

BUDGET HIGHLIGHTS

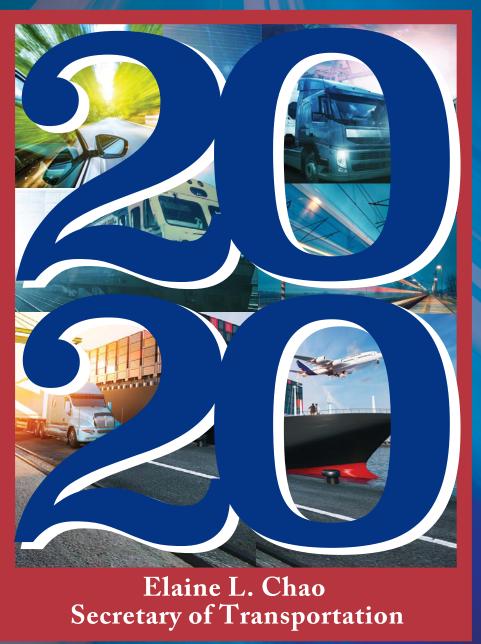


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Technical Notes

- > Tables presented in this document may not add due to differences in rounding.
- The use of brackets in tables indicates a "non-add" entry.
- Time frames in this document represent fiscal years (FY).
- > Full time equivalent employment (40 hours of work for 52 weeks a year) is identified as FTE throughout this document.
- The Department of Transportation has both General Funds (GF) and Trust Funds (TF). Tables in this document use GF and TF indicators to specify the source of funds in each appropriation account.

Acronyms

FAA Federal Aviation Administration FHWA Federal Highway Administration

FMCSA Federal Motor Carrier Safety Administration NHTSA National Highway Traffic Safety Administration

FTA Federal Transit Administration FRA Federal Railroad Administration

MARAD Maritime Administration

PHMSA Pipeline and Hazardous Materials Safety Administration SLSDC Saint Lawrence Seaway Development Corporation

OIG Office of the Inspector General

OST Office of the Secretary
CR Continuing Resolution
FTE Full Time Equivalent

GF General Fund
TF Trust Fund
SF Special Fund

FAST Act Fixing America's Surface Transportation Act of 2015 (P.L. 114-94)

BUILD Better Utilizing Investments to Leverage Development

INFRA Infrastructure for Rebuilding America

KEY POINTS IN THE PRESIDENT'S FY 2020 BUDGET REQUEST FOR THE DEPARTMENT OF TRANSPORTATION

The President's Fiscal Year (FY) 2020 Budget request continues to reflect the President's strong support for investing in and improving our Nation's transportation infrastructure. To address this important priority, the President is requesting \$84 billion to fund the programs within the Department of Transportation. This funding will enable the work of the Department to continue at a steady pace, and will provide the resources needed to address the emerging technologies that will transform transportation in the future

About 75 percent of the resources requested for Transportation come from mandatory funding provided in authorization bills. The President's request continues the authorized funding levels for the Highway Trust Fund consistent with the fifth and final year of the Fixing America's Surface Transportation (FAST) Act (\$58.7 billion). Similarly, the President's request also funds the fully authorized level for the Federal Aviation Administration's (FAA) Airport Improvement Program funded by the Airport and Airway Trust Fund (\$3.35 billion).

The remaining 25 percent of the President's request supports Transportation programs that are funded through discretionary general fund appropriations and represents \$21.4 billion. This includes:

- \$2 billion to fund transportation grants in the BUILD and INFRA programs (in addition to the \$1 billion for the INFRA program provided by the FAST Act);
- > \$1.4 billion in resources for FAA's NextGen program;
- \$1.5 billion for existing and new grant agreements in the Federal Transit Administration's Capital Investment Grants Program;
- > \$500 million in transit state-of-good-repair grants;
- > \$330 million in rail grants; and,
- > \$550 million in transitional grants to States to implement a transformative restructuring of the Amtrak long-distance network.

Additional details on each of these funding proposals are included in the chapters for each Operating Administration later in this document along with reference tables.

ACCOMPLISHMENTS

U.S. Department of Transportation (2017-2018)

Under the leadership of the 18th Secretary of Transportation, Elaine L. Chao, the U.S. Department of Transportation (DOT) has focused efforts to serve the United States by ensuring a safe, fast, efficient, accessible and convenient transportation system that meets our vital national interests, creates jobs and enhances the quality of life of the American people, today and into the future.

Safety

✓ Positive Train Control (PTC)

Implementation: To facilitate and hold railroads accountable for fulfilling this life-saving statutory mandate, FRA has taken dozens of actions, including conducting research, engaging stakeholders, providing financial assistance, and assessing civil penalties. Due to FRA's vigilance and facilitation required railroads either met the December 31, 2018, statutory deadline for fully implementing PTC systems, or submitted requests demonstrating they met or exceeded the statutory criteria for an alternative schedule provided for by law.

✓ Emergency Response: In March 2017, a fire collapsed a major bridge overpass on I-85 in Atlanta, GA. Within 12 hours, DOT awarded \$10 million for emergency repairs and provided critical logistical support. The bridge reopened just 49 days later. DOT has also

worked closely with local and State officials on hurricane response, including for Harvey, Maria, Florence, and Michael.

FHWA provided response actions following Hurricanes Harvey, Irma, and Maria in the summer/fall of 2017, including oversight of FEMA Mission Assignments to deploy FHWA staff to Puerto Rico and the US Virgin Islands to aid in recovery and reconstruction efforts. The FHWA also provided activation and reporting actions related to Hurricanes Lane, Florence, and Olivia, Tropical Storms Gordon and Isaac, and Typhoon Mangkhut in the summer of 2018.

MARAD's Ready Reserve Force, which is used frequently through MARAD's no-cost SafeStor initiative, provides a last measure of protection to First Responder vehicles, boats, equipment, and even personnel during severe weather events. This use of reserve ships provides for more resilient local community emergency response by protecting equipment loaded onto vessels until storms pass. This was used for successive hurricanes in TX, FL, SC, and VA.

Department launched the new Safety Data
Initiative to leverage the latest innovations
in data analytics to help identify and address
emerging safety risks. The initiative has hosted
forums and launched multiple pilot programs,
including a rural speed project and a data
integration and visualization competition. The
Initiative has provided State and local officials
with new cutting-edge tools and best practices
to identify risks and formulate policy responses.

- ✓ Human Trafficking Training: The Department helped protect the most vulnerable by launching new human trafficking training for airline industry personnel through the Blue Lightning Initiative with the Department of Homeland Security. By the end of 2018, DOT will have helped facilitate the training of more than 120,000 airline employees, 55,000 DOT employees, and 20,000 Amtrak employees. DOT also facilitated the launch of A21's "Can You See Me?" public awareness campaign at O'Hare, JFK, LaGuardia, Dulles, and over 20 Amtrak stations (expansion continues).
- Commercial and General Aviation Fatal Accident Rates: Due to FAA's risk-based data driven approach to enhancing aviation safety, FAA has successfully met the goals for reducing commercial air carrier fatalities per 100 million persons on board by 50 percent and reduced the general aviation fatal accident rate to no more than one fatal accident per 100,000 flight hours by 2018.
- ✓ Safety Management Systems (SMS): The FAA required all commercial air carriers to implement safety management systems and receive FAA certification by March 9, 2018. FAA worked collaboratively with industry to define SMS and to ensure all carriers were approved prior to the deadline.
- ✓ Runway Incursion Mitigation and Surface Safety Programs: The Runway Incursion Mitigation Program has resulted in improvements at 28 locations. As of August 2018, incursions were reduced from 297 to 8, saving lives as well as airline equipment and revenue.
- ✓ Aircraft and Technology Certification: The FAA published one of the largest revisions to its regulations in history, which went into effect in August 2017. The new regulations

- update the rules that establish airworthiness standards for general aviation aircrafts. The FAA's previous safety standards were originally written in 1965 and were based on 1950s and 1960s airplane designs. The old standards ensured adequate levels of safety, but lacked flexibility to accommodate rapidly developing technological innovations. Today, instead of telling manufacturers how to build general aviation airplanes, the FAA's regulations set performance standards and allow general aviation manufacturers to develop the designs and innovations to meet those standards.
- ✓ Crash Preventability Demonstration

 Program: August 2017, FMCSA kicked off the Crash Preventability Demonstration Program to study the preventability of eight crash types. The program notes the crash determination in the Safety Measurement System and provides motor carriers with their alternative Crash Indicator BASIC measures and percentiles without crashes found to be not preventable. To date, over 8,000 crashes have been submitted by over 2,500 different companies. As of September 29, 2018, the requests have resulted in over 3,700 not preventable determinations.
- ✓ Published the Public Transportation
 Agency Safety Plan (PTASP) and Public
 Transportation Safety Certification
 Training Program (PTSCTP) final rules:
 With these actions, FTA completed the regulatory framework for the National Public Transportation Safety Program as authorized by Congress. Taking a risk-based safety management system approach, FTA reduced the cost of the PTASP rule from \$71 million for the version proposed in 2016 to \$31 million for the version finalized in 2018.

- ✓ Certified 27 State Safety Oversight (SSO) Programs: Federal law requires States with rail transit systems to obtain FTA certification of their SSO Programs by April 15, 2019. By federal law, the deadline cannot be waived or extended. As of the end of FY 2018, FTA has certified 27 of 31 rail transit SSO Programs in advance of this important safety deadline.
- ✓ Activated and deployed reserved ships operated for the Department of Defense's Missile Defense Agency: These two, DOTowned ships provide for missile defense activities, including mission support for ballistic missile defense tests. These ships are operated by a commercial ship manager under contract with MARAD, provided over 56 days of underway service for the year 2018, over 32 days during FY 2019, with one currently underway in the Pacific Ocean.

Used frequently through MARAD's nocost SafeStor initiative, this provides a last measure of protection to First Responder vehicles, boats, equipment, and even personnel during severe weather events. This use of reserve ships provides for more resilient local community emergency response by protecting equipment loaded onto vessels until storms pass. This was used for successive hurricanes in TX, FL, SC, and VA.

✓ Leading the Nation to combat drug impaired driving: Drug-impaired driving has joined alcohol-impaired driving and distracted driving as a cause of needless crashes on our roadways. NHTSA has launched a public education program to raise awareness of the risks of driving impaired by illicit drugs, prescribed medicines, or over-the-counter products. The initiative will also strengthen programs that support safety programs to ensure that all Americans have access to safer roads and highways.

- ✓ Improving the safety of cars and trucks on our roads: Oversight of safety defects and compliance with federal safety standards for all motor vehicles resulted in 810 recalls affecting over 30 million vehicles in 2017. In 2018, there have been 914 recalls affecting over 29 million vehicles.
- ✓ **Grants to improve 9-1-1 system:** To improve emergency response and public safety throughout the Nation, NHTSA together with the National Telecommunication and Information Administration published a rule to provide for grants to support next generation improvements to the 9-1-1 system.
- ✓ Enhancing pipeline safety technology—plastic pipe final rule: On November 20, 2018, PHMSA published the Plastic Pipe Final Rule in the Federal Register. The rule addressed petitions from industry, as well as safety issues identified by PHMSA staff, inspectors, and standard development committee members. These amendments incorporated newer technologies, standards, and practices related to the installation and operation of plastic gas piping. This rule will result in safety improvements and \$32 million in annual cost savings.
- ✓ "Check the box" nationwide hazardous materials safety initiative: On August 1, 2018, PHMSA introduced its "Check the Box" public safety initiative aimed at increasing public awareness of the dangers of not declaring and properly packaging hazardous materials before shipment. Developed through a partnership with the Air Line Pilots Association, the initiative has gained support from the U.S. Postal Service, United Parcel Service, FedEx, Amazon, the American Trucking Associations, and eBay.

✓ Installation of hands-free mooring (HFM) technology at U.S. seaway locks: On September 19, 2018, the SLSDC completed installation of HFM technology at its U.S. Eisenhower Lock in Massena, New York. This state-of-the-art technology eliminates traditional line handling functions during commercial lockages and allows ships to transit more safely and efficiently, while also enhancing workplace and operational safety conditions

Innovation

- ✓ Unmanned Aircraft Systems (UAS) **Integration Pilot Program (IPP):** DOT has established a UAS Integration Pilot Program, with ten local governments and private partners to gather data for safely advancing beyond-line-of-sight operations over people and package deliveries in selected jurisdictions and to determine future "rules of the road" for time, place, and manner of drone operations. The Secretary of Transportation announced the selection of 10 State, local, and tribal governments as participants in the Unmanned Aircraft Systems Integration Pilot Program (IPP). First announced last October, this White House initiative partners the FAA with local, State, and tribal governments, which then partners with private industry to safely explore the further integration of drone operations.
- ✓ Low Altitude Authorization and
 Notification Capability (LAANC): The
 FAA collaborated with industry to deploy an
 automated system known as LAANC, used to
 process airspace authorizations for small UAS
 operators nationwide. LAANC was deployed
 at nearly 300 air traffic control facilities
 covering approximately 500 airports. As of

- October 1, 2018, over 35,000 authorizations have been granted in controlled airspace using this capability.
- **✓** Autonomous Vehicles: Removing Barriers to Innovation and Enhancing Safety: To facilitate the safe testing and development of components and vehicles that together could comprise advanced Automated Driving Systems (Levels 4 and 5), NHTSA released "AV 2.0, A Vision for Safety," guidance that called for Voluntary Safety Self Assessments by developers and manufacturers, and outlined 12 safety elements that should be addressed in the assessments as well as guidance for State and local governments. In October 2018, DOT released "Preparing for the Future of Transportation: Automated Vehicles 3.0." This non-regulatory approach will promote innovation, which DOT believes could save lives, reduce congestion, and expand mobility.
- **✓** Commercial Space Transportation: FAA plays a critical role in commercial space transportation, ensuring the protection of public safety during launch and reentry operations and encouraging, facilitating, and promoting the U.S. commercial space transportation industry. The FAA licensed a record number of launches in FY 2018—a total of 32 commercial space launches, 14 more than were launched in FY 2017. In order to keep pace with a quickly expanding and innovative industry, and to allow the industry to continue its growth without regulatory burden, the FAA has laid the groundwork for streamlining and updating its commercial space regulations.
- ✓ Published the Strategic Transit Automation Research (STAR) Plan: FTA's STAR plan outlines an FTA research agenda for transit bus automation over five years. The plan provides a framework for the transit industry to pursue

transit bus automation in a safe, efficient, and economically sound manner.

