94)

OVERVIEW OF THE PRESIDENT'S FY 2019 BUDGET

DEPARTMENT OF TRANSPORTATION

- The President is requesting \$76.5 billion for the Department of Transportation (DOT). This is about \$500 million less than FY 2017.
- The FY 2019 resources support **54,714** personnel, which is 38 more than FY 2017.
- The Department's budget is composed of approximately 20 percent discretionary general fund dollars and 80 percent mandatory trust fund dollars.
- The Department's mandatory programs are funded at **\$60.9** billion, which is about **\$2.3** billion more than in FY 2017.
 - The budget fully funds surface transportation programs consistent with the Fixing America's Surface Transportation (FAST) Act authorized funding.
 - The Federal Aviation Administration's (FAA) Airport Improvement Grants are also funded at the authorized level of \$3.4 billion.
- ▶ The Department's discretionary programs are funded at \$15.6 billion, which is about \$2.9 billion less than FY 2017. This primarily reflects reductions in Amtrak, the elimination of funding for the National Infrastructure Investments (otherwise known as TIGER) grant program, and cuts to the transit Capital Investment Grants program.
- The President's Budget includes **\$200 billion** to support his Infrastructure Proposal. This funding is not included with the Department of Transportation funding recommendations but is included in the President's overall request.
- The President's Budget also proposes to begin a multiyear effort to modernize FAA by creating a new independent cooperative organization that will work closely with the Department.
- The President's Budget proposes to modernize and reform the Essential Air Service program.

SECRETARIAL PRIORITIES AND DOT ACCOMPLISHMENTS

Secretarial Priority

DOT Accomplishments

Safety, the highest priority

In 2017, numerous cities and States were faced with unforeseen accidents and disasters that severely affected transportation networks essential to the dayto-day activities of millions of Americans. In these instances, the Department of Transportation, in coordination with Federal partners and State and local agencies, responded rapidly to begin the work necessary to reestablish the safe movement of people, goods, and services. For instance:

- ▶ In 2017, the Department awarded \$197 million in Positive Train Control (PTC) grants for 17 projects in 13 States to assist intercity and commuter railroads with moving forward with the implementation of this life-saving rail safety technology. The Federal Railroad Administration (FRA) and the Federal Transit Administration (FTA) continue to collaborate with rail stakeholders to work towards implementing PTC as broadly as possible before the December 31, 2018 statutory deadline.
- On March 31, 2017, a fire caused the collapse of a bridge and about 700 feet of I-85 in Atlanta, GA. Within hours, Secretary Chao and the Federal Highway Administration (FHWA) assisted Georgia in conducting a supply chain audit identifying materials close by to rebuild the bridge. Within 12 hours, after approvals from the President and Secretary Chao, the FHWA awarded Georgia Department of Transportation (GDOT) \$10 million in quick release Emergency Relief (ER) funds to support cleanup, immediate emergency repairs, and traffic management operations. The immediate release of these funds enabled GDOT to initiate repairs within 36 hours. FHWA provided technical support to GDOT throughout the process including sources of materials. The rapid release of these funds enabled the repairs to begin within days and, through a series of innovative best value contracts and quick response actions, the bridge reopened under budget and ahead of schedule on May 18, 2017.
- When Hurricanes Harvey, Maria, and Irma devastated areas of Texas, Florida, Puerto Rico, and the U.S. Virgin Islands, numerous DOT agencies promptly responded to aid in the ongoing recovery. FHWA quickly awarded nearly \$100 million in ER funding to begin rebuilding affected roads and highways, and both FHWA and FTA personnel were on-site in all affected areas to assist local agencies in developing damage assessments. Likewise, the FAA immediately began assessing damage and establishing interim solutions to reestablish air traffic control services to Puerto Rico. The Maritime Administration (MARAD) Strategic Sealift efforts were also critical to the Hurricane response as multiple training ships were quickly deployed to provide beds, meals, and support services to Federal responders, as well as deliver supplies and emergency equipment.

Secretarial Priority

Safety, the highest priority (continued)

DOT Accomplishments

- When the Federal Biscay, a bulk freighter vessel, became frozen in place in the St. Lawrence Seaway at the end of the 2017 navigation season, the dedicated staff of the Saint Lawrence Seaway Development Corporation (SLSDC) worked around the clock for several days using pressurized steam to free the vessel. SLSDC's efforts ensured that four other ships did not likewise become stranded on the Seaway, and allowed SLSDC to properly winterize a lock system that contributes to over \$30 billion in annual economic activity.
- In 2017, the Pipeline and Hazardous Materials Safety Administration (PHMSA) implemented a new Underground Natural Gas Storage safety program. In standing up the new program, PHMSA established industry-wide standards, developed new inspector training, and provided technical assistance to stakeholders to ensure proper compliance with program requirements.

Secretarial Priority

Revitalizing and rebuilding our critical infrastructure

DOT Accomplishments

In 2017, the Department continued its efforts to coordinate with State and local partners to deliver critical infrastructure projects that localities depend on for timely commutes and delivery of goods. The Department has also made a point of ensuring that rural communities benefit from infrastructure funding. A few of the many infrastructure initiatives include:

- This past summer, DOT launched the Infrastructure for Rebuilding America (INFRA) Grant program with criteria that aims to increase investment by non-Federal stakeholders. The INFRA Grant program also ensures that at least a quarter of available INFRA Grant funding will be awarded to deliver critical infrastructure projects benefiting rural communities.
- ▶ In 2017, the Department's Build America Bureau obligated nearly \$300 million in Transportation Infrastructure Finance and Innovation Act (TIFIA) subsidy funds, which supported more than \$13 billion in rail, highway, and transit projects.
- In 2017, in addition to providing \$56 billion in formula grants for America's highways, airports, and transit systems, the Department awarded over \$2 billion in discretionary grant funding to support numerous transportation infrastructure projects, including aviation infrastructure, capital transit projects, and small shipyards.

Secretarial Priority

Preparing for the future by encouraging innovation

DOT Accomplishments

In 2017, the Department worked closely with various stakeholders to continue to advance promising innovative transportation technologies that have the potential not only to save lives, but to reduce the cost and increase the speed of the movement of people and goods. Examples include:

Secretarial Priority

Preparing for the future by encouraging innovation (continued)

DOT Accomplishments

- In September 2017, the National Highway Traffic Safety Administration (NHTSA) released new guidance, Automated Driving Systems (ADS): A Vision for Safety 2.0, to further promote the advancement of automated vehicles. This non-regulatory approach will continue to facilitate innovation that promises to not only reduce roadway injuries and fatalities, but to improve transportation access and reduce travel times.
- In September 2017, FHWA and the Federal Motor Carrier Safety Administration (FMCSA) successfully conducted a demonstration of automated truck platooning and inspection technologies. The demonstration, using cooperative adaptive cruise control, allowed three freight trucks in the DC metro area to drive as close as 50 feet apart at 55 miles an hour. Potential benefits of such technology include lower shipping costs and improved fuel economy while maintaining safety.
- This past fall, FAA launched the Unmanned Aircraft System (UAS) Integration Pilot Program to accelerate the integration of drones into the national airspace. This program, which represents an opportunity for local governments to partner with leading private sector entities, will allow communities to explore advanced UAS services such as package deliveries or commercial aerial surveys.

Secretarial Priority

Enhancing Accountability Through Regulatory Reform

DOT Accomplishments

By working to reduce regulatory burdens, DOT has accelerated project delivery and reduced project costs.

- This past fall, the Department withdrew the cumbersome Metropolitan Planning Organization (MPO) Coordination rule, which was previously repealed by Congress. The withdrawal of the MPO coordination rule ensures that local officials retain the ability to properly plan local infrastructure initiatives, and will save localities across the country over \$86 million annually.
- FHWA, FRA, and FTA released guidance highlighting new environmental review flexibilities. This guidance clarifies the FAST Act's amendments to their statutory environmental review process (23 U.S.C. 139), which is designed to reduce environmental evaluation times and accelerate project approvals.
- FTA's newly proposed Private Investment Project Procedures for capital transit projects will lead to more effective approaches in encouraging private investment in areas such as project planning, construction, maintenance, and operations.

INFRASTRUCTURE PLAN PRINCIPLES

he President has called for at least \$1 trillion in infrastructure investment nationwide that will connect people to jobs, increase the efficiency of delivering goods, and improve the safety and well-being of all Americans. This goal will not be achieved by Federal investment alone, but rather requires States, local governments, and the private sector to share responsibility and accountability in contributing to our Nation's future. To achieve the President's target of at least \$1 trillion in infrastructure investment, the Administration has proposed \$200 billion in Federal funding for core infrastructure. The Administration's proposed investments and reforms will modernize our infrastructure, strengthen our economy, increase our international competitiveness, and improve the quality of life of all Americans.

The Administration's plan makes targeted investments and reforms designed to transform our transportation system. Key actions include:

Dedicate Federal Funding to
Rural Needs: The Administration is committed to addressing
the infrastructure needs of rural
America by dedicating at least
25 percent of the proposed
Federal infrastructure funding to
grants that support rural projects,

- including funding to U.S. territories and Tribal communities. By improving upon and expanding existing programs, the Administration will be able to improve economic competitiveness, and quality of life for rural Americans.
- Incentives Initiative: This competitive program will provide targeted Federal funding to projects that demonstrate innovative revenue generation, life-cycle cost management, and cost-effective approaches to project delivery. This initiative will begin to address the challenges presented by our outdated funding structure, developing projects that will accelerate the modernization of our infrastructure.
- Projects Program: This competitive program would provide Federal investments and technical assistance to private firms and nonprofit organizations that use transformative technologies and techniques to improve or reduce the costs of transportation services. This program will quickly fill innovation gaps, and yield technologies that may solve our critical issues surrounding safety, congestion, and efficiency.

- Leverage Federal Funds for **Federal Projects of Regional** and National Significance: By leveraging Federal funding, the Department expects to expand the total resources used to build and restore infrastructure, rather than have Federal dollars merely substitute for non-Federal funds. To leverage Federal transportation funding, the Administration proposes a set of reforms including: eliminating prohibitions on tolling of Federal-aid highways; removing restrictions on commercialization of interstate rest areas; expanding Federal credit
- and innovative finance programs such as TIFIA, private activity bonds (PABs), and the Railroad Rehabilitation and Improvement Financing Program (RRIF), and encouraging the use of value capture and private investment in transit.
- **Review and Permitting:** To accelerate the delivery of much-needed transportation projects, the Administration calls for the modernization of the environmental review and permitting process through a

series of reforms.

Accelerate Environmental

ENHANCING ACCOUNTABILITY THROUGH REGULATORY REFORM

n February 24, 2017, President Trump signed an executive order directing each Federal agency to take specific actions to alleviate unnecessary regulatory burdens. In response, the Department of Transportation formed a Regulatory Reform Task Force, named a Regulatory Reform Officer, and quickly began work on regulatory reform. The Regulatory Reform Task Force, along with the Department's own Infrastructure Task Force, meets regularly and works closely with the Operating Administrations to identify and facilitate the elimination of unnecessary regulatory burdens without compromising the Department's core safety mission.

The Department has made and will continue to make significant progress in implementing the President's regulatory reform agenda without compromising safety. Key actions include:

Burden: Rules issued under this Administration in FY 2017 resulted in \$21.9 million in annualized cost savings for the U.S. economy, and eliminated or significantly revised more than a dozen regulations. These cost savings were not only due to decisions to halt costly and inefficient rules from going forward, but were also a result of a significant increase in deregulatory

actions. This progress in advancing regulatory reform was accomplished through several measures, always with an eye on preserving safety and based on sound economic analysis, including: (1) reviewing and reconsidering several proposed regulatory actions that were pending on January 20, 2017; (2) identifying deregulatory actions and instituting new procedures to vet new rulemaking proposals; and (3) seeking stakeholder input to assist in eliminating unnecessary regulatory burdens. Today, in stark contrast to the situation in 2016, most of the Department's active rulemakings are deregulatory in nature.