- AV National Dialogue on Highway
 Automation: The FHWA initiated a national
 conversation with partners and stakeholders,
 as well as the public at-large, to receive
 broad input on key areas of interest and
 prepare FHWA programs and policies to
 incorporate automation considerations.
 Titled the "National Dialogue on Highway
 Automation"—a series of meetings held
 across the country over six months—FHWA
 facilitated information sharing and identified
 key issues to support the transportation
 community to safely and efficiently integrate
 automated vehicles into the road network.
- **✓** Research, Development, and Deployment of Advanced Technology: For the first time, FRA's Automated Track Inspection Program (ATIP) surveyed more than 100,000 miles in a single year, 2017. Using advanced sensors and noncontact measurement systems, ATIP vehicles detected 4,396 substandard track conditions. FRA engaged a new ATIP data management contractor for advanced analytics. FRA issued a request for information and comment on the potential benefits, costs, risks, and challenges to implementing automated railroad operations. FRA led a Departmental forum with the Association of American Railroads related to enabling vehicles to detect, recognize, and react to the status of a grade crossing.
- ✓ Safe pilot program for collaborative research on motor vehicles with high or full driving automation: In order to develop a program for safe testing and development of highly automated vehicles, NHTSA is engaging with stakeholders to consider elements of a pilot program for testing innovative technologies on public roads.

Rebuilding Our Nation's Infrastructure

- ✓ Infrastructure: DOT has issued \$2 billion in INFRA and BUILD (previously "TIGER") grants in FY 2018 using the administration's criteria for infrastructure, including local leverage. For BUILD, rural projects received about 30 percent of funds over the past decade; this year, it was 64 percent. DOT contributed about \$65 billion to improving infrastructure in calendar year 2018.
- ✓ Airport Infrastructure: In FY 2018, the FAA awarded \$3.46 billion in grants to 1,300 airports across the country, making vital investments in the Nation's transportation infrastructure. These grants include investments in runways, taxiways, aircraft parking areas, terminals at small airports, aircraft rescue and firefighting vehicles, snow removal equipment, and firefighting training facilities.
- ✓ International Aviation Agreements: The Department crafted international aviation agreements that increased travel opportunities for Americans, and added jobs and economic opportunities for U.S. passenger and freight airlines in key foreign countries. A previously negotiated agreement with Brazil went into effect. Understandings were reached with Qatar and the United Arab Emirates to protect American air carriers from competitors with market-distorting subsidies. The Understandings also introduced transparency and fair business practices in the air transportation market that will benefit the traveling and shipping public.
- ✓ Data Communications (DataComm):

 DataComm technology supplements voice
 communication between air traffic controllers
 and pilots with digital text-based messages.

This helps pilots and air traffic controllers communicate more efficiently and effectively, and with less risk of miscommunication than with voice. DataComm is expected to save the industry more than \$10 billion and the FAA \$1 billion over the 30-year life cycle of the program. The FAA completed the deployment of DataComm services at 62 airports.

- ✓ Reoriented competitive grant funding toward rural and small urban areas:

 To ensure that the benefits of public transportation investment reach underserved areas of the country, FTA directed a greater share of its competitive grant funding towards rural and small urban areas (i.e., areas having a population less than 200,000). In FTA's two largest competitive grant programs (excluding the Capital Investment Grants program), the portion of funding that was awarded to rural and small urban areas in the first two years of this Administration increased to 42 percent, as compared to 34 percent during the last year of the previous Administration.
- ✓ Restored the Maritime Security Program
 Fleet (MSP) to the full authorized 60 ship
 level: Restoring MSP fleet to full authorized
 levels strengthens National Security and
 allows MARAD and the US Merchant marine
 to meet its Department of Defense
 mission requirement.
- ✓ MARAD processed and approved the application for the first offshore liquefied natural gas (LNG) export terminal in the Gulf of Mexico: The deep-water port will support our Nation's expanding energy export business by providing the capability to process 12 million metric tons of LNG per year for export.

- ✓ Implemented a State Maritime Academy ship sharing program: Coordinating the usage of training ships by State Maritime Academies to meet the licensing requirements helps offset the current shortage of shipboard training capacity and graduate more mariners to meet our national security needs.
- ✓ Infrastructure renewal projects: Since 2017, the SLSDC has invested \$26 million for 14 different capital infrastructure renewal projects, as part of its on-going Asset Renewal Program (ARP). Several of these projects are among the most significant in the 10-year history of the ARP and include construction of a new ice-class tugboat, installation of the hands-free mooring system, and replacement of concrete at Eisenhower Lock.
 - In 2017 and 2018, the SLSDC experienced noticeable gains in the movement of global trade through the St. Lawrence Seaway. Because of the composition of its traditional cargo base (raw materials, bulk goods, and iron and steel), Seaway commercial traffic has historically been a leading indicator of the Nation's general economic condition. In 2017, commercial trade through the St. Lawrence Seaway increased 9 percent, as compared to 2016, with more than 38 million metric tons of cargo moved to and from the Great Lakes region. Additionally, the 4,127 commercial vessel transits were the highest total since 2011
- ✓ Construction of new SLSDC ice-class tugboat: In September 2017, the SLSDC awarded a contract for \$24 million to a U.S. shipyard for construction of a new Tundra 3600 ice-class tugboat to replace the SLSDC's current, 60-year-old Robinson Bay tug. The new tugboat is scheduled for delivery in September 2019. The stationing in the St.

- Lawrence River of a new ice-class tug with this ice breaking capability and power will improve the safety and efficiency of Seaway operations, particularly during the opening and closing periods of the Seaway.
- **✓** Leveraging Transportation Dollars through the Build America Bureau: The Build America Bureau drives transportation infrastructure projects by providing financing for a wide range of projects, including toll roads, bridges, public transit systems, intercity passenger rail, freight rail, multi-modal terminals and Transit Oriented Development. Key Bureau objectives are to increase access to credit for rural projects, new project types and jurisdictions that have not historically received Bureau assistance. The Bureau serves as a "one-stop shop" to streamline credit opportunities, provide technical assistance and encourage innovative best practices in project planning, financing, delivery, and monitoring. The Bureau also promotes the use of public-private partnerships (P3s) by developing and sharing expertise with stakeholders interested in possible P3 arrangements to facilitate project development, construction, operations, and financing, when appropriate. Under Secretary Chao's leadership, the Department has closed approximately \$10 billion in loans and Private Activity Bond allocations, leveraging scarce Federal dollars to construct over \$25 billion in infrastructure projects across the country.

Workforce Development and Job Creation

- ✓ Increased Jobs Via International **Agreements:** The Department helped to create jobs in the U.S. transportation industry through international agreements, including transportation equities with Mexico and Canada for the United States-Mexico-Canada Agreement and the Auto Chapter of the Korea-U.S. Free Trade Agreement. DOT, working with USTR, secured an agreement from Japan to accept seven U.S. Federal Motor Vehicle Safety Standards. DOT also helped Kenya achieve compliance with U.S. standards and regulations and establish nonstop flight service from Nairobi to New York through the Safe Skies for Africa program, furthering trade and business opportunities between the two countries with the first nonstop flight taking place on October 29, 2018.
- ✓ Aviation Workforce Symposium: The FAA held its first "Aviation Workforce Symposium," in Washington, D.C., on September 13. The Symposium featured the sharing of strategies and best practices for ensuring an adequate supply of qualified pilots and aircraft mechanics, by representatives of industry, labor, educational and vocational institutions, and other government agencies.
- ✓ MARAD began the acquisition of the next generation of training ships: This recapitalization effort continues the approach of the Federal Government's support to merchant mariner training and demonstrates a strong commitment from the Administration for the U.S. Maritime Industry. This purpose built, multi-mission ship provides a modern training platform, and highly capable federal asset at best value to the Nation.

- ✓ United States Merchant Marine Academy reaccreditation and sea-year restoration: The U.S. Merchant Marine Academy regained its full accreditation in 2017. Sea-year training which was cancelled in 2016 is now fully restored.
- ✓ PHMSA training center receives prestigious international accreditation: In March of 2018, after an intense 15-month preparation and review period, PHMSA's State pipeline inspector Training and Qualification Center (TQ) received full accreditation from the International Association for Continuing Education and Training (IACET). Located in Oklahoma City, this state-of-the art facility provides training to federal and State pipeline inspectors and accident investigators from throughout the United States. Accreditation from IACET validates the Center's professional training efforts and allows PHMSA to issue continuing education credits for its courses.

Making Transportation More Efficient and Affordable

- ✓ Reducing Regulatory Costs: Costs from DOT rules have decreased by \$1.4 billion under the current Administration, including a 23-1 deregulatory-to-regulatory ratio in FY 2018.
- ✓ FAA Regulatory Reform: Consistent with the President's Executive Order requiring Federal agencies to cut two regulations for every new one, the FAA has effectively implemented regulatory reform efforts, while maintaining a safe system. All deregulatory actions taken by the FAA provides benefit to the industry or to the American taxpayer with no adverse effect on safety. For fiscal year 2018, the FAA completed five deregulatory actions with an estimated annualized cost savings of \$64.3 million.

- Guidance for Trucking Companies
 Transporting Agricultural Commodities
 and Guidance Concerning the Use
 of Commercial Vehicles for Personal
 Conveyance: Implemented new regulatory
 guidance concerning the applicability of the
 Hours of Service rules to trucking companies
 transporting agricultural commodities
 and clearly identify the point at which the
 Federal Hours of Service rules apply to
 such operations and to better ensure drivers
 understand the flexibility of the rules and
 avoid violating the restrictions.
- ✓ Transit Regulatory Reform: FTA reduced regulatory burdens by approximately \$86 million. FTA's deregulatory achievements include: publishing the Private Investment Project Procedures (PIPP) final rule to facilitate private investment in public transportation capital projects; raising FTA's real estate appraisal threshold from \$500,000 to \$1,000,000, reducing by over 20 percent the number of transactions that grantees must submit; implementing risk-based grant reporting that requires reporting only annually instead of quarterly for grants under \$2 million, reducing the reporting burden by 37 percent and eliminating 4,300 reports each quarter; publishing a joint rule with other DOT modes on Environmental Impact and Related Procedures that enables projects to move more expeditiously through the Federal environmental review process; and rescinding two rules and seven circulars.
- ✓ Environmental Reviews: To advance the potential for intercity passenger rail improvement projects, FRA is completing environmental reviews, assessments, and impact statements. Recent examples include issuing: the record of decision for Brightline,

allowing the privately funded passenger rail project to begin construction from West Palm Beach to Orlando, Florida; draft environmental impact statement for the Texas Central Railway from Dallas to Houston; and final environmental impact statement and record of decision to enhance passenger rail service on the 850-mile, north-south corridor between Oklahoma and Texas.

- ✓ Railroad Regulatory Reform: Among the many regulatory reforms FRA has completed are:
 - Exemption from National Historic Preservation Act reviews for some activities within rail rights-of-way.
 - Passenger equipment safety standards final rule for safe implementation of interoperable, high-speed service; alternate crashworthiness and occupant protection requirements, and advanced technology.
 - Withdrawal of electronically controlled pneumatic brakes mandate for certain highhazard flammable trains travelling over 30 miles-per-hour.
 - Hours-of-service paperwork reduction final rule providing an automated recordkeeping option tailored to small operations while supporting compliance with Federal hoursof-service laws.
 - Extension of system safety program rule and training rule effective dates.
- ✓ Permitting Reform: The One Federal Decision MOU is an unprecedented level of collaboration in the environmental review process. It will establish a lead agency and 2-year track for joint federal approvals, down from a decade or longer in many cases.
- ✓ Special permit to reduce costs for local firefighters: PHMSA continued to use special

permits and approvals to adopt innovative solutions that improve safety. For example, PHMSA issued a special permit that doubled the service life of composite cylinders used by firefighters across the country in self-contained breathing apparatus resulting in a cost savings to local communities of more than \$600 million over 15 years.

✓ Partnerships in highway safety programs:
In 2018, DOT's collaboration with State
Traffic Safety Officials included the launch of
a digital platform for the submission of Traffic
Safety Plans and grant applications. This
new system will allow states to save time and
money in the future by updating prior plans
and applications, rather than re-creating the
materials each year.

ADVANCING INFRASTRUCTURE IMPROVEMENTS

By the end of FY 2018, the Department made available more than \$63.9 billion in FY 2018 multimodal discretionary and formula transportation investments and \$1.6 billion in FY 2017 discretionary funds. This marks a significant step forward in funding the Administration's ambitious infrastructure goals.

The Department is committed to revitalizing America's infrastructure using federal dollars as seed money to encourage additional infrastructure investment by states, localities and private sector partners. Utilizing significantly increased levels of appropriations in FY 2018, more investment is reaching areas and projects with the greatest impact.

Additionally, historic investment through DOT's programs in FY 2018 has begun to address the long-awaited infrastructure needs of rural communities, streamlined project delivery, and invested in transformative projects that benefit all Americans.

The Department has released Notices of Funding Opportunity (NOFOs) for nearly 90 percent of the funding from FY 2018 to solicit applications, and many have been closed or awarded. Overall, the Department has made an unprecedented infrastructure investment in America by making available more than \$65.5 billion for key projects.

The Department of Transportation has:

- ➤ Distributed the entire \$56.2 billion in formula funds from FY 2018;
- ➤ Announced \$7.8 billion in discretionary grant availability from FY 2018; and,
- Awarded \$5.8 billion in FY 2017 and FY 2018 discretionary grants to specific recipients.

Major grant programs including Infrastructure for Rebuilding America (INFRA), Better Utilizing Investments to Leverage Development (BUILD), and the Airport Improvement Program (AIP) are examples of DOT programs fulfilling these objectives. Highlights include:

BUILD Transportation Discretionary Grant Program

- In April 2018, the Department published a NOFO allowing applicants to apply for \$1.5 billion in discretionary grant funding with a due date of July 18, 2018. This triples past funding provided for this flexible grant program focused on innovative projects that have significant local or regional impact.
- > FY 2018 BUILD Transportation grants are for investments in surface transportation infrastructure and will be awarded on a competitive basis to projects with significant local or regional impact.

Infrastructure for Rebuilding America (INFRA) Program

- ➤ In June 2018, the Department announced over \$1.5 billion in proposed grants through the INFRA discretionary grant program. These proposed awards are from a NOFO that combined funding from both FY 2017 and FY 2018.
- These proposed awards will leverage an estimated \$6.1 billion in additional funds from state, local and other funding sources. Together an estimated investment of over \$7.6 billion will be spent on transportation infrastructure.
- > INFRA grants will support the Administration's commitment to fixing our nation's crumbling infrastructure by creating opportunities for all levels of government and the private sector to fund infrastructure, using innovative approaches to improve the necessary processes for building significant projects, and increasing accountability for the projects that are built.

Airport Improvement Program (AIP)

- The Airport Improvements Program provides funding for high-priority airport construction projects with an emphasis on maintaining and improving the safety and efficiency of the approximately 3,300 airports in the national airport system.
 - Over \$3 billion has been awarded to airports throughout the country
 - On September 27, 2018 Secretary Chao announced the first installment, \$205 million, of an additional \$1 billion in supplemental AIP funding provided by Congress.

Transit

- In April 2018, the Department's Federal Transit Administration (FTA) announced approximately \$264 million in project selections to improve the safety and reliability of America's bus systems and enhance mobility for transit riders across the country. A total of 139 projects in 52 states and territories will receive funding from FTA's Buses and Bus Facilities Infrastructure Investment Program.
- In June 2018, the FTA announced a NOFO soliciting applications under the Buses and Bus Facilities Infrastructure Investment Program for \$366 million. Grant awards were made on September 25, 2018. The funds assist in the financing of buses and bus facilities capital projects, including replacing, rehabilitating, purchasing or leasing buses or related equipment, and rehabilitating, purchasing, constructing or leasing bus-related facilities.
- In addition, the Department has announced the following Small Starts Grant Agreements:
 - \$56.2 million Laker Line BRT in Grand Rapids, MI (February 9, 2018)
 - \$16.9 million East Corridor First Coast Flyer BRT in Jacksonville, FL (March 7, 2018
 - \$22.5 million for SMART commuter rail extension in San Rafael, CA (April 9, 2018)
 - \$43 million for Swift II BRT in Everett, WA (April 9, 2018)
 - \$29.9 million for Prospect MAX BRT in Kansas City, MO (April 9, 2018)
 - \$75 million for IndyGo BRT in Indianapolis, IN (May 15, 2018)
 - \$75 million for Tacoma Link inTacoma, WA (May 15, 2018)

 \$75 million for Bus Rapid Transit in Albuquerque, NM (August 29, 2018)

Rail

The FRA has issued NOFOs under the Consolidated Rail Infrastructure and Safety Improvements program totaling \$568 million, of which \$203 million for grants to support the implementation of Positive Train Control (PTC) were awarded on August 24, 2018. There is a further \$343 million available for safety and infrastructure improvements.

Pipelines and Hazardous Materials

In September 2018, PHMSA announced a total of \$90 million in funding to States for pipeline safety and emergency preparedness. One highlight is the Hazardous Materials Emergency Preparedness Grant program, totaling \$22 million. This assists State and local governments, as well as Native American tribes, in safely and efficiently handling hazardous materials accidents and incidents. In addition, these funds will provide a comprehensive approach to emergency planning and training.

Maritime

- ➤ In June 2018, MARAD announced a NOFO soliciting applications under the America's Marine Highway Grants for \$5 million. Grants were awarded on August 8, 2018. These grants support projects that are part of a designated Marine Highway project and will assist with mitigating landside congestion.
- ➤ In July 2018, MARAD awarded over \$20 million in grants for Small Shipyards. These grants support capital improvements and

increased efficiency. Twenty nine shipyards received grant awards.

Highways

In addition to highways receiving major funding through the BUILD and INFRA programs, highway bridge projects can receive a share of a total \$225 million in Competitive Highway Bridge Program (CHBP) grants.

LEADING THE WAY: THE FUTURE OF TRANSPORTATION

Today's transportation systems provide our citizens with safe and reliable options that reflect the best of 21st Century technology. While much of the Department of Transportation's budgetary resources and oversight are dedicated to managing today's transportation systems, we are also keenly focused on the enormous potential presented by emerging technologies to transform and expand our transportation options. We welcome these changes. But at the same time, we recognize our responsibility to maintain the safety of transportation.

The President's FY 2020 Budget request includes funding to support the integration and advancement of several new technologies that are changing transportation. Some key examples are highlighted below.

Automated Driving Systems

The FY 2020 funding request supports ongoing research of Automated Driving Systems, including complex safety-critical electronic control systems, vehicle cybersecurity, and new and emerging technologies that can help drivers avoid crashes and save lives.

Program activities will concentrate resources on the most promising safety-enhancement segments of automation, which have the potential to address the high percentage of serious crashes caused by human error. These efforts will support America's global leadership in the safe deployment of highly automated vehicles by empowering privatesector innovation and focusing on collaboration, uniformity, and interoperability to accelerate testing, validation, and deployment of new life-saving technologies. Through ongoing collaboration with industry, the Department will address the barriers that challenge the rollout of higher-level Automated Driving Systems in the United States.

The FY 2020 request includes support for:

- > Collection of real-world motor vehicle crash occupant-based injury data which will be of increasing relevance for the potential alternative seating arrangements that may be present in vehicles with Automated Driving Systems;
- Research to support decisions on the removal of potential barriers for Automated Vehicles;
- Research on system safety performance and crashworthiness of Automated Vehicles;
- Understanding of Driver Engagement with automated vehicles, particularly as the expectations of human behavior and system behavior become intertwined and interdependent in their effects on safety; and,
- Enforcement activities critical to the agency's ability to remove unsafe motor vehicle equipment from the Nation's roadways and the development of new assessment processes for Automated Driving Systems.

Unmanned Aircraft Systems

Unmanned Aircraft Systems (UAS) technology represents the fastest growing sector in aviation today. UAS, more commonly referred to as drones, are being used every day to inspect infrastructure, provide emergency response support, survey agriculture, and to go places that are otherwise dangerous for people or other vehicles. Entrepreneurs around the world are exploring innovative ways to use drones in their commercial activities. As a result, the FAA must develop the most efficient, effective, and safe ways to integrate UAS into the National Airspace System (NAS). This goal must also include a robust security framework to support the full integration of this technology into our aviation system.

The FY 2020 President's Budget request includes \$202.6 million for:

- The Unmanned Air Traffic Management System, which will pair with the traditional Air Traffic Management System;
- Remote Identification of UAS—which will provide more accurate and critical data about who is flying where and their intentions;
- Funding for staff to review and approve applications, maintain the IT system, and pursue continued development of safety standards;
- > Training and outreach activities;
- Research on UAS technologies that directly impact safety of the NAS and that will cover UAS-specific technical issues such as integrations of UAS-NextGen systems, detect and avoid systems and communications with air traffic control; and,

Research data which will generate technical information for the development of policies and guidance materials and provide risk and threat analysis to support FAA decision-making on emerging UAS threats to aviation safety.

Commercial Space

Since 1995, the FAA has been responsible for commercial space launch and reentry activities including licensing, permitting, and safety inspection functions. The commercial space market in the United States continues to grow, which produces challenges that reach beyond the number of launches and re-entry activities. For example, increased orbital debris, both during launch and reentry, can jeopardize the safe operation of the NAS. New types of space vehicles like balloons and winged launch/ re-entry vehicles create complex challenges for licensing and operations. Soon, commercial human spaceflight operations, like space tourism, will create new challenges for FAA's Commercial Space Office.

The FY 2020 President's Budget requests \$64.6 million for Commercial Space activities such as:

- Safety and operation activities to keep pace with rapidly increasing demand for commercial space licenses, permits, safety approvals, payload determinations, inspections, and launch/re-entry activities;
- > Funding to support the Space Data Integrator, replacing the current manual process, which will enable FAA to reduce the amount of airspace closed off to other users and release airspace that is no longer at risk as the mission progresses; and,
- Program funding for risk-based research to improve safety and efficiency of space traffic through the NAS and will provide information

for developing improved assessment methods and the regulations governing launch and reentry sites and operations.

Safety and Regulatory Efficiency

The Department continues to identify opportunities to reduce unnecessary regulatory burdens and modernize regulations while maintaining a strong commitment to safety throughout our Nation's transportation system. For example, the FAA published five deregulatory actions in FY 2018, with a cost savings of \$66.1 million and no significant regulatory actions. FAA's two deregulatory actions in FY 2019 have already provided \$6 million in cost savings and the agency anticipates publication of three more deregulatory actions this fiscal year. Considered the global leader and "gold standard" in civil aviation, the FAA is committed to incorporating new innovations like UAS and Commercial Space into the airspace system. In January 2019, Secretary Chao announced proposed new rules to allow nighttime UAS flights and UAS operations over people without waivers under certain conditions.

To achieve the next level of safety, efficiency and global leadership, while keeping pace with a dynamic aerospace industry, the FY 2020 request will support FAA's efforts to:

- Streamline Commercial Space launch and re-entry requirements;
- > Continue advancement for emerging technologies to transition and operate safely in the NextGen environment;
- Seek public input to identify major UAS safety and security issues to other aircraft, people on the ground or to national security;

- Continue to balance the need to mitigate safety risks without inhibiting technological and operational enhancements;
- Modernize regulations to incorporate safety management principles into design and manufacturing environments; and,
- > Establish an early engagement Innovation Center to facilitate the development of new standards and guidance to promote the safe and efficient adoption of emerging technology and processes for aviation applicants.

Likewise, the FY 2020 budget request will support NHTSA's efforts to improve safety while reducing regulatory costs and burdens by developing, reforming, or updating the Federal Motor Vehicle Safety Standards (FMVSS) and other regulations in the key areas of crash avoidance, crashworthiness, post-crash safety, consumer information, and fuel economy. The requested funding will enable NHTSA to:

- > Review its regulatory portfolio;
- Identify opportunities to safely address unnecessary regulations and control regulatory costs;
- > Expand capabilities for advances in safety technology that reduce fatalities and injuries and increase efficiencies:
- Continue progress on mandated regulations, such as those that enhance motor coach and child passenger safety in MAP-21 and tire safety in the FAST Act; and
- > Continue to conduct analytical work to support fuel economy rulemaking for future years.

FRA is also actively reforming regulations to reduce the cost of compliance, consistent with minimum safety standards. For example,

FRA updated passenger equipment regulations to establish alternate crashworthiness and occupant protection standards that allow for the development of advanced technology and increase safety benefits. The FY 2020 budget request will allow the agency to reduce costs and unnecessary burdens that delay infrastructure projects, cutting red tape and delivering infrastructure and safety improvements more rapidly to spur economic growth.