Streamline Infrastructure Permitting: In conjunction with its efforts on infrastructure, the Department's Regulatory Reform and Infrastructure Task Forces will continue to work together to identify and eliminate rules that unnecessarily impose costly and time-consuming burdens on those seeking permits to build new infrastructure. By these measures, the Department expects to accelerate environmental review and permitting, and thereby help ensure that scarce taxpayer resources are spent in a better and more efficient manner.

- **Enable Innovation:** This Administration is committed to fostering innovation by lifting regulatory barriers to entry and enabling innovative and exciting new uses of transportation technology. The Department has a number of pending deregulatory or enabling regulatory actions that will further support innovation in the transportation sector. For example, NHTSA is working on reducing regulatory barriers to technology innovation, including the development of autonomous vehicles. Similarly, the FAA is working to enable, safely and efficiently, the integration of unmanned aircraft systems into the National Airspace System. In both cases, the Department hopes to be proactive in providing innovators the guidance they need to make long-term investments, while eliminating regulatory barriers otherwise facing new entrants into the transportation space.
- **Rationalize Fuel Economy Standards:** NHTSA is currently taking steps to ensure that its Corporate Average Fuel Economy (CAFE) standards better reflect current trends in the automotive, technological, and energy markets, while also working to ensure that consumers can choose safe, affordable, and efficient vehicles that meet their families' needs. In July 2017, NHTSA requested

comment on whether to revise CAFE penalty rates that the agency had proposed to increase significantly in 2016, and the agency anticipates issuing a notice of proposed rulemaking (NPRM) on this issue soon. In addition, NHTSA is currently working with the Environmental Protection Agency on new standards that appropriately account for consumer demand, vehicular safety, affordability, economic impacts on domestic manufacturing, fuel savings, and emissions reductions. The agency expects to issue an NPRM in the spring of 2018

Continue Making Deregulatory

Progress: Going forward, the Department remains focused on alleviating unnecessary regulatory burdens to spur economic activity and foster innovation without compromising the Department's safety mission. In particular, the Department plans to: (1) continue to monitor progress on existing deregulatory initiatives and continue to evaluate DOT regulations to ensure they do not impose an undue burden on the public without compromising the Department's safety objectives; (2) formalize regulatory reform as a strategic objective by including it in the U.S. DOT Strategic Plan; and (3) evaluate and implement, where appropriate, the more than 2,800 comments received

from the public in response to an October 2, 2017 Federal Register notice asking for public input on actions that may alleviate or eliminate regulatory burdens or burdens on domestically produced energy resources. The

Department expects to finalize dozens of deregulatory actions in 2018 alone, and now anticipates that its new rules will, in present value terms, realize hundreds of millions of dollars in net savings during FY 2018.

PROMOTING INNOVATION AND TECHNOLOGY

nder Secretary Chao's guidance, DOT is leading the development and deployment of innovative practices and technologies that improve the safety and performance of the Nation's transportation system. The following are highlights of efforts supported by the President's FY 2019 Budget request.

Automated Driving System (ADS) Technology

- ► The Office of the Secretary is spearheading the Department's efforts to enable the safe testing and deployment of automated driving technology by engaging with stakeholders and industry to identify regulatory barriers through requests for comments and request for information as part of the Automated Vehicle Guidelines (AV) 3.0 initiative. In parallel, AV 3.0 also seeks input from stakeholders and industry to identity near-term research, pilot programs, and exemptions needed to accelerate the deployment of AVs across all modes of transportation.
- ► The budget for NHTSA includes \$10 million to accelerate the safe testing and deployment of ADS, commonly referred to as automated or self-driving vehicles. The program funds the development of new tools and methods allowing NHTSA to evaluate rapidly emerging technologies

- from both a crash avoidance and occupant protection perspective. NHTSA is developing advanced simulation methods and surrogate vehicles that can be used on closed course test tracks. The Agency is also adapting existing crash test dummies and associated crash tests. Long term, NHTSA will develop system safety performance tests for ADSs, address occupant protection safety for alternative seating configurations, evaluate individual component and sub-function safety of ADSs, and adapt safety standards for compatibility with future ADSs.
- ► In conjunction with NHTSA, FHWA's Connected Vehicle (CV) program is conducting research on both vehicle-to-vehicle and vehicle-to-infrastructure (e.g., traffic signals). FHWA is looking comprehensively at ways to improve safety for drivers, pedestrians, and bikers, as well as to reduce traffic congestion on roads and highways. FHWA's research addresses key technological and institutional barriers to integrating automation technologies into today's transportation system. The Connected Vehicle Pilot Deployment Program funds the deployment of new technologies in select communities to test CV systems in real world environments.
- For FY 2019, the budget for FMCSA requests \$4.6 million

- for an ADS initiative to enable the safe operation of highly automated commercial vehicles on the Nation's highways. Building on the experience from prior truck platooning demonstrations, FMCSA will support research on technologies that evaluate vehicle automation such as testing critical brake performance. FMCSA will also develop safety performance baseline data to better assess autonomous-related vehicle performance during pilot deployments.
- As part of its \$6 million Mobility Innovation Program, FTA will assess and prioritize vehicle automation technologies for use in the public transportation sector. FTA will develop plans for future transit automation that will include the demonstration projects of Advanced Driver Assistance Systems (ADAS) and automated transit shuttles.

Drones

► The budget for FAA includes \$73 million to develop standards for the safe operation of Unmanned Aircraft Systems (UAS), commonly referred to as drones. Innovations in UAS technology have fueled dramatic growth, with FAA's UAS registry recently logging 1 million users. FAA is taking an incremental approach to UAS integration, seeking to balance public safety and security concerns with the flexibility for innovation

- To simplify and streamline the authorization of UAS operations, FAA is implementing new systems including UAS Facility Maps and a Low-Altitude Authorization and Notification Capability (LAANC). LAANC is the first UAS tool that delivers drone information to air traffic control and is the first step in developing Unmanned Aircraft Systems Traffic Management System (UTM). LAANC is a prototype system that FAA expects will ultimately provide near real-time processing of airspace authorization requests for UAS operators nationwide. The system automatically approves most requests to operate in specific areas of airspace below designated altitudes.
- ► FAA is also working with National Aeronautics and Space Administration and industry to research an UTM system to manage UAS traffic. The focus of this research is small UAS operations, primarily below 400 feet, in airspace that contains low-density manned aircraft operations. Future phases of UAS work will facilitate UAS operations over people, beyond the operator's visual range, as well as the transportation of people and property.

Infrastructure

Through its Every Day Counts initiative, FHWA advances

- innovations to speed the construction of highway projects. For example, FHWA is championing e-Construction technology, which is a paperless construction administration delivery process that saves time and money by eliminating paperwork and improving communication through faster approvals, enhanced document tracking, and increased transparency.
- FHWA is also advancing innovative engineering solutions such as Slide-in Bridge Construction (SIBC). SIBC entails building a new bridge next to an existing bridge, out of the way of traffic. This approach allows bridge replacement to take a matter of hours or days instead of months, and saves drivers from dealing with lane closures and detours.
- As part of its \$5 million infrastructure research effort, FTA will test the use of advanced sensor technologies to monitor the "health" of transit infrastructure assets. New materials including nanoparticles, recycled polymers, and composites plus innovative construction techniques, give transit agencies new asset monitoring options. Major advances in sensor technology include strain gauges and unmanned vehicles coupled with increased data analytic tools such as hand-held field devices. These tools promise to yield real-time data about fixed and moving

- infrastructure, which can be used to complement existing visual inspections.
- The budget for PHMSA's Pipeline Safety request includes \$6 million for research and development that continues to target innovative solutions that create measurable improvements in pipeline safety. Among the initiatives continuing into FY 2019 are those that address corrosion, a common cause of pipeline failure. PHMSA will continue research efforts into the development and implementation of new high-performance multifunctional composite coatings, aiming for lifetime prevention and mitigation of internal pipeline corrosion for onshore gas and liquid transmission pipelines. PHMSA will also continue work on the development of internal pipeline inspection tools for small diameter pipelines that are not accessible with current technologies.
- FRA will invest \$2 million in autonomous track inspection technologies that work with trains using unattended instruments with minimal direct involvement from operators. The technology increases inspection frequencies and the amount of track inspected annually at significantly reduced cost compared to manned inspection vehicles, thereby improving the overall safety of the Nation's rail system.

MANAGEMENT REFORMS

The Administration is undertaking ■ a bold management agenda to improve the performance of Federal agencies and provide results to American taxpayers. The Department of Transportation is leading the way by reorganizing its programs, consolidating the delivery of shared services, and comprehensively evaluating the performance of its programs.

The President's budget incorporates key reforms in support of Executive Order 13781, which requires each agency to prepare a plan to reorganize the agency to improve its efficiency, effectiveness, and accountability. DOT proposes to:

- Modernize Air Traffic Man**agement:** The Administration seeks a multiyear reauthorization of FAA that shifts the sizeable air traffic control function out of the FAA to an independent nongovernmental cooperative organization. This proposal will make the Nation's aviation system more efficient and innovative while continuing to preserve safety.
- **Explore Options for Commer**cializing the Saint Lawrence **Seaway Development Corpora**tion (SLSDC): In 1998, Canada commercialized the management and operations of the Canadian portion of the St. Lawrence Seaway on behalf of its federal

government. The Department is examining the feasibility of adopting a similar model for the U.S. portion of the Seaway.

Transfer Job Training Programs to the Department of Labor: DOT will explore the transfer of two transportation job training programs (the highways On the Job Training/Supportive Services program and the Innovative Public Transportation Frontline Workforce Development program) to the Department of Labor, which

is best equipped to provide this

DOT has already begun to implement the following reforms:

Shared Services Models:

service.

DOT is implementing a shared services model for delivering its acquisitions, human resources, and information technology functions. DOT is taking steps to consolidate similar work that is currently being performed throughout the modal Operating Administrations and the Office of the Secretary. This will streamline management and ensure policies and practices are applied consistently throughout the Department. Further, it provides opportunities to procure goods and services on a larger, more strategic scale, which should increase the value to the Government.

Program Evaluation: DOT is also systematically evaluating the performance of its programs and activities. The objective is to enhance DOT's enterprise-wide ability to analyze program effectiveness and DOT's delivery of a fast, safe, efficient, accessible, and convenient transportation

system. The effort entails data analyses, including deep-dive analyses of select programs based on defined criteria. The effort will foster more informed future budget decision-making processes based on data and information.