Account	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
FEDERAL AVIATION ADMINISTRATION:	18,000.7	18,000.7	17,451.9	17,105.0
OPERATIONS (GF/TF)	10,211.8	10,211.8	10,410.8	10,340.0
FACILITIES & EQUIPMENT (TF)	3,250.0	3,250.0	3,000.0	3,295.0
RESEARCH, ENGINEERING & DEVELOPMENT (TF)	188.9	188.9	191.1	120.0
GRANTS-IN-AID FOR AIRPORTS (GF)	1,000.0	1,000.0	500.0	0.0
GRANTS-IN-AID FOR AIRPORTS (Oblim) (TF)	3,350.0	3,350.0	3,350.0	3,350.0
FEDERAL HIGHWAY ADMINISTRATION:	47,449.4	47,452.4	49,211.8	47,404.1
FEDERAL-AID HIGHWAYS (Oblim) (TF)	44,234.2	44,234.2	45,268.6	46,365.1
EXEMPT OBLIGATIONS (TF)	596.8	599.4	599.4	639.0
EMERGENCY RELIEF (TF)	93.4	93.8	93.8	100.0
HIGHWAY INFRASTRUCTURE PROGRAMS (GF)	2,525.0	2,525.0	3,250.0	300.0
LIMITATION ON ADMINISTRATIVE EXPENSES (Non-add)	[442.7]	[442.7]	[449.7]	[456.8]
CANCELLATIONS (Non-add)	[0.0]	[0.0]	[0.0]	[-209.7]
FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION:	844.8	657.8	666.8	675.8
MOTOR CARRIER SAFETY OPERATIONS & PROGRAMS (Oblim) (TF)	283.0	283.0	284.0	288.0
MOTOR CARRIER SAFETY GRANTS (Oblim) (TF)	561.8	374.8	382.8	387.8
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION:	947.2	947.2	966.3	929.3
OPERATIONS AND RESEARCH (GF)	200.6	200.6	204.0	151.0
OPERATIONS AND RESEARCH (Oblim) (TF)	149.0	149.0	152.1	155.3
HIGHWAY TRAFFIC SAFETY GRANTS (Oblim) (TF)	597.6	597.6	610.2	623.0
FEDERAL TRANSIT ADMINISTRATION:	13,480.5	13,480.5	13,460.2	12,416.1
TRANSIT FORMULA GRANTS (Oblim) (TF)	9,733.4	9,733.4	9,939.4	10,150.3
CAPITAL INVESTMENT GRANTS (GF)	2,645.0	2,645.0	2,552.7	1,505.2
WASHINGTON METRO (GF)	150.0	150.0	150.0	150.0
ADMINISTRATIVE EXPENSES (GF)	113.2	113.2	113.2	110.6
TECHNICAL ASSISTANCE & TRAINING (GF)	5.0	5.0	5.0	0.0
TRANSIT INFRASTRUCTURE GRANTS (GF)	834.0	834.0	700.0	500.0
RESCISSION TRANSIT FORMULA GRANTS (GF) (Non-add)	[0.0]	[0.0]	[-46.6]	[0.0]
FEDERAL RAILROAD ADMINISTRATION:	3,091.4	3,091.4	2,890.9	1,998.6
NORTHEAST CORRIDOR GRANTS TO AMTRAK (GF)	650.0	650.0	650.0	325.5
NATIONAL NETWORD GRANTS TO AMTRAK (GF)	1,291.6	1,291.6	1,291.6	611.0
RAILROAD RESEARCH & DEVELOPMENT (GF)	40.6	40.6	40.6	19.0
SAFETY & OPERATIONS (GF)	221.7	221.7	221.7	213.1
SAFETY USER FEE (GF)	0.0	0.0	0.0	-50.0

U.S. DEPARTMENT OF TRANSPORTATION

in millions of dollars

Account	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
CONSOLIDATED RAIL INFRASTRUCTURE AND SAFETY IMPROVEMENTS (GF)	592.5	592.5	255.0	330.0
STATE OF GOOD REPAIR (GF)	250.0	250.0	400.0	0.0
RESTORATION AND ENHANCEMENT GRANTS (AMTRAK LONG DISTANCE ROUTES) (GF)	20.0	20.0	5.0	550.0
MAGNETIC LEVITATION TECHNOLOGY DEPLOYMENT PROGRAM (GF)	0.0	0.0	10.0	0.0
RRIF CREDIT SUBSIDY (GF)	25.0	25.0	17.0	0.0
CANCELLATIONS (Non-add)	[0.0]	[0.0]	[0.0]	[-55.7]
PIPELINE & HAZARDOUS MATERIALS SAFETY	270.4	270.6	273.3	
ADMINISTRATION:				
OPERATIONAL EXPENSES (GF)	23.0	23.0	23.7	24.2
HAZARDOUS MATERIALS SAFETY (GF)	59.0	59.0	58.0	53.0
EMERGENCY PREPAREDNESS GRANTS (TF)	26.4	26.6	26.6	28.3
PIPELINE SAFETY (GF)	139.0	139.0	142.0	127.0
PIPELINE SAFETY (TF)	23.0	23.0	23.0	22.0
MARITIME ADMINISTRATION:	979.6	979.6	1,115.4	682.5
OPERATIONS AND TRAINING (GF)	513.6	513.6	149.4	377.5
STATE MARITIME ACADEMY OPERATIONS (GF)	[300.0]	[300.0]	345.2	[242.3]
SHIP DISPOSAL (GF)	116.0	116.0	5.0	5.0
ASSISTANCE TO SMALL SHIPYARDS (GF)	20.0	20.0	20.0	0.0
MARITIME SECURITY PROGRAM (GF)	300.0	300.0	300.0	300.0
MARITIME GUARANTEED LOANS (TITLE XI) (GF)	30.0	30.0	3.0	0.0
PORT INFRASTRUCTURE DEVELOPMENT PROGRAM (GF)	0.0	0.0	292.7	0.0
CANCELLATIONS (Non-add)	[0.0]	[0.0]	[0.0]	[-25.0]
SAINT LAWRENCE SEAWAY DEVELOPMENT	40.0	40.0	36.0	28.0
CORPORATION (TF)				
INSPECTOR GENERAL (GF)	92.2	92.2	92.6	
OFFICE OF THE SECRETARY:	1,977.7	1,989.4	1,386.2	
SALARIES AND EXPENSES (GF)	112.8	112.8	113.9	
NAT'L SURFACE TRANSP. AND INNOVATIVE FINANCE BUREAU (GF)	3.0	3.0	5.0	4.0
TRANSPORTATION PLANNING, RESEARCH & DEVELOPMENT (GF)	14.0	14.0	7.9	8.0
OFFICE OF CIVIL RIGHTS (GF)	9.5	9.5	9.5	9.0

U.S. DEPARTMENT OF TRANSPORTATION

in millions of dollars

Account	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
FINANCIAL MANAGEMENT CAPITAL (GF)	6.0	6.0	2.0	2.0
ESSENTIAL AIR SERVICE (SF)	133.7	145.4	145.4	150.5
PAYMENTS TO AIR CARRIERS (TF)	155.0	155.0	175.0	125.0
NATIONAL INFRASTRUCTURE INVESTMENTS (BUILD) (GF)	1,500.0	1,500.0	900.0	1,000.0
INFRASTRUCTURE FOR REBUILDING AMERICA GRANTS (GF)	0.0	0.0	0.0	1,035.0
RESEARCH AND TECHNOLOGY (GF)	23.5	23.5	8.5	22.0
CYBER SECURITY INITIATIVE (GF)	15.0	15.0	15.0	15.0
SMALL AND DISADVANTAGED BUSINESS UTILIZ. &	5.1	5.1	4.0	3.0
OUTREACH/MBRC (GF)				
TOTAL GROSS BUDGETARY RESOURCES	87,174.0	87,001.7	87,551.3	84,077.6
PHMSA USER FEE OFFSETTING RECEIPT	-139.0	-139.0	-142.0	-127.0
Cancellations/Rescissions	0.0	0.0	-46.6	-290.4
TOTAL BUDGETARY RESOURCES (AFTER ADJUSTMENTS)	87,035.0	86,862.7	87,362.7	83,660.1
DISCRETIONARY SUBTOTAL	27,275.5	27,275.5	26,510.4	21,422.8
MANDATORY SUBTOTAL	59,759.4	59,587.2	60,852.3	62,237.4
EMERGENCY RELIEF SUPPLEMENTAL				
FEDERAL HIGHWAY ADMINISTRATION	1,374.0	0.0	0.0	0.0
FEDERAL TRANSIT ADMINISRATON	330.0	0.0	0.0	0.0
FEDERAL AVIATION ADMINISTATION	114.6	0.0	0.0	0.0
MARITIME ADMINISTRATION	10.0	0.0	0.0	0.0

GF = General Fund, TF = Trust Fund, SF = Special Fund. Budgetary Resources includes appropriations, obligation limitations, and FHWA and OST mandatory programs. Does not reflect transfers.

FEDERAL AVIATION ADMINISTRATION

BUDGETARY RESOURCES

in millions of dollars

Account	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
OPERATIONS (GF/TF)	10,211.8	10,211.8	10,410.8	10,340.0
FACILITIES & EQUIPMENT (TF)	3,250.0	3,250.0	3,000.0	3,295.0
RESEARCH, ENGINEERING & DEVELOPMENT (TF)	188.9	188.9	191.1	120.0
GRANTS-IN-AID FOR AIRPORTS (GF)	1,000.0	1,000.0	500.0	0.0
GRANTS-IN-AID FOR AIRPORTS (Oblim) (TF)	3,350.0	3,350.0	3,350.0	3,350.0
TOTAL	18,000.7	18,000.7	17,451.9	17,105.0
EMERGENCY RELIEF 1/	114.6			
Full Time Equivalent Employment	44,851	45,491	45,491	45,647

1/ Includes \$114.6 million supplemental funding from the Further Additional Supplemental Appropriations for Disaster Relief Requirements Act, 2018 (P.L. 115-123) of which \$35 million is in Operations and \$79.6 million is in Facilities & Equipment.

OVERVIEW

The Federal Aviation Administration (FAA) is the principal Federal agency responsible for providing the safest and most efficient aerospace system in the world. The FAA oversees all aspects of civil aviation in the United States, running the largest air traffic control system in the world, while ensuring the safety of the traveling public. FAA is dedicated to achieving new levels of safety and efficiency in FY 2020 and beyond, with about 45,500 full-time equivalent employees supporting the Nation's air travel.

HIGHLIGHTS OF THE FY 2020 PRESIDENT'S BUDGET

The FY 2020 President's request for the Federal Aviation Administration is \$17.1 billion to maintain our Nation's air system and provide critical investments in the FAA's infrastructure and in the NextGen effort to modernize the Nation's air traffic control system. This year's request of nearly \$1.4 billion for NextGen investments is critical to ensuring that our Nation's airspace can accommodate the rapid expansion of critical safety and innovation technologies. FAA will engage with the Congress and aviation industry stakeholders to explore the potential for better integrated NextGen automation solutions with a focus on whether fewer providers would result in the improved effectiveness and efficiency of various NextGen capabilities.

The Budget request also makes strong investments in **safety** and **innovation**. It prioritizes safety by providing the funding necessary to support critical workforces at the FAA—air traffic controllers and aviation safety inspectors. In addition, nearly \$203 million is requested for Unmanned Aircraft

Systems, including developing policies and setting safety standards for the national airspace system. Nearly \$65 million is requested for commercial space to address the increasing amounts of licensing and permitting needs of a growing and increasingly complex industry.

The U.S. aviation sector is experiencing a renaissance in new users and technologies. The FAA faces increasing challenges as the pace of change needed throughout the airspace system continues to accelerate. The FAA budget includes a new Office of Innovation to establish oversight and foster the integration of those new users and technologies, and support our Nation's leadership in aviation innovation throughout the world.

Key Components of the Request Include

OPERATIONS: \$10.3 billion is requested for the operation, maintenance, communications, and logistical support of the air traffic control and air navigation systems. Additional investments are requested in the areas of Unmanned Aircraft Systems (UAS), Cybersecurity, and Commercial Space Transportation to integrate UAS into the national airspace, ensure the FAA keeps pace with regulatory reform, and build a stronger cyber security defense.

- Air Traffic Organization (ATO): \$7.8 billion is requested to provide safe, secure, and cost-effective air traffic services to commercial and private aviation. This includes an increase of \$5.1 million to safeguard against internal and external cyber threats, as well as protect our new technologies against the threat of cyberattacks.
- **> Aviation Safety (AVS): \$1.3 billion** is requested to ensure the continued safety of the air transportation system.
- > Unmanned Aircraft Systems (UAS): \$63.1 million, an increase of \$12.0 million, is requested to safely integrate UAS into our Nation's busy airspace. This effort spans offices across the agency, including the Air Traffic Organization, Aviation Safety, Security and Hazardous Materials Safety, Communications, and Policy, International Affairs & Environment.
- Commercial Space Transportation (AST): \$25.6 million is requested to ensure the protection of the public, property, and national security of the United States during commercial launch and reentry activities. This includes \$2.0 million to speed the processing of licenses and approvals, streamline regulatory requirements, and keep pace with industry demands for products and services.
- NextGen (ANG): \$60.1 million is requested to provide management and direction to the FAA's NextGen effort and to manage the day-today operations and maintenance of the FAA's William J. Hughes Technical Center campus in Atlantic City, New Jersey.
- > Security and Hazardous Materials Safety (ASH): \$117.7 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.

- **> Finance and Management (AFN): \$784.8 million** is requested to provide centralized management and delivery of core services to the FAA's lines of business and staff offices
- **> Staff Offices: \$246.6 million** is requested to provide executive leadership, policy and planning, legal counsel, security services, and other administrative services in support of the FAA's mission.
- > Innovation: The request includes \$1.6 million for a new Office of Innovation that will examine the new technologies' potential impact on the system, their likely benefits, and methods for safe integration into existing operations; as well as provide leadership in industry engagement and internal collaboration.

FACILITIES AND EQUIPMENT (F&E): \$3.3

billion is requested to meet the challenge of both maintaining the capacity and safety of the current airspace system while continuing its modernization and transformation. Of this total, \$1.22 billion supports innovative NextGen capital investments, including near-term priorities identified by the NextGen Advisory Committee. The FAA is working together with industry through the NextGen Advisory Committee to identify NextGen priorities that can deliver immediate benefits. Examples of these innovation projects include:

> Unmanned Aircraft Systems (UAS): \$130.8 million will help develop an Unmanned Traffic Management system, a separate but complementary system to the Air Traffic Management system. This investment will include technology to track approved UAS flight plans, development of technology to distinguish UAS operators with approved flight plans from those that do not, evaluation of technology that will support smart collection

- and dissemination of data to Unmanned Traffic System service providers, and cyber security and data integrity work for UAS networks.
- allow FAA to automate launch and reentry operations that are currently manual in nature, time consuming, and require vast sections of commercial airspace to be closed off. This automation will safely reduce the amount of airspace that must be closed to other users, release airspace that is no longer at risk as a mission progresses, and will build the foundation for integrating commercial space operations into the airspace.
- > Air-to-Ground Data Communications (Data Comm): \$136 million is requested to modernize communications between air traffic controllers and pilots by replacing some traditional voice communications with digital information exchanges. Data Comm will bridge the gap between current voice-only air traffic communication and data intensive NextGen in the en route environment. Data Comm in the en route air-space will improve safety by reducing communication related operational errors between pilots and controllers as well as increase controller efficiency by automating routine data exchanges.
- **Decision Support Systems: \$164 million** is requested for programs that give air traffic controllers the tools they need to optimize traffic flow across the national airspace.
 - \$133 million accelerates Terminal Flight

 Data Manager (TFDM) that will collect,
 distribute, and update flight information
 in the airspace around an airport. TFDM
 is a key ground infrastructure program for
 NextGen operations and will help reduce
 congestion along the North East Corridor of
 the United States.