DEPARTMENT OF TRANSPORTATION BUDGETARY RESOURCES

Budgetary Resources

Dollars in Millions

Account	FY 2017 Actual	FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Federal Aviation Administration	\$16,407.4	\$16,295.9	\$16,122.3
Operations (GF/TF)	10,025.9	9,957.8	9,931.3
Facilities & Equipment (TF)	2,855.0	2,835.6	2,766.6
Research, Engineering & Development (TF)	176.5	175.3	74.4
Grants-in-Aid for Airports (Oblim) (TF)	3,350.0	3,327.3	3,350.0
Federal Highway Administration	43,097.1	42,805.5	45,790.6
Federal-Aid Highways (Oblim) (TF)	43,266.1	42,972.3	45,268.6
Exempt Obligations (TF)	594.9	596.8	639.0
Emergency Relief (TF)	93.1	93.4	100.0
Emergency Relief (GF) (Non-Add)	1,532.0	0.0	0.0
Limitation on Administrative Expenses (TOTAL) (Non-Add)	435.8	432.8	449.7
Rescissions/Cancellations	- 857.0	- 857.0	- 217.0
Federal Motor Carrier Safety Administration	644.2	639.8	665.8
Motor Carrier Safety Operations & Programs (Oblim) (TF)	277.2	275.3	284.0
Motor Carrier Safety Grants (Oblim) (TF)	367.0	364.5	381.8
National Highway Traffic Safety Administration	911.3	905.2	914.7
Operations and Research (GF)	180.1	178.9	152.4
Operations and Research (TF)	145.9	144.9	152.1
Highway Traffic Safety Grants (Oblim) (TF)	585.4	581.4	610.2
Federal Transit Administration	12,414.5	12,330.2	11,118.6
Capital Investment Grants (GF)	2,412.6	2,396.2	1,000.0
Washington Metro (GF)	150.0	149.0	120.0
Administrative Expenses (GF)	113.2	112.4	111.7
Technical Assistance & Training (GF)	5.0	5.0	0.0
Transit Formula Grants (Oblim) (TF)	9,733.7	9,667.6	9,939.4
Cancellations	0.0	0.0	- 52.6
Federal Railroad Administration	1,851.4	1,838.8	854.0
Northeast Corridor Grants to Amtrak (GF)	328.0	325.8	200.0
National Network Grants to Amtrak (GF)	1,167.0	1,159.1	537.9
Railroad Research & Development (GF)	40.1	39.8	19.6
Safety & Operations (GF)	218.3	216.8	202.3
Safety User Fee (GF)	0.0	0.0	- 50.0
Infrastructure and Safety Improvements (GF)	68.0	67.5	0.0
State of Good Repair (GF)	25.0	24.8	0.0
Restoration and Enhancement Grants (GF)	5.0	5.0	0.0
Cancellations	0.0	0.0	- 55.7

Dollars in Millions

Account	FY 2017 Actual	FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Pipeline and Hazardous Materials Safety Administration	260.4	260.6	254.3
Operational Expenses (GF)	22.5	22.3	23.7
Hazardous Materials Safety (GF)	57.0	56.6	52.1
Emergency Preparedness Grants (SF)	26.4	26.4	28.3
Pipeline Safety (SF)	134.3	135.1	127.2
Pipeline Safety (TF)	20.3	20.2	23.0
Maritime Administration	\$522.6	\$519.0	\$396.4
Operations and Training (GF)	175.6	174.4	152.4
Ship Disposal (GF)	34.0	33.8	30.0
Assistance to Small Shipyards (GF)	10.0	9.9	0.0
Maritime Security Program (GF)	300.0	298.0	214.0
Maritime Guaranteed Loans (Title XI) (GF)	3.0	3.0	0.0
Saint Lawrence Seaway Development Corporation	36.0	35.8	28.8
Inspector General (GF)	90.2	89.5	91.5
Office of the Secretary	948.1	951.5	390.1
Salaries and Expenses (GF)	114.0	113.2	113.8
Nat'l Surface Transp. and Innovative Finance Bureau (GF)	3.0	3.0	3.0
Transportation Planning, Research & Development (GF)	12.0	11.9	7.9
Office of Civil Rights (GF)	9.8	9.7	9.5
Financial Management Capital (GF)	4.0	4.0	2.0
Essential Air Service (SF)	121.8	130.8	140.2
Payments to Air Carriers (GF)	150.0	149.0	93.0
National Infrastructure Investments (TIGER) (GF)	500.0	496.6	0.0
Research and Technology (GF)	13.0	12.9	7.0
Cyber Security Initiative (GF)	15.0	14.9	10.0
Small and Disadvantaged Business Utiliz. & Outreach/MBRC	5.6	5.5	3.7
PHMSA User Fee Offsetting Receipt	- 134.3	- 135.1	- 127.2
Total Budgetary Resources	\$77,048.9	\$76,536.8	\$76,500.0
Discretionary Subtotal	18,487.5	18,356.1	15,606.4
Mandatory Subtotal	58,561.5	58,180.7	60,893.6
Federal-Aid Highways Emergency Relief Emergency Supplemental	1,532.0	0.0	0.0

GF = General Fund, TF = Trust Fund, SF = Special Fund.

Budgetary Resources include appropriations, obligation limitations, and FHWA and OST mandatory programs.

FEDERAL AVIATION ADMINISTRATION

Budgetary Resources

Dollars in Millions

Account	FY 2017 Actual	FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Operations (GF/TF)	\$10,025.9	\$9,957.8	\$9,931.3
Facilities & Equipment (TF)	2,855.0	2,835.6	2,766.6
Research, Engineering & Development (TF)	176.5	175.3	74.4
Grants-in-Aid for Airports (Oblim) (TF)	3,350.0	3,327.3	3,350.0
Total	\$16,407.4	\$16,295.9	\$16,122.3
Full Time Equivalent Employment	45,547	45,517	45,147

The Federal Aviation Administration (FAA) is the principal Federal agency responsible for providing the safest and most efficient aerospace system in the world. Since 1958, the FAA has regulated and overseen all aspects of civil aviation in the United States, running the largest and safest air traffic control system in the world, and ensuring the safety of the traveling public. FAA is dedicated to achieving new levels of safety, innovation, and efficiency with about 45,000 FTEs supporting the Nation's air travel.



The FY 2019 President's Budget requests \$16.1 billion for FY 2019 to invest in the FAA's infrastructure and in the NextGen effort to modernize the Nation's air traffic control system. The request also protects safety by providing the funding necessary to support critical workforces at the FAA—air traffic controllers and aviation safety inspectors. The President's Budget furthers these investments in safety and innovation. For example, \$73.2 million is requested for unmanned aircraft systems including developing policies and setting safety standards for the National Airspace System. In addition, for commercial space flight the Budget requests an increase of

\$2 million to speed the processing of licenses and approvals, streamline regulatory requirements, and keep pace with industry demands for products and services.

Our aviation system is stronger and safer than ever, giving us the opportunity to ask critical questions about the future. The FAA's current authorization expires on March 31, 2018, and the President has proposed a multiyear reauthorization that shifts the air traffic control function of the FAA to an independent, nongovernmental cooperative organization. This proposal will make the Nation's aviation system more efficient and innovative while continuing to preserve safety.

Key Components of the Request Include

Operations: \$9.9 billion is requested for the operation, maintenance, communications, and logistical support of the air traffic control and air navigation systems.

- Air Traffic Organization (ATO): \$7.5 billion is requested to provide safe, secure, and cost-effective air traffic services to commercial and private aviation. FAA forecasts \$54 million in savings by modernizing the delivery of flight and weather services.
- Aviation Safety (AVS): \$1.3 **billion** is requested to ensure the continued safety of the air transportation system.
- **Security and Hazardous Materials Safety (ASH): \$105.6 million** is requested to protect

the FAA's critical infrastructure. deliver emergency operations and contingency planning, and ensure the safe transportation of hazardous materials in air commerce.

- **Commercial Space Transpor**tation (AST): \$21.6 million is requested to protect the public, private property, as well as for National security during commercial space launch and reentry activities. This request includes additional funding for the AST workforce so FAA can keep pace with the industry's growing licensing and permitting needs.
- NextGen (ANG): \$58.5 million is requested to manage FAA's NextGen effort and the day-to-day operations and maintenance of

- the FAA's William J. Hughes Technical Center campus in Atlantic City, New Jersey.
- Finance and Management (AFN): \$771.0 million is requested to manage and deliver core services to the FAA's lines of business and staff offices
- **Staff Offices: \$202.7 million** is requested for executive leadership, policy and planning, legal counsel, security services, and other administrative services in support of the FAA's mission.
- Unmanned Aircraft Systems (UAS): The President's Budget includes \$51 million in Operations funding to develop the policies, procedures, and standards for safe UAS operations in the National Airspace System. Funds will also be used to work with law enforcement agencies, airports, and other government agencies (federal, state and local) to ensure public safety and security; to coordinate with stakeholder groups, advisory groups and other government agencies (federal, state and local) to identify UAS priorities and educate on UAS rules and guidance and to review applications for specific UAS operations to ensure their safety.

Facilities and Equipment (F&E): **\$2.8 billion** is requested to both maintain the capacity and safety of the current National Airspace System

- while continuing its investment in transformative technology. Within this total. \$832.6 million is for **NextGen** capital investments. The FAA is working together with industry through the NextGen Advisory Committee to identify NextGen priorities that can deliver immediate benefits. Examples of specific NextGen projects include:
- Air-to-Ground Data Communications (Data Comm): \$114 million is requested to modernize communications between air traffic controllers and pilots by replacing some traditional voice communications with digital information exchanges. The result is reduced delays while improving controller and pilot efficiency, reducing radio frequency congestion, and reducing the likelihood of communication errors that can occur from voice exchange. Data Comm has already resulted in substantial time savings at major airports for the airline industry.
- **Decision Support Systems: \$140 million** is requested for programs that give air traffic controllers tools to optimize traffic flow across the National Airspace. Of this total, \$119 million is for Terminal Flight Data Manager (TFDM), which shares real-time data among controllers, aircraft operators, and airports so they can better manage arrivals and departures. Another \$21

million is for Time Based Flow Management (TBFM), which uses time instead of distance to help controllers sequence air traffic. Compared to the traditional process for separating aircraft, TBFM provides a more efficient traffic flow that reduces fuel burn, lowers exhaust emissions. and increases traffic capacity.

- **System-Wide Information** Management (SWIM): \$59 million is requested to implement an information-sharing platform that allows members of the aviation community to access the specific information they need, in the way that they need it, to facilitate an innovative and efficiently run National Airspace System. Industry has made significant advancements in sharing data using SWIM. Delta Air Lines and American Airlines are providing 11 surface data elements to improve surface efficiency, and other airlines are in the testing and development phase.
- Performance Based Navigation (PBN): \$20 million is requested to optimize the use of airspace and procedures in large metropolitan areas. The PBN framework enables safer and more efficient flight paths, separating traffic between airports, arrival and departure paths, and nearby routes. The use of PBN procedures results in increased safety, fuel savings, and a reduction in aircraft emissions.

The remainder of the F&E budget, \$1.9 billion, will sustain the FAA's current infrastructure and systems including its aging physical infrastructure, power systems, information technology, navigational aids, communications and surveillance equipment, and weather systems. The FAA is aggressively pursuing satellite-based technology as part of its NextGen effort, but the current infrastructure must remain in place until the full transition occurs. and certain elements will remain permanently to provide operational resiliency. Examples of specific investments in current infrastructure and systems include:

- Air Traffic Control Facilities **Strategic Sustainment Plan:** \$524 million is requested to improve FAA infrastructure facilities. This undertaking will address the FAA's air traffic control towers and other air traffic control facilities, improving the condition of buildings that protect the FAA workforce and critical systems of the National Airspace. Investments will also improve electrical power systems, unmanned facilities, employee protections, and temporary facilities that are used during emergency responses and heavy air traffic situations.
- Standard Terminal Automation Replacement Systems (STARS): \$76 million is requested to complete the deployment of STARS

technology that will modernize and standardize the automation systems used by air traffic controllers who manage air traffic close to large airports. This funding will also provide updates to the original STARS systems first deployed in 2000.

Unmanned Aircraft Systems **(UAS):** The budget also requests \$18 million in Facilities and **Equipment** funding to allow integration of UAS without impact to manned aircraft operations or creating disruptions or delays. Funds will be used to support Low Altitude Authorization and Notification Capability that provides an automated near real-time solution for small UAS operators and FAA Air Traffic Control to comply with the Part 107 Small UAS Rule and for development of a proposed **Unmanned Traffic Management** (UTM) system, which is a separate, but complementary system to the Air Traffic Management system and will automate UAS airspace access.

Research, Engineering & Development (RE&D): \$74 million

is requested to support work in NextGen, safety, and other research areas. Highlighted research programs include:

Fire Research and Safety: \$4.9 **million** is requested to research aircraft fire safety, including fire tests for interior materials,

fire detection and suppression systems, firefighting procedures and guidance material, and safeguards to protect against fires involving lithium batteries, fuel cells, and hazardous materials. For example, the FAA's research will support establishing criteria for systems that can detect fires in hidden areas of an aircraft and that discriminate between actual fires and nonthreatening sources of fumes or odors.

- Commercial Space Transportation Safety: \$2.5 million is requested for Office of Commercial Space Transportation to continue its work on improvements for the safe integration of commercial space operations into the National Air Space (NAS). FY 2019 research will focus on integration of launch and reentry activity into the NAS, advanced safety assessment methods, advanced vehicle safety methodologies, and human spaceflight safety. It will develop methods to automatically declare aircraft hazard areas in real-time during launch or reentry and will develop recommended practices for crew in suborbital winged commercial spaceflight vehicles.
- **Unmanned Aircraft Systems** (UAS): The budget requests \$3.3 million for RE&D funding to study safety implications of new UAS operational concepts and technologies, and to support the

development of new and modification of existing regulatory standards This UAS research will focus on the areas of control and communications, training devices, and detection and avoidance technologies.

Grants-in-Aid for Airports (also called Airport Improvement Program [AIP]): \$3.35 billion is requested in obligation limitation for AIP.

- Grant funding will support safetyrelated development projects, including reducing runway incursions, as well as projects that improve capacity, efficiency, noise mitigation, and infrastructure conditions.
- The Budget includes \$500,000 to establish a permanent field office and hire two new employees in Puerto Rico. This office will provide planning, environmental, engineering, and compliance

- services to support infrastructure improvements at the 12 airports in Puerto Rico and the U.S. Virgin Islands that are a part of the National Plan of Integrated Airport Systems (NPIAS). These functions are currently performed by personnel at the FAA's regional office in Atlanta, Georgia. The new office will allow the FAA to achieve savings and provide better service.
- The Budget also includes \$4.4 million for upgrades to FAA data systems to improve its analytical capabilities and airports' access to data, and \$2 million to the Airports Technology Research Program for advanced materials testing.
- **Unmanned Aircraft Systems** (UAS): \$1 million is requested in Airport funding for research on how to safely integrate UAS operations and airport operations at airports.

Account		FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Activity 1—Engineering, Development, Test and Evaluation	\$157.0	\$151.1	\$166.9
Advanced Technology Development and Prototyping	24.8	26.8	33.0
William J. Hughes Technical Center Programs	32.2	31.0	33.0
NextGen Pre-Implementation Portfolios	100.0	74.8	86.9
Unmanned Aircraft Systems (UAS)		18.5	14.0
Activity 2—Air Traffic Control Facilities and Equipment	1,791.7	1,783.3	1,681.2
Data Communications in Support of NG Air Transportation System	232.0	178.1	113.9
ADS-B NAS Wide Implementation	154.8	139.2	123.7
En Route Automation Modernization (ERAM)—System Enhancements & Tech Refresh		86.3	102.1
Next Generation Very High Frequency Air/Ground Communications (NEXCOM)	50.5	54.0	50.0
System-Wide Information Management	43.8	50.1	58.8
Time Based Flow Management Portfolio NextGen Weather Processors	50.6 27.8	40.5 35.5	21.2 24.7
Oceanic Automation System	24.0	23.1	17.5
Terminal Flight Data Manager (TFDM)	42.2	90.4	119.3
Terminal Automation	180.8	161.3	84.4
National Airspace System Voice System (NVS)	48.4	68.8	43.2
Collaborative Air Traffic Management Technologies	13.8	9.0	17.7
Wide Area Augmentation System (WAAS) for GPS	111.6	104.3	96.3
Facilities Infrastructure Sustainment	406.3	457.5	480.6
Improve Automation Systems	44.3	26.6	42.3
Sustain Communication Systems	34.1	54.5	61.8
Sustain Flight Services for General Aviation	5.7	16.7	12.8
Navigation and Landing	38.5	38.0	57.4
Runway Safety Areas—Navigational Mitigation	14.0 62.9	1.6	2.0
Sustain Surveillance Systems Improve Weather Systems	29.0	35.5 22.6	29.2 25.2
Other	95.7	90.2	97.4
Activity 3—Non-Air Traffic Control Facilities and Equipment	182.9	192.0	201.9
Hazardous Materials Management	31.0	35.3	29.8
Information Security Facility Security Risk Management	25.0 21.0	20.7 20.4	16.0 18.6
National Air Space (NAS) Recovery Communications (RCOM)	12.0	12.0	12.2
Aeronautical Center Infrastructure Modernization	14.0	14.0	14.3
Safety Database and Computer Systems	61.7	72.0	81.1
Other	18.3	17.6	29.9
Activity 4—Facilities and Equipment Mission Support	237.4	226.5	227.0
Center for Advanced Aviation System Development (CAASD)	60.0	57.0	57.0
Facility Leases	65.9	66.7	67.2
Technical Support Contracts	82.1	78.6	78.0
Aeronautical Information Management Program	10.4	6.2	6.8
Logistics and Acquisition Support Services	11.0	11.0	11.0
Other	8.0	7.0	7.0
Activity 5—Personnel and Related Expenses	486.0	482.7	489.6
Total Facilities & Equipment	\$2,855.0	\$2,835.6	\$2,766.6

Account		FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Facilities & Equipment	\$900.4	\$907.5	\$832.6
NextGen—Separation Management Portfolio	32.8	13.5	16.6
NextGen—Traffic Flow Management Portfolio	0.0	10.8	14.0
NextGen—Improved Surface	2.0	0.0	0.0
NextGen—On Demand NAS Portfolio	11.5	12.0	20.5
NextGen—Improved Multiple Runway Operations Portfolio	6.5	0.0	0.0
NextGen—NAS Infrastructure Portfolio	17.7	17.5	13.5
NextGen—Support (NIEC, Test Bed) Portfolio	12.0	12.0	12.8
NextGen—System Safety Management Portfolio	17.0	16.2	14.7
NextGen—Unmanned Aircraft System (UAS)	0.0	18.5	14.0
NextGen—Enterprise, Concept Development, Human Factors & Demonstration Portfolio	0.0	9.0	9.5
Performance Based Navigation and Metroplex Portfolio	17.5	20.0	20.0
NextGen—Communications in Support of NextGen	232.0	178.1	113.9
En Route Automation Modernization (ERAM)—System Enhancements	78.0	86.3	102.1
System-Wide Information Management (SWIM)	43.8	50.1	58.8
ADS-B NAS Wide Implementation	154.8	139.2	123.7
Collaborative Air Traffic Management (CATMT) Portfolio	13.8	9.0	17.7
Terminal Flight Data Manager (TFDM)	42.2	90.4	119.3
Tactical Time-Based Flow Management (TBFM)	50.6	40.5	21.2
Next Generation Weather Processor (NWP)	27.8	35.5	24.7
NAS Voice System (NVS)	48.4	68.8	43.2
SBS Advanced Surveillance Enhanced Procedural Separation	0.0	5.3	0.0
Flight Interfacility Data Interface (FIDI) Modernization	13.0	0.0	0.0
Aeronautical Information Management Program (AIM)	10.4	6.2	6.8
Cross Agency NextGen Management	2.0	1.0	1.0
Activity 5 F&E PCBT—NextGen Staffing	66.6	67.9	64.8
Research Engineering and Development (RE&D)	76.4	75.7	19.5
NextGen—Alternative Fuels for General Aviation	7.0	6.9	0.0
NextGen—Flight Deck Data Exchange Requirements	0.0	0.0	1.0
NextGen—Information Security	1.0	1.0	1.2
NextGen—Wake Turbulence	8.6	8.5	3.5
NextGen—Air Ground Integration	8.5	8.5	1.3
NextGen—Weather in the Cockpit	4.1	4.0	1.5
NextGen—Environmental Research, Aircraft Technologies, Fuels and Metrics	27.2	26.9	7.6
Unmanned Aircraft Systems Research	20.0	19.9	3.3
Operations	97.7	98.2	100.5
NextGen Staffing	33.0	33.6	31.2
NextGen Unmanned Aircraft System	51.1	50.8	50.8
Performance Based Navigation (PBN) Activities	13.7	13.8	18.5
Total NextGen Programs	\$1,074.5	\$1,081.4	\$952.6

FEDERAL HIGHWAY ADMINISTRATION

Budgetary Resources

Dollars in Millions

Account	FY 2017 Actual	FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Federal-aid Highways (Oblim) (TF)	\$43,266.1	\$42,972.3	\$45,268.6
Exempt Obligations (TF)	594.9	596.8	639.0
Emergency Relief (TF)	93.1	93.4	100.0
Limitation on Administrative Expenses (TOTAL) (Non-add)	435.8	432.8	449.7
Cancellations/Rescissions—Multiple Accounts (TF)	- 857.0	- 857.0	- 217.0
Total	\$43,097.1	\$42,805.5	\$45,790.6
Emergency Relief Supplemental Appropriation (GF)	1,532.0	0.0	0.0
Full Time Equivalent Employment	2,700	2,720	2,713

The Federal Highway Administration (FHWA) supports State and local governments in the design, construction, and maintenance of the Nation's highway system and various Federally and Tribalowned lands. Through financial and technical assistance to State and local governments, FHWA is responsible for ensuring that America's roads and bridges continue to be among the safest and most technologically sound in the world. In addition to its headquarters office, FHWA has personnel in each of the 50 States, the District of Columbia, and Puerto Rico that work with State, local, and other Federal transportation agencies.



The FY 2019 President's Budget requests \$45.8 billion for the **Federal-aid Highway Program** in FY 2019 to invest in the Nation's highway and bridge infrastructure. The request, which reflects the fourth year of the Fixing America's Surface Transportation (FAST) Act, will enable FHWA to invest in projects that improve roadway safety, repair aging bridges and highways, and promote the movement of freight.



The Budget will provide States and localities flexibility to invest in the projects that best meet local needs while improving the performance of the national infrastructure network. Further, through streamlined environmental permitting processes, FHWA will accelerate project delivery to reduce the time required to complete construction projects.

Key Components of the Request Include

FHWA's request supports the Secretary of Transportation's key priorities of safety, infrastructure, innovation, and accountability.

Safety

Safety is FHWA's top priority. In 2016, 37,461 people died in motor vehicle crashes on our Nation's highways. FHWA's Highway Safety Improvement Program (HSIP) has played a significant role in achieving reductions in highway fatalities and serious injuries since 2005, the year HSIP was enacted. A total of \$2.6 billion is requested for the HSIP for FY 2019.

In addition to the human impact, the annual societal burden of highway crashes is estimated to be more than \$800 billion. No amount of money can replace the loss of a loved one or lessen a family member's suffering. However, quantifying the economic and societal costs of motor vehicle crashes demonstrate even further the importance of investing in highway

safety. FHWA estimates that highway safety improvement projects return up to \$7 of benefits for every dollar invested.

FHWA will continue to conduct rigorous evaluations of new safety technologies and practices, and champion life-saving innovations. Recent successes include the release of a new group of "Proven Safety Countermeasures"—infrastructureoriented safety treatments and strategies, chosen based on proven effectiveness and benefits. For example, a new strategy to reduce left turn conflict intersections has been shown to reduce serious crashes by up to 54 percent.

Infrastructure

FHWA will continue to improve the condition and performance of our national transportation infrastructure by providing States and localities flexible funding that will empower recipients to invest in the projects that best meet local needs.