- \$30.7 million is included for Time Based Flow Management (TBFM), which uses time instead of distance to help controllers sequence air traffic. TBFM provides a more efficient traffic flow that reduces fuel burn, lowers exhaust emissions, and increases traffic capacity into and out of busy metropolitan airspaces and corresponding airports.
- > System-Wide Information Management (SWIM): \$101 million will continue implementation of 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. SWIM will improve the efficient flow of information through the National Airspace System while adding capabilities to strengthen the overall information system security posture. Some SWIM data will become available through Cloud Based Services and will allow for the addition of more consumers of aviation information. The FAA collaborates with aviation stakeholders on SWIM through the SWIM Industry-FAA Team (SWIFT), a forum that is open to the public, to ensure availability and accessibility to SWIM data.

\$1.8 billion in capital investments 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 to that technology can occur. A cross section of this infrastructure will remain in place even after

that transition to provide operational resiliency in the event of satellite outages or interruptions. Examples of these investments in current infrastructure and systems include:

- Nair Traffic Control Facilities Strategic
 Sustainment Plan: \$529 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.
- > Time Division Multiplexing (TDM): **\$68.5** million is requested for two significant infrastructure programs to ensure telecommunication operations continue without interruption as major U.S. telecommunications carriers discontinue TDM based services, on which the FAA has been highly dependent. The FAA has developed a strategy that will address the phase out of these services and will adapt the communications interface through a conversion device or modernization efforts. In addition, the FAA is replacing the current telecommunications service contract that provides communications over a legacy TDM infrastructure that will no longer be supported in the commercial market place.

RESEARCH, ENGINEERING & DEVELOPMENT: \$120 million is requested to support work in NextGen, safety, and other research areas. Highlighted research programs include:

- > Unmanned Aircraft Systems (UAS): \$7.5 million is requested 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.
- **>** Commercial Space Transportation Safety: **\$6** million is requested for the Office of Commercial Space Transportation to continue its work on improvements for the safe integration of commercial space operations into the airspace system. The FY 2020 research will focus on the integration of launch and reentry activities into the airspace system, 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 re-entry and will develop recommended practices for crews in suborbital winged commercial spaceflight vehicles.
- \$2.7 million is requested to help prevent disruptive cyber incidents that affect the air traffic control mission and to improve cyber resiliency. While current measures for information security are robust, the rapidly evolving threats require the FAA to explore advanced detection and defense capabilities. This research will develop FAA's capability to analyze large datasets, with visualization tools for aggregating and correlating current operational, behavioral, and environmental data with the express intent of understanding, predicting, and responding to cyber events.

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 the FAA's continued focus on safety-related development projects, including projects to help prevent injuries, fatalities and damage when aircraft skid off a runway; projects to reduce the risk of aircraft accidentally entering a runway incorrectly, as well as projects that help preserve critical airfield infrastructure, improve nonstandard conditions, improve capacity and efficiency, and enhance noise mitigation.
- > Airport Technology Research: \$33 million is requested to continue to research innovative technologies for airport safety applications and for extending pavement life at airports. Examples of innovative technologies include the integration of Light Emitting Diode (LED) solutions in airport lighting, the augmented use of foreign object debris radars to monitor pavement surface condition, and the use of wireless sensors to monitor pavement health.
- Airport Cooperative Research Program (ACRP): \$15 million is requested to carry out applied research on problems that are shared by airport operating agencies and are not being adequately addressed by existing Federal research programs. ACRP studies are managed by the Transportation Research Board of the National Academy of Sciences using procedures designed to ensure that the research is objective and productive.
- > The Budget includes **funding for two additional safety positions** to support
 integration of UAS into airports through policy
 development and outreach, and to better ensure
 airport compliance with safety regulations.

Facilities & Equipment Programs

		FY 2019		EV 2020
	EV 2010	Annualized	TH 2010	FY 2020
	FY 2018	Continuing	FY 2019	President's
Account	Actual	Resolution	Enacted	Budget
Activity 1 - Engineering, Development, Test and Evaluation	165.6	210.3	194.3	277.8
Advanced Technology Development and Prototyping William J. Hughes Technical Center Laboratory Sustainment	26.8 23.0	33.0 21.0	33.0	40.9 20.0
William J. Hughes Technical Center Infrastructure Sustainment	15.0	15.0	21.0 15.0	15.0
Unmanned Aircraft Systems (UAS)	25.0	25.0	25.0	68.4
Other	75.8	116.3	100.3	133.5
	70.0	110.5	100.5	
Activity 2 - Air Traffic Control Facilities and Equipment	2,148.1	2,087.2	1,849.8	2,051.4
En Route Automation Modernization (ERAM)	91.7	126.1	115.3	106.0
Next Generation VHF Air/Ground Communications (NEXCOM)	60.0	60.0	60.0	50.0
System-Wide Information Management	50.1	60.3	55.3	101.0
ADS -B NAS Wide Implementation	150.3	143.7	139.2	174.4
Air Traffic Management Implementation Portfolio	13.9	33.8	29.8	77.1
Time Based Flow Management Portfolio	40.5	28.2	28.2	30.7
NextGen Weather Processor	45.5	33.7	28.7	31.3
Data Communications in Support of NG Air Transportation System	294.1	153.9	118.9	136.2
Reduced Oceanic Separation	24.4	25.0	17.5	32.3
Commercial Space Integration	4.5	9.0	9.0	33.0 41.3
Standard Terminal Automation Replacement System (STARS) Terminal Flight Data Manager (TFDM)	152.8 90.4	84.9 119.3	74.9 119.3	135.5
Unmanned Aircraft Systems (UAS) Implementation	90.4	119.5	119.5	58.4
Airport Ground Surveillance Portfolio	14.8	10.0	7.5	19.0
Terminal and EnRoute Surveillance Portfolio	37.5	29.2	29.2	68.5
Terminal and EnRoute Voice Switch and Recorder Portfolio	30.8	50.0	35.4	49.8
Wide Area Augmentation System (WAAS) for GPS	110.3	96.3	96.3	90.0
Landing and Lighting Portfolio	31.0	89.7	56.0	48.2
FAA Telecommunications Infrastructure	30.0	59.2	40.0	48.5
TDM-to-IP Migration	39.0	38.0	38.0	20.0
Facilities Programs	552.8	554.2	480.5	491.7
Other	284.0	283.0	271.1	208.6
Activity 3 - Non-Air Traffic Control Facilities and Equipment	193.0	214.1	204.7	203.4
Hazardous Materials Management	35.3	29.8	29.8	20.0
Aviation Safety Analysis System (ASAS)	12.0	18.7	18.7	19.7
National Air Space (NAS) Recovery Communications (RCOM)	12.0	12.0	12.0	12.0
Facility Security Risk Management	20.4	19.6	17.8	15.1
Information Security	20.7	26.0	20.9	33.3
System Approach for Safety Oversight (SASO)	25.8	25.4	25.4	23.1
Other	66.8	82.6	80.1	80.2
Activity 4 - Facilities and Equipment Mission Support	245.3	240.4	238.4	237.7
System Engineering and Development Support	35.7	39.7	39.7	38.0
Program Support Leases	47.0	47.0	47.0	48.0
Mike Monroney Aeronautical Center Leases	19.7	20.2	20.2	20.6
Center for Advanced Aviation System Development (CAASD)	57.0	57.0	57.0	57.0
Other	85.9	76.5	74.5	74.1
Activity 5 - Personnel and Related Expenses	498.0	498.0	512.8	524.7
Total F&E Amo	unt 3,250.0	3,250.0	3,000.0	3,295.0

NextGen Programs

Account	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
Facilities and Equipment	\$1,086.5	\$998.6	\$913.3	\$1,220.2
NextGen - Separation Management Portfolio	13.5	16.0	16.0	33.5
NextGen - Traffic Flow Management Portfolio	10.8	17.0	14.0	27.5
NextGen - On Demand NAS Portfolio	12.0	28.5	21.0	10.5
NextGen - NAS Infrastructure Portfolio	17.5	22.5	20.0	17.0
NextGen - Support (NIEC, Test Bed) Portfolio	12.0	12.8	12.8	13.0
NextGen - System Safety Management Portfolio	16.2	15.7	14.2	19.5
NextGen - Unmanned Aircraft System (UAS)	25.0	25.0	25.0	68.4
NextGen - Enterprise, Concept Devel, Human Factors, and Demo Portfolio	9.0	19.5	16.5	32.0
Performance Based Navigation and Metroplex Portfolio	20.0	20.0	20.0	5.0
Unmanned Aircraft Systems (UAS) Implementation	0.0	0.0	0.0	58.4
Implementation of Flight Object Exchange & Enterprise Information Mgt	0.0	0.0	0.0	35.0
NextGen - Communications in Support of NextGen	294.1	153.9	118.9	136.2
En Route Automation Modernization (ERAM) - System Enhancements	91.7	126.1	115.3	106.0
System - Wide Information Management (SWIM)	50.1	60.3	55.3	101.0
ADS - B NAS Wide Implementation	150.3	143.7	139.2	174.4
Collaborative Air Traffic Management (CATMT) Portfolio	9.0	17.7	17.7	0.0
Air Traffic Management Implementation Portfolio	0.0	0.0	0.0	77.1
Terminal Flight Data Manager (TFDM)	90.4	119.3	119.3	135.5
Tactical Time Based Flow Management (TBFM)	40.5	28.2	28.2	30.7
Next Generation Weather Processor (NWP)	45.5	33.7	28.7	31.3
NAS Voice System (NVS)	68.8	43.2	43.2	0.0
SBS Advanced Surveillance Enhanced Procedural Separation	24.4	25.0	17.5	32.3
Aeronautical Information Management Program (AIM)	15.0	5.0	5.0	5.3
Cross Agency NextGen Management	1.0	1.0	1.0	0.0
Activity 5 F&E PCBT - NextGen Staffing	70.0	64.8	64.8	70.7
Research Engineering and Development (RE&D)	\$78.4	\$78.4	\$74.6	\$31.1
NextGen - Alternative Fuels for General Aviation	7.0	7.0	1.9	0.0
NextGen - Flight Deck Data Exchange Requirements	0.0	0.0	1.0	1.0
NextGen - Information Security	1.0	1.0	1.2	2.7
NextGen - Wake Turbulence	6.8	6.8	6.8	3.7
NextGen - Air Ground Integration	6.8	6.8	6.8	1.7
NextGen - Weather in the Cockpit	3.6	3.6	3.6	2.0
NextGen - Environmental Research, Aircraft Technologies, Fuels and Metrics	29.2	29.2	29.2	12.5
Unmanned Aircraft Systems Research	24.0	24.0	24.0	7.5
Operations	\$103.3	\$103.3	\$112.5	\$122.7
NextGen Staffing	38.4	38.4	38.4	38.7
NextGen Unmanned Aircraft System	51.1	51.1	56.0	63.1
Performance Based Navigation (PBN) Activities	13.8	13.8	18.1	20.9
Total NextGen Programs	\$1,268.2	\$1,180.3	\$1,100.4	\$1,374.0

The Federal Aviation Administration supports America's economic growth by...

- **Operating the busiest, most complex air traffic control system** in the world with 74,000 pieces of equipment that runs 24 hours a day, 7 days a week, 365 days a year. Aviation contributes \$1.6 trillion annually to the U.S. economy and generates approximately 10.6 million jobs with earnings of \$446.8 billion.
- > Ensuring the safe transport of more than 1 billion passengers and 25 million tons of cargo annually on U.S. and foreign carriers.
- **Safely guiding** 26 million flights every year.
- > Inspecting and certifying approximately 202,000 U.S. civil aircraft, and 600,000 pilots and 540 commercial airports.
- **Safely integrating Unmanned Aircraft Systems** into the system by granting over **35,000 authorizations** to date to operate UAS in controlled airspace.
- > Promoting commerce in space by licensing or permitting roughly 35 or more commercial space launch and reentry activities each year.
- **Awarding grants** to improve **3,330 eligible public-use airports** in the United States. These grants support air-field capital development at the Nation's public airports by maintaining and enhancing airport safety, preserving infrastructure, and expanding capacity and efficiency throughout the system.

FEDERAL HIGHWAY ADMINISTRATION

BUDGETARY RESOURCES

in millions of dollars

Account	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
FEDERAL-AID HIGHWAYS (Oblim) (TF)	44,234.2	44,234.2	45,268.6	46,365.1
EXEMPT OBLIGATIONS (TF) 1/	596.8	599.4	599.4	639.0
EMERGENCY RELIEF (TF) 1/	93.4	93.8	93.8	100.0
HIGHWAY INFRASTRUCTURE PROGRAMS (GF)	2,525.0	2,525.0	3,250.0	300.0
LIMITATION ON ADMINISTRATIVE EXPENSES (TOTAL)	[442.7]	[442.7]	[449.7]	[456.8]
(Non-add)				
CANCELLATIONS/RESCISSIONS—MULTIPLE ACCOUNTS 2/	[0.0]	[0.0]	[0.0]	[-209.7]
(TF) (Non add)				
TOTAL	47,449.4	47,452.4	49,211.8	47,404.1
EMERGENCY RELIEF (GF) 3/	1,374.0	0.0	0.0	0.0
Full Time Equivalent Employment	2,640	2,674	2,714	2,693

^{1/} FY 2018 and FY 2019 Exempt Obligations and Emergency amounts are after reductions due to sequestration.

^{2/} Includes cancellation of prior balances of \$40.317 million from Appalachian Development Highway Systems, \$117.34 million from Miscellaneous Appropriations, and \$52.065 million from Miscellaneous Highway Trust Funds.

^{3/} Includes \$1,374.0 million supplemental funding from the Further Additional Supplemental Appropriations for Disaster Relief Requirements Act, 2018 (P.L. 115-123).

The Federal Highway Administration (FHWA) supports State and local governments, as well as other Federal agencies, in the design, construction, and maintenance of the Nation's highway system, including highways on Federal and Tribal-owned lands. Through financial and technical assistance to State, local, and Tribal governments, and other Federal agencies, FHWA is responsible for ensuring that our Nation'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, tribal, and other Federal transportation agencies.

HIGHLIGHTS OF THE FY 2020 PRESIDENT'S BUDGET

The FY 2020 President's request is \$47.4 billion for the Federal-aid highway program to invest in the Nation's highway and bridge infrastructure. This request, which reflects the fifth and final year of the Fixing America's Surface Transportation (FAST) Act and additional funding for a competitive highway bridge program, will enable FHWA to invest in projects that improve safety and mobility, repair aging bridges and highways, and promote the efficient 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

Key Components of the Request Include

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP): \$2.66 billion is requested to reduce deaths and injuries on our Nation's highways. The HSIP is a core Federal-aid highway program that supports the Secretary's safety priority

by aiming to achieve a significant reduction in fatalities and serious injuries on all public roads. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads with a focus on performance.

In 2017, 37,133 people died in motor vehicle crashes on our Nation's highways. 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 demonstrates even further the importance of investing in highway safety. FHWA estimates that well chosen highway safety improvement projects can return up to \$7 of benefits for every dollar invested.

NATIONAL HIGHWAY PERFORMANCE PROGRAM (NHPP): \$24.24 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 connecting major population centers, border crossings, intermodal transportation facilities, and major travel destinations. It includes the approximately 49,000 miles of the Interstate Highway System. The NHPP is a formula-based program that in partnership with States supports

the Secretary's key priorities of preserving safety and infrastructure by improving or preserving the condition of highways and bridges. The NHPP requires a risk-based asset management approach to ensure that States have a strategic and systematic process for operating, preserving, and improving physical assets on the NHS.

Preserving and improving the NHS keeps
America's highways and bridges safe, supports
U.S. economic world trade competitiveness,
and improves the U.S. economy. The NHPP
emphasizes preservation of the NHS while
giving States the flexibility to make additional
investments to enhance NHS condition and
operational performance, and to build new
capacity. The NHPP addresses all areas of the
U.S., including mobility and access in rural areas,
ensuring that improvements to the NHS benefit
both urban and rural areas.

NATIONAL HIGHWAY FREIGHT PROGRAM (NHFP): \$1.49 billion is requested for the NHFP to provide funding for States to invest in infrastructure and operational improvements on the National Highway Freight Network that reduce congestion, improve safety and productivity, and strengthen the U.S. economy. Smart investments in freight infrastructure have a profoundly positive effect on the national economy, create jobs, and support economic growth and competitiveness in both rural and urban areas.

Investment in our Nation's transportation freight infrastructure is needed if we expect to maintain a global competitive edge. By 2045, the Nation's population is projected to increase to 389 million people, compared to 321 million in 2015. To support the projected population and economic growth, freight movements across all modes are

expected to grow by roughly 42 percent by the year 2040.

NATIONALLY SIGNIFICANT FREIGHT AND HIGHWAY PROJECTS PROGRAM: \$1 billion

is requested for a discretionary grant program to support highway and freight projects of national or regional significance. An additional \$1.035 billion is requested for this program and shown in the Office of the Secretary's budget highlights section. This program, also referred to as the "Infrastructure for Rebuilding America (INFRA)" program, allows States, metropolitan planning organizations, local governments and other eligible entities to apply for funding to complete projects that improve safety, generate economic benefits, reduce congestion, enhance resiliency, and hold the greatest promise to eliminate freight bottlenecks and improve critical freight movements.

The program has successfully leveraged Federal investment to generate significant new non-Federal investment in critical projects. As evidenced by the large number and value of applications received during the first three rounds of the program, there is significant unmet need in the Nation for freight and highway investment. In the latest round of the INFRA program, the Department received 234 applications requesting approximately \$12.3 billion.

SURFACE TRANSPORTATION BLOCK GRANT

PROGRAM: \$12.14 billion is requested to provide flexible funding to States and localities to target priority areas and areas of greatest need. Surface Transportation Block Grant Program (STBG) funds can be used on the approximately 1,000,000 miles of Federal-aid highways. This includes projects to improve or preserve condition and performance on any Federal-aid highway; bridge and safety projects on any public road;

and facilities for nonmotorized transportation. So long as it does not displace and substitute for States' other resources, this program improves mobility, access to community resources, and quality of life.

To further enhance the flexibility and effectiveness of the STBG, the request proposes to eliminate the off-system bridges set-aside, while maintaining funding eligibility for off-system bridges under the existing STBG program. This set-aside limits State and local governments from making funding decisions that best meet their needs. Eliminating this set-aside will provide States with greater flexibility and allow for the more effective use of limited Federal-aid funds.

FEDERAL LANDS AND TRIBAL PROGRAMS:

\$1.15 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):

\$2.50 billion is requested to help States, local governments, and private-sector sponsors reduce highway congestion and harmful emissions. The CMAQ program provides a near-term funding source for State and local governments to fund transportation projects and programs that are designed to help States meet the requirements of the Clean Air Act and its amendments, and helps reduce regional congestion on transportation networks.

TRANSPORTATION INFRASTRUCTURE FINANCE AND INNOVATION ACT (TIFIA) PROGRAM:

\$300 million is requested to support critical infrastructure projects across the Nation. TIFIA provides credit assistance and 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 dollar of TIFIA funding authority provides approximately \$14 in credit assistance, resulting in infrastructure investment of up to \$40 when accounting for other State, local, and private sector investments. The TIFIA portfolio consists of 81 loans—67 active loans and 14 repaid loans—totaling approximately \$30.8 billion.

COMPETITIVE HIGHWAY BRIDGE PROGRAM

(CHBP): \$300 million is requested to rehabilitate and replace our Nation's rural bridges. The CHBP provides an opportunity to address significant challenges across the Nation for improving highway bridge conditions in rural areas. The FY 2020 budget request will help States meet the challenges of keeping highway bridges in rural areas in a state of good repair, resulting in safer bridges, improved mobility of the public and freight, and supporting local and regional economic vitality.

The CHBP is a competitive grant program that provides funding for highway bridge replacement and rehabilitation projects on public roads that demonstrate cost savings by bundling multiple highway bridge projects into a single contract. All highway bridges with a rural functional classification in the 2018 National Bridge Inventory (NBI) are eligible for this funding.

RESEARCH, TECHNOLOGY, AND EDUCATION PROGRAM: A total of \$420 million is requested to focus on highway research and development, and technology and innovation deployment. This program seeks to generate new solutions; provide better decision-support data, information, and tools; and build effective partnerships that will allow our Nation to make optimal investments in the transportation system. 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.

OTHER PROGRAMS: This request will also ensure that investment continues in the vital areas of emergency relief following disasters or catastrophic failures (\$100 million); metropolitan planning (\$359 million); highway programs in Puerto Rico and United States Territories (\$200 million); and the Ferry Boats Program (\$80 million), which provides vital connections on the network of Federal-aid highways.

The Federal Highway Administration supports America's economic growth by...

- **Saving lives.** FHWA's Highway Safety Improvement Program (HSIP) has played a significant role in achieving a 15 percent reduction in highway fatalities since 2005, the year HSIP was enacted. An extrapolation of the data conservatively indicates that the full benefits of a \$2.66 billion program are as high as 590 lives saved and 2,000 serious injuries prevented annually.
- which creates jobs and spurs commerce. Federal funding provided through the Federal-aid highway program enables States and localities to invest in projects that improve roadway safety, repair aging bridges and highways, and promote the efficient movement of freight. For example, the Idaho Transportation Department's I-84 Karcher Interchange to Franklin Boulevard project, a recipient of an INFRA grant, will improve safety, enhance mobility, and bolster economic growth along Idaho's major freight corridor. The project, which encompasses 2.8 miles of I-84, continues a larger \$820 million I-84 corridor project in Idaho's Treasure Valley area. The Karcher project is expected to improve connectivity among the modes of freight transportation moving goods into and out of the Boise area and mitigate the impact on communities.
- > Responding to Disasters throughout our Nation. When disaster strikes, transportation is key to recovery. First responders, emergency management personnel and others all use highways and bridges like a lifeline for fuel, food and medical care. Federal support often becomes a critical part of efforts to get roads and bridges open to traffic again. In 2018 alone, FHWA's Emergency Relief program released more than \$1.1 billion in emergency relief aid, including \$5 million in quick-release funds to help reopen important sections of roads that were damaged by the earthquake in Alaska, \$22 million to repair roads and bridges damaged by Hurricane Florence in North Carolina and South Carolina, and \$7.5 million to repair highways and bridges in multiple states damaged by flooding this year.

Likewise, FHWA continues to support the recovery of Texas, Florida, Puerto Rico and the U.S. Virgin Islands following Hurricanes Harvey, Irma, and Maria. In addition to funding, FHWA offered technical assistance and highway engineering expertise to Federal agencies and affected State DOTs during the hurricane response and recovery effort. Over 170 FHWA staff deployed to Florida, Puerto Rico, Texas, and the U.S. Virgin Islands following the storms to assist with damage assessments, contract management, and other engineering services.

> Focusing on the Needs of Both Urban and Rural Areas. Programs such as the Surface Transportation Block Grant Program and Transportation Alternatives suballocate funding based on population so that both urban and rural areas can invest in transportation projects that best meet their needs.

> Promoting Innovation to Address Current and Emerging Transportation Issues. 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, such as with the Connected Vehicle (CV) Pilot Deployment Program, which is funding large-scale CV system implementation efforts. Included in this program is the New York City Pilot, which is anticipated to be the largest CV pilot to date. Using approximately 8,000 vehicles, including cars, taxis, and buses, the pilot aims to improve the safety of travelers and pedestrians through the deployment of CV technologies.

FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION

BUDGETARY RESOURCES

in millions of dollars

Account	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
MOTOR CARRIER SAFETY OPERATIONS & PROGRAMS (Oblim) (TF)	283.0	283.0	284.0	288.0
MOTOR CARRIER SAFETY GRANTS (Oblim) (TF)	374.8	374.8	382.8	387.8
TOTAL	657.8	657.8	666.8	675.8
MODERNIZATION AND MAINTENANCE OF BORDER FACILITIES (Oblim) (TF) 1/	87.0			
HIGHLY AUTOMATED VEHICLE RESEARCH AND	100.0			
DEVELOPMENT (Oblim) (TF) 1/				
Full Time Equivalent Employment	1,145	1,202	1,202	1,170

^{1/} Repurposed prior year funds for Modernization and Maintenance of Border Facilities, and Highly Automated Vehicle Research and Development. The Budget Highlights does not show this provision repeating under the FY 2019 Annualized Continuing Resolution.

The Federal Motor Carrier Safety Administration's (FMCSA) primary mission is to reduce crashes, injuries and fatalities involving large trucks and buses. For more than 18 years, the men and women of FMCSA have worked hard to ensure that freight and people move safely by providing safety oversight of motor carriers, commercial motor vehicles, and commercial drivers in the United States. This request provides FMCSA with the necessary resources to fulfill the Agency mission to save lives by reducing crashes and the resulting injuries and fatalities involving large trucks and buses. The Agency performs this mission through education, innovation, regulation, enforcement, financial assistance and full accountability.

FMCSA engages with the motor vehicle industry and safety partners, working consistently to maintain the safest transportation system possible—a system of excellence that includes holding motor carriers accountable, promoting knowledgeable drivers, ensuring that vehicles are well maintained to avoid breakdowns and the attendant road hazards, and encouraging innovation to unleash sound technology to advance highway safety.

HIGHLIGHTS OF THE FY 2020 PRESIDENT'S BUDGET

The FY 2020 President's Budget requests \$675.8 million for the Federal Motor Carrier Safety Administration to provide the Agency with resources necessary to drive the "Road to Zero" to end fatalities on the Nation's roads within the next 30 years. The FY 2020 budget aligns FMCSA with the Department of Transportation's key priorities of safety, infrastructure, innovation, and regulatory reform for the American public. In line with these priorities FMCSA will: 1) focus on activities for elimination and replace them with risk-based programs that reduce the burden on industry while maintaining the safety of our roads; 2) continue execution of its border facility modernization program in coordination with the General

Service Administration and Customs and Border Patrol, creating a safe working environment for inspectors and meeting mission safety standards; and 3) continue to work with State partners to maximize the safety impact of all of our grant programs.

Key Components of the Request Include

Motor Carrier Safety Operations and Programs: The President's Budget requests \$288 million in FY 2020 to fund operations, research, technology, and programs that reduce serious injuries and deaths resulting from commercial motor vehicle crashes. Funds will also be used in support of FMCSA's efforts to develop, implement, and enforce safety programs. The Agency performs this mission through education, research, innovation, regulation, enforcement, financial assistance and full accountability.