- National Highway Performance Program: \$23.74 billion is requested to preserve and modernize the National Highway System (NHS). The NHS is composed of 220,000 miles of rural and urban roads serving major population centers, border crossings, intermodal transportation facilities, and major travel destinations. This includes the Interstate Highway System, all principal arterials, intermodal connectors, and roads important to mobility, commerce, national defense, and intermodal connectivity. This program addresses all areas of the United States ensuring that improvements to the NHS benefit both urban and rural areas.
- ▶ \$1.34 billion is requested for the National Highway Freight Program and \$950 million for the Nationally Significant Freight and Highway Projects **Program.** Through these programs, FHWA will advance nationally significant freight projects that will improve the safety, efficiency, and reliability of the movement of freight and people.
- **Surface Transportation Block Grant Program (STBG): \$11.88 billion** is requested to provide flexible funding to States and localities to target priority areas and areas of greatest need. STBG funds can be used on the approximately 1,000,000 miles of the Federal-aid highway

- system. This includes projects to improve or preserve condition and performance on any Federalaid highway; bridge and safety projects on any public road; and facilities for nonmotorized transportation. This program improves mobility, access to community resources, and quality of life.
- Federal Lands and Tribal **Programs: \$1.13 billion** is requested to improve access to and within Federal and Tribal lands. These projects will provide multimodal access to basic community services for Federally recognized sovereign Tribes, improve multimodal access to recreational areas on public lands, and expand economic development and transportation accessibility in and around Federal and Tribal lands.
- **Congestion Mitigation and Air Quality Improvement Program** (CMAQ): \$2.45 billion is requested to help States, local governments, and private-sector sponsors reduce highway congestion and harmful emissions.
- **Transportation Infrastructure Finance and Innovation Act** (TIFIA) Program: \$300 million is requested to support critical infrastructure projects across the Nation. TIFIA leverages both public and private investment in transportation infrastructure, which improves the economy

through job creation, improves mobility, enhances transportation options, and improves access in local and rural communities. Historically, each billion dollars of TIFIA funding authority provides approximately \$14 billion in credit assistance, resulting in infrastructure investment of up to \$40 billion when accounting for other State, local, and private sector investments.

This request will also ensure that investment continues in the vital areas of emergency relief following disasters or catastrophic failures (\$100 million); metropolitan planning (\$350 million); highway programs in Puerto Rico and United States Territories (\$200 million): and the Ferry Boat Program (\$80 million), which provides vital connections on the network of Federal-aid highways.

Innovation

A total of \$420 million is requested for the Research, Technology, and Education Program, which focuses on highway research and development, and technology and innovation deployment. FHWA's contributions to researching and implementing transformative innovations and technologies are changing the way roads, bridges, and other facilities are planned, designed, built, managed, and maintained across the country to be more responsive to current and future needs

FHWA is committed to promoting innovation to address current and emerging transportation issues. Notably, FHWA, in partnership with the National Highway Traffic Safety Administration (NHTSA), is at the forefront of automated vehicle research. Through the Intelligent Transportation Systems Program (ITS), FHWA is playing a significant role in addressing key technological and institutional barriers to ensure the safe, efficient, and equitable integration of automation into the transportation system. A flagship effort of the ITS program is the Connected Vehicle (CV) Pilot Deployment Program which is funding large-scale CV system implementation efforts.

Through its Every Day Counts initiative, FHWA works with State and local transportation agencies and industry stakeholders to identify a new collection of innovations to champion every two years. Innovations are selected collaboratively by stakeholders, taking into consideration market readiness, impacts, benefits and ease of adoption. For example, e-Construction, an FHWA championed technology, is a paperless construction administration delivery process that saves time and money through elimination of the cumbersome paper-based approach, and improves communication through faster approvals, enhanced document tracking, and increased transparency.

FHWA will continue to focus on innovative solutions such as Slide-in Bridge Construction (SIBC). SIBC accelerates bridge construction whereby a new bridge is built next to an existing bridge out of the way of traffic. Under SIBC, the bridge can be replaced in a matter of hours or days, instead of drivers dealing with lane closures and/or detours for months.

Accountability

This request demonstrates FHWA's commitment to accountability.

FHWA continues to examine regulations to identify those that should be modified, streamlined, or repealed to reduce costs or eliminate bureaucratic obstacles to efficient project delivery. FHWA recently repealed certain burdensome planning regulations pertaining to the establishment of metropolitan

planning area boundaries and the coordination among metropolitan planning organizations. In addition, FHWA is working with the Office of the Secretary and modal partners through the Regulatory Reform Task Force to identify high-impact ideas to speed project development and delivery.

FHWA will continue to pursue a multifaceted strategy to accelerate project delivery while also upholding safety and protecting the environment. This includes initiatives, whether legislatively or agency-driven, to encourage interagency collaboration and to significantly shorten project delivery timeframes. Examples include reducing duplication by linking the planning and environmental review and exploring new categorical exclusions under the National Environmental Policy Act.

FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION

Budgetary Resources

Dollars in Millions

Account	FY 2017 Actual	FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Motor Carrier Safety Operations & Programs (Oblim) (TF)	\$277.2	\$275.3	\$284.0
Motor Carrier Safety Grants (Oblim) (TF)	367.0	364.5	381.8
Total	\$644.2	\$639.8	\$665.8
Full Time Equivalent Employment	1,161	1,202	1,202

The Federal Motor Carrier Safety Administration's (FMCSA) mission is to prevent commercial motor vehicle-related crashes, fatalities, and injuries. Activities of the agency provide safety oversight of motor carrier (truck and bus companies) operations through focused enforcement of safety regulations; intervening with high-risk carriers and commercial motor vehicle drivers; improving safety information systems and data collection; facilitating the safe testing and deployment of advanced commercial motor vehicle technologies; strengthening commercial motor vehicle equipment and operating standards; and increasing safety awareness. To accomplish these activities, FMCSA collaborates with Federal, State, and local enforcement agencies, the motor carrier industry, labor, safety interest groups, and others.

> In carrying out its safety mandate, FMCSA: (1) develops and implements data-driven regulations that balance motor carrier safety with operational efficiency; (2) enforces safety regulations focusing on high-risk carriers; (3) targets educational messages to carriers, commercial drivers, and the traveling public; and (4) works in partnership with stakeholders including other Federal, State, and local government agencies, the motor carrier industry, safety groups, and organized labor to identify and implement strategies to reduce bus and truck-related crashes.

To execute its mission, FMCSA employs approximately 1,200 safety professionals, with 28 percent providing operational support in headquarters and 72 percent strategically deployed in field offices in each of the 50 States, the District of Columbia, and Puerto Rico. FMCSA also provides grants to State and local partners to fund, train, and equip more than 12,000 local enforcement officers and inspectors to increase commercial motor vehicle safety oversight nationwide.



The FY 2019 President's Budget requests \$665.8 million to invest in motor carrier and commercial motor vehicle safety innovation, outreach, enforcement, and research operations.

Key Components of the Request Include

Motor Carrier Safety Operations and Programs: \$284 million is requested to fund research, innovation, and advanced driver systems, and programs that reduce serious injuries and deaths resulting from commercial motor vehicle crashes. Funds will also be used for administrative expenses to develop and implement safety oversight programs.

General Operations: \$240.1 million is requested to carry out FMCSA's safety mission and required support functions. This includes:

\$3.5 million is requested for innovation, technology, and rulemaking improvements with a focus on FMCSA data transparency and collaboration with

- industry, and overall commercial vehicle safety on America's Highways.
- **\$6** million is requested for investments in facilities along the southern border and in high priority domestic offices to improve collaboration with other border agencies and to ensure safe operating conditions for FMCSA personnel as well as for truck and bus drivers.

Research & Technology: \$9.1 **million** is requested for multiyear Research and Technology programs focused on producing safer commercial vehicles, drivers, and carriers. The FY 2019 Budget emphasizes developing autonomous vehicle

technology. The budget request for FMCSA is \$4.6 million for an Automated Driving System (ADS) initiative to enable the safe operation of highly automated commercial vehicles on the Nation's transportation system. The multifaceted initiative will speed the use of automatic emergency braking systems in commercial motor vehicles, develop uniform interstate standards for truck platoon deployments, and provide Federal oversight and support for State pilot programs. FMCSA will also test new inspection tools for ADS-equipped vehicles and test electronically controlled brake systems.

Information Management (IM): \$34.8 million is requested for multiyear information technology projects in four key safety process areas—Registration, Inspection, Compliance, and Enforcement ("R-I-C-E"). FMCSA's broad safety mission requires delivering innovative and integrated technology solutions that effectively manage information and support essential mission-oriented activities

- **\$2.5 million** to continue development of the National Registry of Certified Medical Examiners and the Entry-Level Driver Training Provider Registry.
- **\$28.0 million** to advance projects such as increasing the resilience and capacity of the overall information technology infrastructure that supports electronic logging devices and inspection modernization efforts.

\$4.3 million for the continued development of FMCSA's Drug and Alcohol Clearinghouse. This system includes significant personally identifiable information, which requires FMCSA to provide security and protection of information.

Motor Carrier Safety Grants: \$381.8 million is requested for the Motor Carrier Safety Grants program. This funding is consistent with the updated program structure provided in the FAST Act. This new structure reduces the application and compliance burden on grantees and lessens FMCSA's administrative costs. Grant dollars fund States' motor carrier investigations, roadside driver and vehicle safety inspections, and the identification and apprehension of traffic violators. FMCSA also provides competitive grant funding which spurs innovative ideas and supports technological advancements through high priority safety initiatives, commercial drivers' license program improvements, and driver training facilities.

Motor Carrier Safety Assistance Program (MCSAP): **\$304.3 million** is requested for formula grants to support State safety programs, including roadside inspections, new entrant safety audits, investigations, and targeted traffic enforcement. State partners best understand their safety needs and can target additional resources to rural areas and high-risk corridors.

- These funds also support existing safety technology programs and border safety operations.
- **High Priority Activities** Program (HP): \$44.0million is requested for safety programs that improve motor carrier compliance and safety through State and local law enforcement programs. FMCSA's HP program encourages best practices in enforcement and safety initiatives at the State and local level. The HP grant program also supports State implementation of FMCSA's Performance and Registration Information Systems Management (PRISM) program. PRISM is a critical national safety system utilized by both Federal and State law enforcement agencies to identify and intercept commercial motor vehicles that pose serious safety risks.
- **Commercial Driver's License** (CDL) Program Implementation: \$32.5 million is requested for grant funding to States and others to ensure that only safe and qualified commercial drivers receive and retain a commercial drivers' license (CDL). The request will help fund updates to State information systems and enable them to comply with CDL requirements related to implementing the Medical Examiner's Certification Integration, Entry-Level Driver Training, and the Drug and Alcohol Clearinghouse.
- **Commercial Motor Vehicle Operator Safety Training: \$1 million** is requested to train individuals to become commercial operators, with an attention to training Veterans and their families.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Budgetary Resources

Dollars in Millions

Account	FY 2017 Actual	FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Operations and Research (GF)	\$180.1	\$178.9	\$152.4
Operations and Research (Oblim) (TF)	145.9	144.9	152.1
Highway Traffic Safety Grants (Oblim) (TF)	585.4	581.4	610.2
Total	\$911.3	\$905.2	\$914.7
Full Time Equivalent Employment	541	626	626



The National Highway Traffic Safety Administration (NHTSA) works every day to help Americans drive, ride, and walk safely. NHTSA does this by promoting vehicle safety innovations, identifying and addressing vehicle defects, setting safety standards for cars and trucks, and educating Americans to help them make safer choices when driving, riding, or walking.



The FY 2019 President's Budget requests \$914.7 million for the National Highway Traffic Safety Administration to invest in initiatives that reduce traffic crashes and fatalities, and improve safety for American motorists. This request will support NHTSA's mission through ongoing programs and safety efforts while keeping pace with innovations and rapidly emerging roadway trends. NHTSA's research and investment in cutting edge technologies, such as automated driving systems, has the potential to dramatically reduce serious car crashes, most of which are attributed to driver error or choice.

Key Components of the Request Include

Operations and Research: \$304.5 million is requested for Operations and Research activities including:

- **\$13.5 million** is requested for the safe development and deployment of automated vehicle technologies:
 - Vehicle Electronics and **Emerging Technology: \$3.5 million** is requested to support core agency **Automated Driving Systems** (ADS) research, including vehicle electronics reliability, safety-critical system software assessments, and cybersecurity activities. These efforts aim to enhance the safety and security of automotive electronic control systems, which are heavily reliant on the use of complex systems, software, artificial intelligence, and at times, various forms of connectivity. These activities are safety critical as vehicles are increasingly reliant on complex software and electronic systems. This program will also closely coordinate NHTSA's advanced crash avoidance, human factors research, and ADS programs.
 - Automated Driving Systems: **\$10 million** is requested for a new program aimed at accelerating the safe

- deployment of ADS. The research funded by this request will advance agency decisions on regulatory updates to enable innovation, develop new tests, tools, and procedures to properly evaluate the safety of new vehicle cockpits and, inform consumer acceptance efforts to address public confidence issues that may slow deployment of these life-saving technologies. The research conducted under this program will also support the deployment of systems on commercial vehicles
- Office of Defects Investigation (ODI): \$9.1 million is requested to identify safety defects, work with manufacturers to implement remedies promptly, and quickly inform the public of critical information.
- New Car Assessment Program (NCAP): \$12.0 million is requested to maintain test coverage of approximately 85 percent of the new model year fleet while incorporating more advanced crash avoidance technologies into the program. This non-regulatory program helps consumers make more informed purchasing decisions and encourages vehicle manufacturers to voluntarily improve vehicle safety.

- Corporate Average Fuel Economy (CAFE): \$7.4 million is requested to support fuel economy and efficiency rulemaking programs including the passenger car and light-duty truck CAFE standards. NHTSA will be the lead Agency on CAFE matters and will continue to work with the Environmental Protection Agency to evaluate emission standards and develop fuel efficiency standards that advance energy independence consistent with safety needs.
- **Biomechanics: \$8.2 million** is requested to complete detailed crash and medical investigations that improve the Agency's understanding of injuries and their causes.
- Crash Avoidance: \$8.3 million is requested to address safety issues related to driver inattention, enhance the Agency's understanding of driver-vehicle interface issues, and assess the development of advanced technologies intended to prevent or mitigate crashes.
- Vehicle Safety Systems Research: **\$5.2 million** is requested to evaluate new vehicle designs, safety countermeasures, and equipment to make occupants safe in a crash. Research conducted in FY 2019 will center on understanding the implications of vehicle automation and increasingly light-weight and fuel-efficient vehicle design on

- occupant safety; frontal, side, and rear crash safety; occupant containment; and occupant restraint designs for a wide range of occupants.
- **Highway Safety Programs: \$61.8 million** is requested to support NHTSA's safety efforts through behavioral research, program development, demonstrations, and technical assistance to States. NHTSA provides national leadership relating to alcohol and drug countermeasures, occupant protection, distraction, traffic law enforcement, motorcycle riders, pedestrian and bicycle safety, and younger and older driver safety programs. NHTSA coordinates these efforts with numerous Federal partners, States, local government safety associations, and other organizations.
- National Center for Statistics and Analysis: \$40.3 million is requested to collect critical crash data and to operate NHTSA's data systems (Fatality Analysis Reporting System, State Data Systems, Special Crash Investigations systems, Crash Report Sampling System, and the Crash Investigation Sampling System). These systems are necessary for collecting and analyzing nationwide crash data. NHTSA uses the information to identify national trends and interventions. NHTSA will also analyze data and take steps to improve their quality and reliability.

Highway Traffic Safety Grants: The FY 2019 President's Budget

requests \$610.2 million for Highway Traffic Safety Grants. These include:

- **State and Community Highway** Safety Grants (Section 402): \$270.4 million is requested for the State and Community Highway Safety grants program, which is the backbone of NHTSA's State Highway Safety initiatives. These formula grants provide flexibility to States to address pervasive and emerging highway safety problems. The grants also fund the comprehensive State Traffic Safety Enforcement program critical to maintaining State traffic safety improvements.
- **National Priority Safety Pro**grams (Section 405): \$283.0 million is requested to address occupant protection and impaired driving, improve State traffic safety information systems, and oversee grant programs aimed at encouraging States to adopt Graduated Driver Licensing laws and Distracted Driving laws.
- **High Visibility Enforcement:** \$30.2 million is requested to promote and administer the highly successful annual Click It or *Ticket* mobilizations to increase seatbelt use around Labor Day and in December, as well as the Drive Sober or Get Pulled Over impaired driving initiatives.

FEDERAL TRANSIT ADMINISTRATION

Budgetary Resources

Dollars in Millions

Account	FY 2017 Actual	FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Capital Investment Grants (GF)	\$2,412.6	\$2,396.2	\$1,000.0
Washington Metro (GF)	150.0	149.0	120.0
Administrative Expenses (GF)	113.2	112.4	111.7
Technical Assistance & Training (GF)	5.0	5.0	0.0
Transit Formula Grants (Oblim) (TF)	9,733.7	9,667.6	9,939.4
Cancellations—Multiple Accounts (GF)	0.0	0.0	- 52.6
Total	\$12,414.5	\$12,330.2	\$11,118.6
Full Time Equivalent Employment	555	574	563



The Federal Transit Administration (FTA) oversees transit safety and provides financial and technical assistance to more than 1,000 local public transit systems that operate buses, subways, light rail, commuter rail, trolleys, and ferries. FTA also conducts innovative technology research and demonstrations.

> Since 1964, FTA has been assigned to help local governments and States create and enhance public transportation systems. FTA now provides approximately \$11 billion annually to support transit service across the country. This investment helps modernize the Nation's urban public transportation network and supports transit service in small cities and rural communities as well. In 2016, more than 10 billion trips were taken on public transit nationwide.

HIGHLIGHTS of the FY 2019 PRESIDENT'S BUDGET

The FY 2019 President's Budget requests \$11.1 billion to strengthen transit safety oversight, help bring our Nation's bus and rail transit infrastructure into a state of good repair, and provide expanded transit systems to several communities. The President's request makes strategic investments in public transportation infrastructure through both formula-driven and competitive funding opportunities to help address the capital needs of urban and rural communities.

Key Components of the Request Include

Transit Formula Grants: \$9.9

billion is requested for grants that support transit capital investments, state of good repair, safety, planning, research, technical assistance and workforce development, bus and railcar purchases and maintenance, and transit operations in small urban and rural areas

Within this amount is \$28 million for FTA research that advances public transportation innovation. FTA's research activities prioritize safety, infrastructure, and mobility innovation to find ways to increase public transportation safety, effectiveness, and efficiency. Transit automation demonstrations will complement emerging private-sector advancement in autonomous vehicle and mobility technology, potentially leading to job creation in new businesses and technologies. In addition, through the Accessible Transportation Technologies Research Initiative (ATTRI) FTA will develop technologies that

help individuals with disabilities to independently plan, navigate and use transportation options. It will leverage recent advances in vehicle, infrastructure, and pedestrian-based technologies, as well as accessible data, mobile computing, robotics, artificial intelligence, object detection, and navigation.

Capital Investment Grants:

\$1.0 billion is requested for the construction of major capital projects that provide new and expanded transit service, economic benefits to communities, and help address existing fixed-guideway transit corridors that are at or near capacity. The Budget requests funding for 10 transit projects that have existing full funding grant agreements under the Capital Investment Grant Program.

Washington Metropolitan Area **Transit Authority (WMATA): \$120 million** is requested for capital projects that address the transit

agency's highest safety priorities and its maintenance backlog. The Federal 10-year authorization that helps support WMATA's capital improvement program expires in FY 2018. The Budget continues the program in FY 2019 to assist WMATA in carrying out safety improvements throughout the WMATA system.

This funding is in addition to the more than \$310 million it receives annually from FTA formula funds.

Administrative Expenses: \$111.7 million is requested to support FTA's core lines of business—namely the staff needed to manage and oversee its grant-making and safety oversight activities.

Capital Investment Grants FY 2019 President's Budget

Dollars in Millions

<u> </u>		
Existing New Starts Full Funding Grant Agreements		
Regional Connector	Los Angeles, CA	\$100.0
Westside Subway Section 1	Los Angeles, CA	100.0
Westside Subway Section 2	Los Angeles, CA	100.0
Mid-Coast Corridor Transit Project	San Diego, CA	100.0
Green Line Extension	Boston, MA	150.0
Portland-Milwaukie Light Rail Project	Portland, OR	65.7
TEX Rail	Fort Worth, TX	100.0
National Capital Purple Line	Maryland	120.0
Total Existing New Starts Full Funding Grant Agreements		835.7
Existing Core Capacity Full Funding Grant Agreements		
Peninsula Corridor Electrification Project	San Carlos, CA	100.0
Red and Purple Line Modernization Project Phase One	Chicago, IL	100.0
Total Existing Core Capacity Full Funding Grant Agreements		200.0
Oversight Activities		10.5
Total ¹		\$1,046.2

¹ The FY 2019 Budget requests \$1 billion in new budget authority and \$46.2 million of anticipated prior year recoveries for a total of \$1,046.2 million in program funding.

FEDERAL RAILROAD ADMINISTRATION

Budgetary Resources

Dollars in Millions

Account	FY 2017 Actual	FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Northeast Corridor Grants to Amtrak (GF)	\$328.0	\$325.8	\$200.0
National Network Grants to Amtrak (GF)	1,167.0	1,159.1	537.9
Railroad Research & Development (GF)	40.1	39.8	19.6
Safety & Operations (GF)	218.3	216.8	202.3
Safety User Fee (GF)	0.0	0.0	- 50.0
Infrastructure and Safety Improvements (GF)	68.0	67.5	0.0
State of Good Repair (GF)	25.0	24.8	0.0
Restoration and Enhancement Grants (GF)	5.0	5.0	0.0
Cancellations—Multiple Accounts (GF)	0.0	0.0	- 55.7
Total	\$1,851.4	\$1,838.8	\$854.0
Full Time Equivalent Employment	919	933	927



The Federal Railroad Administration's (FRA) mission is to enable the safe, reliable, and efficient movement of people and goods for a strong America, now and in the future. FRA executes this mission by developing and enforcing minimum safety standards, promoting non-regulatory safety activities, investing in rail services and infrastructure, and researching and developing innovations and technology solutions.



The FY 2019 President's Budget requests \$854.0 million for programs that advance rail safety, reliability, and efficiency for long-term U.S. economic growth. The request directly aligns with the Secretary's priorities.



Safety

The President's Budget addresses railroad safety comprehensively by funding safety inspectors and specialists, research and development, and oversight, enforcement, outreach, and training. FRA will continue to target its resources at the most pressing safety challenges: implementation of positive train control, grade crossing safety and trespass prevention, train accidents, safe transportation of energy products by rail, and drug and alcohol use by railroad personnel.

Infrastructure

FRA oversees the safety of the Nation's railroad infrastructure including track, bridges, and equipment. In addition, FRA provides funding to Amtrak to support investments on Amtrak's Northeast Corridor and National Network.

Innovation

FRA collaborates closely with the railroad industry to leverage Federal investments in innovative technologies and practices to improve rail safety, reliability, and efficiency. Funding requested for FY 2019 will advance transformative, next-generation safety technology initiatives, with a focus on safely automating railroad operating and inspection functions.

Accountability

In FY 2019, FRA will expeditiously move publicly and privately proposed high-speed passenger rail systems through the project development process and ensure the systems provide adequate levels of safety. Because some systems under consideration do not align with existing railroad industry standards and regulatory requirements, FRA will need to develop tailored Rules of Particular Applicability.

Key Components of the Request Include

Safety and Operations: \$202.3 million is requested for FRA's core safety programs and activities. The request includes resources to provide technical assistance and monitor railroads' implementation of positive train control (PTC). Requested funding will also enable FRA to improve its Automated Track Inspection Program, which uses advanced technology to assess track conditions on routes that carry passengers and hazardous materials, among other priorities. The President's Budget dedicates \$5.9 million to support FRA's work to help railroads implement PTC—including approving PTC safety plans, monitoring and enforcing compliance with statutory requirements, and providing techni-

The President's Budget also proposes to reestablish a fee on railroads to reimburse FRA for a portion of the cost of rail safety inspectors and activities. Like other regulated industries, railroads benefit directly and indirectly from the Government's efforts to ensure high safety standards, and it is therefore appropriate for railroads to help shoulder these costs. Under this proposal, FRA will collect \$50 million in fees in FY 2019, resulting in a net appropriation to the Safety and Operations account of \$152.3 million.

cal assistance.