> Research & Technology – \$9.1 million is requested for conducting and using transformative research that focuses on risk

factors and safety technology to inform and enhance FMCSA's programs and priorities including education, innovation, regulation, enforcement, financial assistance and full accountability. The Agency's Research & Technology program supports innovative technology solutions employed in delivery of products and services that promote safety and compliance. In FY 2020, FMCSA will continue supporting the advancement of automated vehicle technology, including ongoing testing at the Aberdeen Test Center via the Platooning and Automated Commercial Motor Vehicle Evaluation (PACE) Program. FMCSA will also participate in a series of truck platoon and Assisted Driving Systems equipped commercial motor vehicle (CMV) demonstration and safety assessment projects with FHWA and our State partners.

- **Enforcement** Dedicating \$15.2 million to programs and oversight to identify breakdowns in safety and help carriers and drivers operate more safely on the nations roadways. In FY 2020, the agency will continue its work with the Department of Defense and the Veterans Administration to identify and implement additional programs to facilitate the transition of military personnel and veterans into commercial truck driving careers by working with Federal and State partners, the military branches, industry, and veterans support groups. The FY 2020 Budget represents year two of the planned three-year FAST Act required pilot program for under 21-year-old military drivers and the implementation of the Military commercial driver license (CDL) waiver regulations.
- > Border Support FMCSA oversees 28 commercial vehicle entry ports covering four border states on the southern border, which includes large trucks hauling international

- cargo and large passenger carriers. The ports are staffed by 126 federal commercial vehicle safety inspectors, completing over 286,000 vehicle and driver inspections in FY 2018. An additional 156 FMCSA members support these safety efforts through the established motor carrier safety programs such as new entrant and compliance reviews. FMCSA will continue to improve and expand on these border facilities in FY 2020 obligating over \$11 million on major crossings and collaborating with other Federal agencies like Customs and Border Protection to maximize the impact of the dedicated resources.
- Outreach Targeting educational messages to carriers, commercial drivers, and the public with \$4 million to improve safety outcomes. For example, the consumer moving fraud prevention outreach campaign, "Protect Your Move" website continues to educate the public about illegal business practices by dishonest moving companies and brokers, and provides information on resources for protection against deceitful activities.
- > Regulation \$11.3 million for developing and implementing data-driven policies and regulations that balance motor carrier (truck and bus companies') safety with efficiency. Within this area are activities like the comprehensive medical oversight program that sets minimum medical qualification standards for approximately eight million CMV drivers, including over four million active CDL holders.

Motor Carrier Safety Grants: The FY 2020 President's Budget requests \$387.8 million for the Motor Carrier Safety Grants program. This request increases the resources available to award grants to States, local governments and non-profit organizations to conduct roadside inspections and traffic

enforcement in high-crash corridors, support compliance investigations of motor carriers, upgrade information systems to ensure only properly-tested and licensed individuals may operate commercial vehicles, and to perform safety outreach and training to industry stakeholders. FMCSA's grant programs focus on partnering, and through the grant programs FMCSA engages: law enforcement, industry, safety advocates, and others to maximize the impact of our shared safety goal through all programs and activities. The 831 FMCSA field staff are both facilitators and subject matter experts who support consistent and compliant safety programs delivered by the States and other safety stakeholders through FMCSA's: Motor Carrier Safety Assistance Program, High Priority Activities Programs, Commercial Driver's License Program Improvement, and Commercial Motor Vehicle Operator Safety Training grants.

- > Motor Carrier Safety Assistance Program (MCSAP): \$308.7 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. Each fiscal year, FMCSA grants support a range of proven commercial vehicle safety strategies, including 3.5 million roadside inspections, 35,000 new entrant safety audits, 6,000 compliance investigations, as well as intensive traffic enforcement in high-crash corridors, educational and outreach programs, and intelligent transportation networks deployment.
 - MCSAP Southern Border Related Activities: The MCSAP formula includes funding for border related safety activities.

- The four southern border states dedicate approximately \$60 million a year of their MCSAP funding to conduct their safety activities including over 600,000 inspections of U.S. and Mexican domiciled carriers at 28 separate border crossings.
- \$44.9 million 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.
- Implementation: \$33.2 million is requested for grant funding to States and others to ensure that only safe and qualified commercial drivers receive and retain a 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. Early FMCSA funding of State pilot projects has shown great promise in allowing States to uncover fraud and thereby ensure that each CDL driver maintains only one license.
- > Commercial Motor Vehicle Operator Safety Training: \$1 million is requested to train individuals to become commercial operators, with a special focus on training Veterans.

The Federal Motor Carrier Safety Administration supports America's economic growth by...

- > Saving Lives. Studies estimate that on average, FMCSA's carrier interventions program has helped Americans avoid 5,300 large truck and bus crashes per year, prevent roughly 3,200 injuries per year, and save nearly 175 lives per year. In addition, Roadside Inspection and Traffic Enforcement programs, supported mainly through FMCSA's grants programs with State and local governments, have helped to prevent approximately 14,000 large truck crashes on average per year, prevent almost 8,500 injuries on average per year, and save more than 450 lives on average annually.
- **Ensuring Motor Carrier Safety.** FMCSA issued 14 Imminent Hazard Out of Service orders in 2018, shutting down carriers or drivers presenting an imminent threat to public safety. In addition, 96 percent of high risk motor carriers are investigated within 90 days of being identified; with a crash rate of nearly four times the national average, this quick move to investigate ensures safe operations on roadways. FMCSA also creates a national framework where safety regulations are uniformly applied to provide stability nationwide for interstate trucking and bus industry.
- **Executing Safety Grant Programs.** MCSAP, High Priority, and CDL Programs provide funding to State and U.S. Territory agencies responsible for motor carrier, CMV and driver safety. Through these programs over three million inspections are conducted, technology innovations are tested and implemented, and States improve their regulatory compliance each year. These activities saved hundreds of lives, and prevented thousands of injuries and CMV crashes each year.
- > Supporting the Traveling Public. In 2017 FMCSA conducted 111 Americans with Disabilities Act compliance reviews of motorcoach operators. FMCSA also funds a National Consumer Complaint Database (NCCDB) which collects complaints on household goods moves, complaints from consumers who travel on motorcoaches, and coercion and harassment complaints from drivers. The NCCDB receives over 9,500 complaints annually which FMCSA uses along with safety data to target enforcement and makes the combined data available to consumers to allow the public to find safe movers with sound business practices.
- **> Stakeholder Engagement.** FMCSA leads and strengthens engagement with stakeholders and the public through interactions such as, the Motor Carrier Safety Advisory Committee, fostering creative solutions to achieve common goals for improving highway safety, saving lives, and reducing crashes involving large trucks and buses.
- **Partnering with Southern Border States.** To increase traffic and commerce safely and securely, FMCSA partners with the States of Arizona, California, New Mexico and Texas through MCSAP to provide over 800,000 commercial vehicle and driver safety inspections, compliance reviews and traffic safety activities creating a safety network along the border that ensures no matter where the large commercial bus or truck originates it complies with U.S. safety regulations.

- **> Fostering Innovation.** FMCSA partners with commercial motor vehicle industry leaders and provides information as they explore the adoption of advanced driver assistance technology.
- **> Safety Research.** FMCSA coordinates with other agencies within the Department, such as the National Highway Transportation Safety Administration (NHTSA) and the Federal Highway Administration (FHWA), to examine crash factors and provide strategic direction for developing and testing crash measures to reduce the incidence and severity of crashes.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

BUDGETARY RESOURCES

in millions of dollars

Account	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
OPERATIONS AND RESEARCH (GF)	200.6	200.6	204.0	151.0
OPERATIONS AND RESEARCH (Oblim) (TF)	149.0	149.0	152.1	155.3
HIGHWAY TRAFFIC SAFETY GRANTS (Oblim) (TF) 1/	597.6	597.6	610.2	623.0
TOTAL	947.2	947.2	966.3	929.3
Full Time Equivalent Employment	557	626	626	619

^{1/} Does not reflect penalty transfers from FHWA, which were \$104 million in FY 2018. FY 2019 and FY 2020 amounts to be determined based on State penalty information.

The National Highway Traffic Safety Administration (NHTSA) works every day to ensure vehicle and pedestrian safety. NHTSA does this by promoting vehicle safety innovations, setting safety standards for cars and trucks, identifying and addressing vehicle defects, and educating Americans to help them make safer choices on our Nation's roads.

HIGHLIGHTS OF THE FY 2020 PRESIDENT'S BUDGET

The FY 2020 President's Budget requests \$929.3 million for NHTSA to invest in initiatives that reduce traffic crashes and fatalities, and improve safety for American motorists. This request will support NHTSA's safety mission through ongoing programs and safety efforts while keeping pace with innovations and rapidly emerging roadway trends. NHTSA's research into cutting edge technologies, such as automated driving systems and vehicle-to-vehicle communication, which has the potential to dramatically reduce serious car crashes, the vast majority of which are caused by human error or decisions attributed to the driver.

Key Components of the Request Include

OPERATIONS AND RESEARCH: The FY 2020 President's Budget is requesting \$306.3 million for Operations and Research activities including:

Automated Vehicle Technologies: \$14.2 million is requested for the safe development and deployment of automated vehicle technologies:

- Advanced Safety Technologies: \$7.22 million is requested for the Advanced Driver Assistance Systems (ADAS) and Heavy Vehicle Safety Technologies programs. These programs support the safe testing and deployment of technologies including safety countermeasures for passenger vehicles, and large trucks and buses that assist drivers in preventing crashes. New vehicles are increasingly equipped with advanced safety technologies that help drivers avoid crashes when they find themselves in difficult and risky circumstances. Advanced Safety Technologies research focuses on the safe development, evaluation, and deployment of technologies and systems that enable partial driving automation but still require full driver engagement. Advanced Safety Technologies have the potential to provide an additional safety margin that can help drivers avoid or significantly mitigate crash severity.
- Automated Driving Systems (ADS): \$7 million is requested to continue the necessary research to address testing and regulatory issues associated with new vehicle designs enabled by the ADS technologies. This research will enable innovation, develop new tests, tools and procedures to properly evaluate the safety of new vehicle technologies surrounding highly and fully automated vehicles.

- > Corporate Average Fuel Economy (CAFE): \$12.4 million is requested to support the fuel economy rulemaking programs including the passenger car and light-duty truck CAFE standards. NHTSA will also continue to work with the Environmental Protection Agency to support the research and analysis of medium- and heavy-duty vehicle fuel efficiency standards and rulemakings.
- > Office of Defects Investigation (ODI): \$11.6 million is requested to support identification of safety defects, overseeing manufacturers' efforts to promptly implement remedies, and quickly inform the public of critical information.
- > Highway Safety Programs: \$63.1 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 young and older driver safety programs. NHTSA coordinates these efforts with numerous Federal partners, States, local government safety associations, and other organizations.
 - Highway Safety Research: \$3 million is requested to advance ADS human factors research activities and \$2 million to fund ADAS driver adaption research associated with new and emerging technologies.
 - **Defects Investigation Recall Management: \$2 million** is requested to support the Defects Investigation Recall Management program. The funding allows NHTSA to enhance its existing oversight of recalls completion rates, better assess what factors contribute to high recalls completion rates, and work with manufacturers when targets are not met.

National Center for Statistics and Analysis: \$43 million is requested 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), collect critical crash data and fund a new crash causation study. 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 its quality and reliability.

HIGHWAY TRAFFIC SAFETY GRANTS: The FY 2020 President's Budget requests **\$623 million** for Highway Traffic Safety Grants. These include:

- State and Community Highway Safety Grants (Section 402): \$279.8 million is requested for the State and Community Highway Safety Grants program. 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 Programs (Section 405): \$285.9 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: \$30.5 million is requested to promote and administer the highly successful annual *Click It or Ticket* mobilizations to increase seatbelt use, as well as the *Drive Sober or Get Pulled Over*, and *If You Feel Different, You Drive Different: Drive High, Get a DUI.* impaired driving initiatives.

The National Highway Traffic Safety Administration supports America's economic growth by...

- **Reducing Regulatory Burdens.** NHTSA is addressing regulatory barriers for safety innovations such as adaptive driving-beam headlights, optional camera systems for rear visibility, and automated vehicle technologies. NHTSA is also streamlining administrative processes to assure safety while adapting to emerging technology.
- **Emission Standards.** NHTSA's Safer Affordable Fuel-Efficient Vehicles Proposed Rule represents the next set of mandated corporate average fuel economy (CAFE) standards in conjunction with EPA's tailpipe carbon dioxide emission standards for passenger cars and light trucks. NHTSA and EPA estimated the proposed rule could save more than \$500 billion in costs, including \$2,000 per new vehicle, and reduce highway fatalities by 12,700 over the lifetimes of the vehicles through FY 2029.
- **Saving Lives.** By reducing fatalities, preventing injuries and reducing the costs of traffic crashes across the Nation, NHTSA supports broad economic benefits and economic growth in all of our communities.

FEDERAL TRANSIT ADMINISTRATION

BUDGETARY RESOURCES

in millions of dollars

Account	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
TRANSIT FORMULA GRANTS (Oblim) (TF)	9,733.4	9,733.4	9,939.4	10,150.3
CAPITAL INVESTMENT GRANTS (GF)	2,645.0	2,645.0	2,552.7	1,505.2
WASHINGTON METRO (GF)	150.0	150.0	150.0	150.0
ADMINISTRATIVE EXPENSES (GF)	113.2	113.2	113.2	110.6
TECHNICAL ASSISTANCE & TRAINING (GF)	5.0	5.0	5.0	0.0
TRANSIT INFRASTRUCTURE GRANTS (GF)	834.0	834.0	700.0	500.0
RESCISSION—TRANSIT FORMULA GRANTS (GF) (Non-add)	[0.0]	[0.0]	[-46.6]	[0.0]
TOTAL	13,480.5	13,480.5	13,460.2	12,416.1
PUBLIC TRANSPORTATION EMERGENCY RELIEF	330.0	0.0	0.0	0.0
PROGRAM (GF) 1/				
Full Time Equivalent Employment	549	563	558	554

1/ Includes \$330.0 million supplemental funding from the Further Additional Supplemental Appropriations for Disaster Relief Requirements Act, 2018 (P.L. 115-123).