Research and Development: \$19.6 million is requested for FRA's activities to advance rail safety innovation concentrating on future needs and emerging areas. FRA will work collaboratively with industry and the private sector to focus research and development on advancing automation in the rail industry without

introducing new safety risk.

Amtrak: \$737.9 million is requested for Amtrak capital, operating, and debt service needs. Funding includes \$200 million for infrastructure investment on the Northeast Corridor and \$537.9 million to support the continued operations of Amtrak's National Network The President's Budget proposes reforms to rationalize the Amtrak system, improve efficiency, and reduce costs, including implementing State contributions equal to the Federal Government's for operating long distance routes through their communities. Amtrak's long-distance routes have poor on-time performance, account for only 4.7 million of Amtrak's nearly 32 million annual passengers, and incur annual operating losses of more than \$500 million.

PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

Budgetary Resources

Dollars in Millions

Account	FY 2017 Actual	FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Operational Expenses (GF)	\$22.5	\$22.3	\$23.7
Hazardous Materials Safety (GF)	57.0	56.6	52.1
Emergency Preparedness Grants (SF)	26.4	26.4	28.3
Pipeline Safety (SF)	134.3	135.1	127.2
Pipeline Safety (TF)	20.3	20.2	23.0
Total	\$260.4	\$260.6	\$254.3
Full Time Equivalent Employment	540	581	581



OVERVIEW The Pipeline and Hazardous Materials Safety Administration (PHMSA) oversees the safe movement of hazardous materials, including energy products, transported in the United States by pipeline, highway, rail, air, and water. PHMSA develops standards for the classifying, handling and packaging of more than 1 million daily shipments of hazardous materials within the United States. PHMSA promotes safety in the design, construction, operation, maintenance, and spill response planning of America's 2.7 million miles of natural gas and hazardous liquid pipelines. Collectively PHMSA supports the delivery of nearly all of our Nation's energy products and the safe arrival of hazardous materials such as lithium batteries, propane gas, and other products used daily in homes and businesses

> PHMSA operates under rapidly changing conditions. The United States continues to experience increasing energy market growth that has seen production nearly double since 2000. Almost all product is moved without incident from points of extraction to refineries and to consumer markets. The Energy Information Administration forecasts record natural gas production in 2018 along with an expected rise in electricity generation from natural

gas-fired power plants and a 23 percent increase in U.S. natural gas exports. PHMSA's responsibility has also grown as natural gas is increasingly liquefied to reduce its volume, and then moved by surface transportation modes to points of use, export, or storage for later use.

PHMSA's work is guided by the Fixing America's Surface Transportation (FAST) Act, which calls for improving the safe movement of hazardous products such as liquefied natural gas, crude oil by rail, and lithium batteries often shipped by air. Similarly, the Protecting our Infrastructure of Pipelines and Enhancing Safety (PIPES) Act of 2016 calls for developing safety standards for underground natural gas storage facility operators to safely store natural gas in depleted hydrocarbon reservoirs and salt caverns while it awaits market demand, helping our Nation's economic growth, energy development and energy exports.



The FY 2019 President's Budget requests \$254.3 million to invest in the safe transportation of hazardous materials including energy products. This funding will support Pipeline Safety, Hazardous Materials Safety, Emergency Preparedness Grants, and Operational Expenses.

Key Components of the Request Include

- ► Pipeline Safety: \$150.2 million is requested to support the movement of energy products safely to market. The Pipeline Safety program promotes the safe construction and operation of new infrastructure and the safe operation, maintenance and repair of existing pipelines. Both rapid expansion and aging infrastructure present challenges to safety.
- Hazardous Materials Safety: **\$52.1 million** is requested to support the safe movement, by packagers and shippers, of hazardous materials to the homes and businesses that use them. This includes support for energy products moving by rail, and the movement and storage of liquefied natural gas being used domestically and shipped abroad. The request includes a new investment of \$1.0 million for a

- Voluntary Compliance System Pilot Program that encourages companies to adopt safety management systems.
- **Emergency Preparedness** Grants: \$28.3 million is requested to help communities develop hazardous materials emergency response plans and to train first responders to deal with releases of hazardous materials near homes and businesses.
- **Operational Expenses: \$23.7** million is requested for operational expenses to support the safety management organization including \$2.5 million for grants to communities affected by pipeline and hazardous material routes. The request includes proposals to consolidate and focus grant programs in support of economic growth and underserved rural areas.

MARITIME ADMINISTRATION

Budgetary Resources

Dollars in Millions

Account	FY 2017 Actual	FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Operations and Training (GF)	\$175.6	\$174.4	\$152.4
Ship Disposal (GF)	34.0	33.8	30.0
Assistance to Small Shipyards (GF)	10.0	9.9	0.0
Maritime Security Program (GF)	300.0	298.0	214.0
Maritime Guaranteed Loans (Title XI) (GF)	3.0	3.0	0.0
Total	\$522.6	\$519.0	\$396.4
Full Time Equivalent Employment	732	814	813



The Maritime Administration (MARAD) program strengthens and promotes the economic competitiveness, efficiency, and productivity of the U.S. maritime transportation system and help to ensure sealift capability and capacity is available to support the military defense and economic security needs of the Nation.

> MARAD works in a variety of areas involving shipyards, ports, waterways, ships and shipping, vessel operations, national security and strategic mobility, ship disposal, and maritime education. MARAD is responsible for maintaining the health of the Merchant Marine since commercial mariners are vital for supporting our economic and national security. The agency operates the United States Merchant Marine Academy (USMMA) and supports six State Maritime Academies (SMAs). It also partners with the Department of Defense (DoD) to maintain a fleet of cargo ships in reserve to provide surge sealift during war and national emergencies. Further, MARAD is responsible for disposing of noncombatant Government ships as they become obsolete.

> A strong, resilient marine transportation system is required to keep the United States competitive in the global economy and to maintain our military strength.

HIGHLIGHTS of the FY 2019 PRESIDENT'S

The FY 2019 President's Budget requests \$396.4 million to invest in MARAD's program activities and initiatives.

Key Components of the Request Include

- Operations and Training: **\$152.4 million** is requested to support the USMMA, the SMAs, and MARAD Operations and Programs. This funding is used to educate and graduate highly trained merchant mariners to support the economic security and national defense needs of the Nation, and will provide for agency infrastructure, staff and programs supporting maritime initiatives.
 - **United States Merchant** Marine Academy: \$74.6 million is requested for the USMMA to provide mission-essential program requirements to support the highest standards of excellence in education for the Midshipmen, including \$70.6 million for operating expenses and \$4 million for priority capital repairs

- and improvements to the Academy's buildings and infrastructure.
- **State Maritime Academies:** \$24.4 million is requested to support the SMAs including \$22 million for school ship maintenance and repair to maintain the six SMA training ships in compliance with the U.S. Coast Guard and American Bureau of Shipping requirements, and \$2.4 million for student tuition assistance program support.
- **Operations and Programs: \$53.4 million** is requested to support MARAD Operations and Programs and provide the agency infrastructure and professional staff for its operating mission and support programs.

- Maritime Security Program: **\$214 million** is requested for the Maritime Security Program (MSP) to ensure the maintenance of a commercial fleet of militarily useful vessels. The MSP provides assured access to sealift and intermodal logistics capability during times of conflict, national emergencies, and other contingency situations. The MSP fleet has the capacity to move and sustain the heaviest armored units to support DoD operational requirements. The MSP fleet provides employment for 2,400 highly trained, qualified U.S. Merchant Mariners, who are critical to manning the U.S.
- surge sealift fleet during national contingency situations. Additionally, the MSP program supports more than 5,000 shoreside maritime industry jobs.
- Ship Disposal: \$30 million is requested for the Ship Disposal Program, which includes \$3 million to maintain the Nuclear Ship SAVANNAH (NSS) in protective storage according to Nuclear Regulatory Commission license requirements. The request also includes \$25 million to dismantle and decontaminate the defueled nuclear power plant on board the NSS. The remaining \$2 million is for MARAD salaries and administrative costs.

SAINT LAWRENCE SEAWAY **DEVELOPMENT CORPORATION**

Budgetary Resources

Dollars in Millions

Account	FY 2017 Actual	FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Saint Lawrence Seaway Development Corporation	\$36.0	\$35.8	\$28.8
Full Time Equivalent Employment	132	144	144



OVERVIEW The Saint Lawrence Seaway Development Corporation (SLSDC), a wholly owned Government corporation, is responsible for the operations, maintenance, and infrastructure renewal of the U.S. portion of the St. Lawrence Seaway between Montreal and Lake Erie. This responsibility includes maintaining and operating the two U.S. Seaway locks located in Massena, New York, and performing vessel traffic control operations in areas of the St. Lawrence River and Lake Ontario.

> The SLSDC remains dedicated to safely and efficiently operating the U.S. portion of the St. Lawrence Seaway, while also promoting the economic benefits of the marine mode, attracting new cargoes to the Great Lakes Seaway System, and leveraging technology and innovation to enhance the system's performance and safety.

The SLSDC coordinates its activities with its Canadian counterpart, the St. Lawrence Seaway Management Corporation, particularly with respect to rules and regulations, overall day-to-day waterway and lock operations, traffic management, and trade and economic development programs.

Since the 15-lock binational waterway's opening in 1959, nearly 3 billion metric tons of cargo has moved on the St. Lawrence Seaway valued at more than \$450 billion. Maritime commerce on the

Great Lakes Seaway System is responsible for annually sustaining more than 125,000 U.S. jobs and \$18 billion in revenues for U.S. transportation-related businesses.

As part of the Administration's "Reforming Government" efforts, a study will be completed in FY 2018 to examine the feasibility of privatizing or commercializing SLSDC operations. The Canadian government commercialized Canadian Seaway operations in 1998.



The FY 2019 President's Budget requests \$28.8 million from the Harbor Maintenance Trust Fund to support the continued safe, reliable, and efficient operation of the U.S. portion of the St. Lawrence Seaway, including the two U.S. Seaway locks in Massena, New York. SLSDC activities in this request support the Secretary's priorities of safety, infrastructure, innovation, and mission efficiency.

Key Components of the Request Include

- Agency Operations: \$19.1 million is requested for the operations and maintenance of the U.S. portion of the binational St. Lawrence Seaway. This program includes funding for all 144 SLSDC FTEs.
- Asset Renewal Program (ARP): \$9.7 million is requested to fund infrastructure-related capital expenses as part of the SLSDC's ongoing ARP, which includes \$5 million for the completion of the ongoing tugboat replacement project, and \$2.5 million for the continuation of maintenance dredging in the U.S. sections of the St. Lawrence River.

OFFICE OF THE SECRETARY

Budgetary Resources

Dollars in Millions

Account	FY 2017 Actual	FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Salaries and Expenses (GF)	\$114.0	\$113.2	\$113.8
Nat'l Surface Transp. and Innovative Finance Bureau (GF)	3.0	3.0	3.0
Transportation Planning, Research & Development (GF)	12.0	11.9	7.9
Office of Civil Rights (GF)	9.8	9.7	9.5
Financial Management Capital (GF)	4.0	4.0	2.0
Essential Air Service (SF)	121.8	130.8	140.2
Payments to Air Carriers (GF)	150.0	149.0	93.0
National Infrastructure Investments (TIGER) (GF)	500.0	496.6	0.0
Research and Technology (GF)	13.0	12.9	7.0
Cyber Security Initiative (GF)	15.0	14.9	10.0
Small and Disadvantaged Business Utiliz. & Outreach/MBRC (GF)	5.6	5.5	3.7
Total	\$948.1	\$951.5	\$390.1
Full Time Equivalent Employment	1,439	1,588	1,582



The Office of the Secretary (OST) oversees the formulation of national transportation policy, promotes intermodal transportation, and manages significant financial assistance programs. OST provides research, analysis, technical and statistical information, and assessments to inform policy development and decision making. In addition to furthering the Secretary's priorities of safety, infrastructure, and innovation, other OST responsibilities include exploring ways to use data to reduce transportation-related fatalities, enforcing airline consumer protection regulations, issuing regulations to prevent alcohol and illegal drug use in the transportation sector, preparing transportation legislation, and negotiating and implementing international transportation agreements.

> OST also implements key infrastructure grant and loan programs, including the Infrastructure for Rebuilding America (INFRA) grant program as wells as the Transportation Infrastructure Finance and

Innovation Act (TIFIA) and Railroad Rehabilitation & Improvement Financing (RRIF) loan programs. In addition, OST aims to foster a regulatory environment that allows for reduced regulatory burden and the deployment of innovative technologies throughout transportation sectors.



The FY 2019 President's request is \$390 million to invest in the programs and activities of the Office of the Secretary. The request includes funding for core oversight and policy activities as well as investment in the National Surface Transportation and Innovative Finance Bureau, cyber security initiatives, and research and technology programs.

OST is driving innovative solutions in FY 2019. For example, OST will expand the existing Departmental Technology Transfer Program to accelerate deployment of innovative research results, continue the Safety Data Initiative, applying innovative data analysis tools to address transportation safety problems, and provide insights and analysis to encourage the safe development, testing and deployment of automated vehicle technologies across all modes of transportation and gather input from stakeholders and industry to identify regulatory barriers through request for comments and request for information as part of the Automated Vehicle (AV) 3.0 initiative.

Key Components of the Request Include

- Operations (Salaries and **Expenses): \$113.8 million** is requested for salaries and expenses of the Office of the Secretary. This request funds oversight, policy development, and administration of Departmentwide management.
- Financial Management Capital: \$2 million is requested for implementation of the electronic authentication solution to enable vendors to electronically certify and register for access to the eInvoicing system. By extending these capabilities to the vendor community, we will eliminate current manual processes and reduce costs, increase timeliness of payments, and improve data quality.
- Small and Disadvantaged Business Utilization: \$3.5 million is requested for the Office of Small and Disadvantaged Business Utilization and Outreach (OSDBU) to provide the small business community training, counseling, and procurement assistance for transportationrelated contracts. OSDBU ensures that small businesses have an equitable opportunity to participate in DOT's direct procurement and Federal financial assistance programs. The Budget also includes \$250 thousand to create a new financial education program while discontinuing the

- Short-Term Lending Program that is duplicative of resources the Small Business Administration provides.
- Transportation Planning, **Research and Development** (TPR&D): \$7.9 million is requested for activities and studies to support the Secretary's responsibilities in the formulation of national and international transportation policy, as well as in implementing the Department's multimodal programs. TPR&D will also be a major contributor to furthering autonomous vehicle research and development, continuing the Department's Safety Data Initiative, as well as research focused on other emerging technologies and their impact on the Nation's transportation systems. Additionally, the request includes \$1.0 million for DOT's Infrastructure Permitting Improvement Center including the Permitting Dashboard that is designed to improve the transparency and accountability of the permitting process.
- Cyber Security Initiatives: \$10 **million** is requested to strengthen the Department's ability to identify and remediate cybersecurity risks through advanced data collection, integration and reporting, and continuous monitoring.

- Research and Technology: **\$7.0 million** is requested for the Office of the Assistant Secretary for Research and Technology (OST-R) to strengthen research and technology initiatives across all Operating Administrations. To better coordinate research across the Department, the FY 2019 budget reflects that OST-R is relocated under the Office of the Under Secretary for Policy. This Office also receives \$26 million for the Bureau of Transportation Statistics and \$77.5 million for the University Transportation Centers grant program through the Highway Trust Fund.
- National Surface Transportation and Innovative Finance Bureau (Bureau): \$3 million is requested for the Bureau. Established under the FAST Act, the Bureau continues to facilitate targeted Federal investments in infrastructure by streamlining the Department's innovative finance programs. The funding will allow OST to further build on its initial progress of consolidating these credit programs, continuing to develop and promote best practices for innovative financing

- and public-private partnerships. For FY 2019, the Budget proposes that the Bureau assume responsibility for overseeing existing loans made by the Federal Ship Financing Program (Title XI), which is currently located within MARAD. Given the program's history of troubled performance, the Budget requests no funding for Title XI and proposes terminating its authorization.
- Essential Air Service/Payments to Air Carriers: \$93 million in discretionary appropriations is requested in addition to the **\$140.2** million provided through mandatory budget authority. OST looks forward to working with Congress on reforms to the EAS program. The Budget proposes to reform the EAS program by adjusting EAS eligibility based on driving distance to nearby airports; increasing the subsidy cap from \$200 to \$250 per passenger for EAS communities located within 210 miles from a large or medium hub airport, and eliminating the waiver for this requirement; and, placing limits on the waiver authority for the 10-enplanement requirement.

OFFICE OF INSPECTOR GENERAL

Budgetary Resources

Dollars in Millions

Account	FY 2017 Actual	FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Inspector General (GF)	\$90.2	\$89.5	\$91.5
Full Time Equivalent Employment	410	410	416

The Department of Transportation's Office of Inspector General (DOT-OIG) is committed to providing relevant and timely information about transportation issues to Congress, the Department, and the American public. We accomplish this by fulfilling our statutory responsibilities under the Inspector General Act of 1978, as amended, while supporting DOT's mission and strategic goals, particularly its emphasis on safety. We work closely with Members of Congress, the Secretary, and senior Department officials to enhance the effectiveness and integrity of DOT programs through cost savings, recoveries, and efficiency gains.

> DOT-OIG's mission is to improve the performance and integrity of DOT's programs to ensure a safe, efficient, and effective national transportation system and detect and prevent fraud, waste, and abuse. Our audit recommendations lead to substantial financial, programmatic and safety improvements. Additionally, our investigations enhance safety by thwarting criminal activities that put lives at risk, and protect taxpayer investments through court-ordered fines, restitutions and recoveries.

> During FY 2017, DOT-OIG issued 107 audit reports containing 337 recommendations. We concluded investigations resulting in 79 indictments and 68 convictions. From FY 2013 through FY 2017, OIG achieved an average return on investment (ROI)¹ of \$35 for every appropriated dollar.

¹ ROI compares DOT-OIG appropriations to the revenue and other savings generated through our findings. Findings are comprised of court-ordered fines, restitutions, recoveries of improper payments, recommended cost savings, and recommendations for funds put to better use.

Our 5-year Strategic Plan covering FY 2017 through FY 2021 describes the goals, strategies, and performance measures for achieving our mission and maintaining the core values of OIG's work—safety, accountability, and integrity.

Safety is DOT's highest priority and central to OIG's mission. OIG is committed to conducting effective audits and investigations of DOT's programs and operations to reduce fatalities and injuries across all modes of transportation.

Accountability is at the heart of OIG's work. Through independent and fair audits and investigations, OIG seeks to ensure that all DOT agencies are accountable for their results and for the resources invested in them. Integrity is OIG's foundation. OIG maintains the highest standards of integrity in its work for the American people, Congress, the Secretary, and senior Department officials, and strives to set the example for objectivity, independence, accuracy, and transparency.



The FY 2019 President's Budget requests \$91.5 million to support the Office of Inspector General. These funds will be used to support the OIG's independent and objective oversight of the Department's programs and activities to provide the Secretary, Congress and the Public with relevant analyses necessary to improve the efficiency and effectiveness of the Department's operations

SUPPORTING SUMMARY TABLES

Budgetary Resources

Appropriations, Obligation Limitations, and FHWA and OST Mandatory Programs (Dollars in Millions)

Administration	FY 2017 Actual	FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Federal Aviation Administration	\$16,407.4	\$16,295.9	\$16,122.3
Federal Highway Administration	43,097.1	42,805.5	45,790.6
Federal Motor Carrier Safety Administration	644.2	639.8	665.8
National Highway Traffic Safety Administration	911.3	905.2	914.7
Federal Transit Administration	12,414.5	12,330.2	11,118.6
Federal Railroad Administration	1,851.4	1,838.8	854.0
Pipeline and Hazardous Materials Safety Administration	260.4	260.6	254.3
Maritime Administration	522.6	519.0	396.4
Saint Lawrence Seaway Development Corporation	36.0	35.8	28.8
Office of the Secretary	948.1	951.5	390.1
Office of Inspector General	90.2	89.5	91.5
PHMSA User Fee Offsetting Receipts	(134.3)	(135.1)	(127.2)
Total DOT Budgetary Resources	\$77,048.9	\$76,536.8	\$76,500.0

Totals may not add due to rounding. Totals do not reflect transfers.

Budget Authority

Dollars in Millions

Administration	FY 2017 Actual	FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Federal Aviation Administration	\$16,414.3	\$16,318.7	\$16,122.3
Federal Highway Administration	43,177.5	43,052.4	44,510.6
Federal Motor Carrier Safety Administration	644.2	657.8	665.8
National Highway Traffic Safety Administration	1,012.6	1,024.7	914.7
Federal Transit Administration	13,850.5	13,696.3	12,418.6
Federal Railroad Administration	1,853.2	1,939.2	854.0
Pipeline and Hazardous Materials Safety Administration	260.4	260.6	254.3
Maritime Administration	523.7	526.2	397.4
Saint Lawrence Seaway Development Corporation	36.0	35.8	28.8
Office of the Secretary	948.3	951.5	390.1
Office of Inspector General	90.2	89.5	91.5
Offsetting Receipts	- 1,233.2	- 1,881.0	- 723.5
Total DOT Budget Authority	\$77,577.7	\$76,671.7	\$75,924.7

Totals may not add due to rounding. Totals do not reflect transfers.

Outlays Dollars in Millions

Administration	FY 2017 Actual	FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Federal Aviation Administration	\$15,867.1	\$16,761.5	\$16,643.2
Federal Highway Administration	44,167.1	44,731.4	45,467.5
Federal Motor Carrier Safety Administration	562.2	608.1	666.3
National Highway Traffic Safety Administration	946.7	1,042.0	1,049.0
Federal Transit Administration	12,263.3	13,322.0	13,226.0
Federal Railroad Administration	4,601.6	2,264.0	1,075.0
Pipeline and Hazardous Materials Safety Administration	242.9	299.3	284.1
Maritime Administration	466.6	579.9	475.8
Saint Lawrence Seaway Development Corporation	25.6	52.0	43.8
Office of the Secretary	767.9	1,179.0	926.0
Office of Inspector General	89.1	91.0	91.0
Surface Transportation Board	0.5	0.0	0.0
Offsetting Receipts	- 1,233.2	- 1,881.0	- 723.5
Total DOT Outlays	\$78,767.4	\$79,049.2	\$79,224.2

Totals may not add due to rounding.

Full Time Equivalent Employment

Administration	FY 2017 Actual	FY 2018 Annualized Continuing Resolution	FY 2019 President's Budget
Federal Aviation Administration	45,547	45,517	45,147
Federal Highway Administration	2,700	2,720	2,713
Federal Motor Carrier Safety Administration	1,161	1,202	1,202
National Highway Traffic Safety Administration	541	626	626
Federal Transit Administration	555	574	563
Federal Railroad Administration	919	933	927
Pipeline and Hazardous Materials Safety Administration	540	581	581
Maritime Administration	732	814	813
Saint Lawrence Seaway Development Corporation	132	144	144
Office of the Secretary	1,439	1,588	1,582
Office of Inspector General	410	410	416
Total DOT Full Time Equivalent Employment	54,676	55,109	54,714

Totals may not add due to rounding.



U.S. Department of Transportation

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