The Federal Transit Administration (FTA) 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 oversees transit safety and program compliance, and conducts innovative technology research and demonstrations focused on improving mobility.

Since 1964, FTA has partnered with State and local governments to create and enhance public transportation systems, and now invests approximately \$12 billion annually to support local transit service across the country—in large and small cities, rural America, and tribal communities. This investment, with an emphasis on capital expenditures, subsidizes the Nation's public transportation infrastructure and helps to maintain it in a state of good repair. FTA also works to make public transportation safe for the tens of millions of riders that use it every day. In 2017, 10 billion trips were taken on public transportation nationwide, with a majority of these occurring in New York, Chicago, Los Angeles, Boston, San Francisco, and Washington, D.C.

HIGHLIGHTS OF THE FY 2020 PRESIDENT'S BUDGET

The FY 2020 President's Budget requests \$12.4 billion to strengthen transit safety oversight, bring our Nation's bus and rail transit infrastructure into a state of good repair, and fund new and expanded transit systems. 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 communities in all parts of the country, and include both rail and bus investments.

Key Components of the Request Include

TRANSIT FORMULA GRANTS: Consistent with the FAST Act, **\$10.1 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 in some instances transit operations. These include:

- > \$4.9 billion for formula grants to urban areas;
- ▶ \$673 million for transit service in rural America;
- > \$2.7 billion to help bring our Nation's transit systems into a state-of-good-repair;
- > \$142 million for planning;
- > \$809 million for bus and bus facility state-of-good-repair investments;
- > \$286 million to improve the mobility of seniors and individuals with disabilities who rely on public transportation; and,
- \$28 million supports FTA research that advances public transportation innovation. FTA's research activities focus on safety, infrastructure, and mobility innovation to find ways to improve 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.

Transit Infrastructure Grants: \$500

million is requested for transit infrastructure grants to address the more than \$90 billion local state of good repair backlog that continues to grow.

- \$250 million will supplement FTA's State of Good Repair formula grant program that focuses primarily on rail transit systems; and
- > \$250 million will support the Bus and Bus Facilities competitive grant program, which supports state of good repair investments for bus transit systems. FTA received more than \$2 billion in requests from transit agencies during the FY 2018 Bus and Bus Facilities grant competition, indicating that the demand is far greater than available Federal funding.

PROPOSED FY 2020 FUNDING FOR FTA CAPITAL INVESTMENT GRANTS PROGRAM

in millions of dollars

Existing Signed New Starts Full Funding Grant Agreements		
Regional Connector	Los Angeles, CA	\$104.9
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
TEX Rail	Fort Worth,TX	\$20.39
National Capital Purple Line	Maryland	\$120.0
Link Extension	Lynnwood, WA	\$100.0
Total Existing New Starts Full Funding Grant Agreements		\$795.29
Existing Core Capacity Full Funding Grant Agreement		
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
Other Projects That May Become Ready For		\$494.85
Section 5309 or 3005(b) Funding During FY 2020		
Oversight Activities		\$15.05
Grand Total		\$1,505.19

CAPITAL INVESTMENT GRANTS (CIG): \$1.5

billion is requested to supplement State and local efforts to fund the construction of major capital projects that provide new and expanded transit service. The requested funds can also support projects in the Expedited Project Delivery for Capital Investment Grants Pilot Program which encourages public private partnerships and innovative project delivery methods. FTA will continue to exercise diligence in administering the CIG program to help ensure that Federal funds go to projects that will use the assistance effectively.

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY (WMATA): \$150

million is requested for capital projects that address WMATA's highest safety priorities and its maintenance backlog. The Federal 10-year funding authorization that helped support WMATA's capital improvement program expired in FY 2018. However, the Budget request continues funding to assist WMATA in carrying out critical safety improvements throughout the WMATA system. This funding is in addition to the more than \$310 million it receives annually from FTA formula funds bringing total Federal transit funding for WMATA to \$460 million.

ADMINISTRATIVE EXPENSES: \$110.6 million

is requested to support FTA's core lines of business—namely, the staff and related resources needed to manage and oversee its grant making, technical assistance, and safety oversight activities. FTA will achieve its mission in a lean, results-driven manner that responsibly steward's taxpayer funds and avoids unnecessary regulatory burdens.

The Federal Transit Administration (FTA) supports America's economic growth by...

- > Improving the state of good repair in transit to ensure rapid movement of people to jobs and commerce. FTA invests over \$12 billion annually to support transit service across the country—in large and small cities, rural America, and tribal communities to help bring the Nation's infrastructure into a state of good repair. More than \$90 billion of transit infrastructure is not in a state of good repair.
- **Making transit safer and more efficient** by reviewing and certifying rail transit safety programs in 31 States, and providing direct safety oversight of the Washington Metropolitan Area Transit Authority Metro rail system. FTA provides \$25 million a year to States that administer rail transit safety programs.
- **> Fostering Innovation to reduce costs and increase safety and efficiency.** FTA is developing a framework for the transit industry to pursue automating transit buses in a safe, efficient, and economically sound manner over the next five years.
- **Leveraging emerging technologies to expand personal and commercial mobility.** FTA is leading the mobility on demand (MOD) initiative to support a multimodal, integrated, automated, and connected transportation system in which personal mobility is viewed as a service. MOD leverages emerging technologies for more traveler-centric services through expanded transportation options such as demand-responsive transit, taxi, shared ride, shared vehicle and bike share modes.
- > Supporting transit agencies to quickly restore commerce and mobility through funding and technical assistance when a natural disaster hits our Nation's communities. FTA also provides affected communities temporary relief from administrative and statutory requirements to accelerate needed funds.

FEDERAL RAILROAD ADMINISTRATION

BUDGETARY RESOURCES

in millions of dollars

Account	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
NORTHEAST CORRIDOR GRANTS TO AMTRAK (GF)	650.0	650.0	650.0	325.5
NATIONAL NETWORK GRANTS TO AMTRAK (GF)	1,291.6	1,291.6	1,291.6	611.0
RAILROAD RESEARCH & DEVELOPMENT (GF)	40.6	40.6	40.6	19.0
SAFETY & OPERATIONS (GF)	221.7	221.7	221.7	213.1
SAFETY USER FEE (GF)	0.0	0.0	0.0	-50.0
CONSOLIDATED RAIL INFRASTRUCTURE AND SAFETY IMPROVEMENTS (GF)	592.5	592.5	255.0	330.0
FEDERAL-STATE PARTNERSHIP FOR STATE OF GOOD REPAIR (GF)	250.0	250.0	400.0	0.0
RESTORATION AND ENHANCEMENT GRANTS (AMTRAK LONG DISTANCE ROUTES) (GF)	20.0	20.0	5.0	550.0
MAGNETIC LEVITATION TECHNOLOGY DEPLOYMENT PROGRAM (GF)	0.0	0.0	10.0	0.0
RRIF CREDIT SUBSIDY (GF)	25.0	25.0	17.0	0.0
CANCELLATIONS—MULTIPLE ACCOUNTS (GF) (Non-add)	[0.0]	[0.0]	[0.0]	[-55.7]
TOTAL	3,091.4	3,091.4	2,890.9	1,998.6
Full Time Equivalent Employment	903	932	932	911

The mission of the Federal Railroad Administration (FRA) 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.

HIGHLIGHTS OF THE FY 2020 PRESIDENT'S BUDGET

The FY 2020 President's Budget requests \$2 billion for programs that advance rail safety, reliability, and efficiency for long-term U.S. economic growth. FRA will continue to target resources toward the most pressing safety challenges, such as implementation of positive train control and grade crossing safety and trespass prevention. FRA oversees Federal funding to Amtrak to support investments on the Northeast Corridor and National Network and proposes to rationalize the National Network and reform the long distance routes. In addition, FRA will award competitive grants to states, local governments, regional and shortline railroads, and other entities for planning, capital, and safety projects. FRA collaborates closely with industry to leverage Federal investments in innovative technologies and practices to improve rail safety, reliability, and efficiency. Moreover, FRA personnel are pursuing opportunities to reduce regulatory burdens, implement critical safety initiatives effectively, and streamline the project development and delivery processes.

Key Components of the Request Include

AMTRAK: Amtrak is funded at \$1.5 billion total.

- Northeast Corridor and National Network Grants: \$936.5 million for Northeast Corridor and National Network grants and a major proposal to restructure Amtrak's antiquated, money-losing long distance network. The President's proposal will promote a market-based, customer-focused intercity passenger rail network that serves the mobility demands of the American public. The President's FY 2020 Budget request will mark the end of the Government fully subsidizing operating losses on Amtrak's long distance routes and transition decision-making and cost responsibilities to states
- \$550.0 million to shift Federal support for long-distance services from Amtrak to the states. As they assume control over service choices, build ridership, and generate revenue, the Federal share of net operating costs will decline from 100 percent in FY 2020, to 80 percent in FY 2021, 60 percent in FY 2022, 40 percent in FY 2023, and phase out fully by FY 2024. States are encouraged to apply jointly with Amtrak for this funding in FY 2020 so they can begin to make informed decisions about their routes and the elements they value to continue operating in the future.

The Department will collaborate with Amtrak, states, and affected local governments to rationalize the long distance network into regional corridors that meet market demand and customer expectations.

SAFETY AND OPERATIONS: \$213.1 million

to improve railroad safety, and provide the organizational infrastructure (e.g., payroll, rent, information technology, and contracts) for FRA's programs to achieve their goals. The request includes \$13.0 million to help railroads implement positive train control and \$9.5 million to improve FRA's advanced technology to assess track conditions.

CONSOLIDATED RAIL INFRASTRUCTURE AND SAFETY IMPROVEMENTS: \$330 million

to invest in projects within the United States to improve railroad safety, efficiency, and reliability; mitigate congestion at both intercity passenger and freight rail chokepoints; enhance multi-modal connections; and lead to new or substantially improved intercity passenger rail corridors. The program provides a comprehensive solution to leverage private, state and local investments that support safety enhancements and general improvements to infrastructure for both intercity passenger and freight railroads.

RESEARCH AND DEVELOPMENT: \$19.0 million

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.

The Federal Railroad Administration supports America's economic growth by...

- > Replacing taxpayer subsidies for infrequent, inconvenient long-distance passenger trains with transition grants to states for consumer driven, regional services. Eliminating the Federal subsidy for long distance routes and enabling states to play a larger role in shaping the delivery of these services will improve financial performance and increase accountability over Amtrak and the host freight railroads for the on-time performance of these trains.
- > Ensuring railroads operate safely to support economic productivity and meet passenger and freight mobility needs. Although total accidents and incidents increased 1.5 percent from FY 2016 to FY 2017, they decreased 14 percent since FY 2008. In addition, from FY 2008 to FY 2017, total derailments declined by 35 percent and total highway-rail grade crossing incidents declined by 18 percent. FRA will remain diligent and develop new approaches to advance continuous safety improvement.
- > Supporting the railroads' implementation of the most important rail safety technology in more than 100 years to improve system performance nationally. Positive Train Control (PTC) systems are life-saving technology that stops certain railroad-related accidents and near accidents and FRA has conditionally certified 13 PTC systems to date.
- > Protecting passengers and railroad crews and minimizing the cost of accidents for the more than 500 million annual railroad passenger trips. The rate of rail-related accidents and incidents has fallen by 85 percent since 1980. Moreover, the number of employee on-duty fatalities in 2018 was about half the number in 2009. Nevertheless, fatal Amtrak accidents in 2015 and 2017 underscore that the railroad industry and FRA have hard work ahead.

PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

BUDGETARY RESOURCES

in millions of dollars

Account	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
OPERATIONAL EXPENSES (GF)	23.0	23.0	23.7	24.2
HAZARDOUS MATERIALS SAFETY (GF)	59.0	59.0	58.0	53.0
EMERGENCY PREPAREDNESS GRANTS (SF) 1/	26.4	26.6	26.6	28.3
PIPELINE SAFETY (GF)	139.0	139.0	142.0	127.0
PIPELINE SAFETY (TF)	23.0	23.0	23.0	22.0
TOTAL	270.4	270.6	273.3	254.5
Full Time Equivalent Employment	538	581	581	571

1/ FY 2018 and FY 2019 Emergency Preparedness Grants amounts are after reductions due to sequestration.

The Pipeline and Hazardous Materials Safety Administration (PHMSA) oversees the safe movement of hazardous materials and energy-related products. The safe delivery of these commodities fuels economic growth, supporting the United States energy sector as well as packagers and shippers as they deliver products to consumers—homes and business—that rely on them. PHMSA achieves the safe movement of hazardous materials by setting sensible safety standards, advancing industry safety management systems, encouraging innovation through research, conducting comprehensive safety inspections, assisting business with safety compliance, and when necessary executing enforcement actions to encourage safe transport.

HIGHLIGHTS OF THE FY 2020 PRESIDENT'S BUDGET

The FY 2020 President's Budget requests \$254.5 million to invest in the continued safe transportation of hazardous materials, including energy products.

As innovations in packaging and transportation methods develop, pipelines expand, and volumes of hazardous materials shipments increase, PHMSA remains responsive to emerging issues, working continuously to improve safety in a rapidly changing environment. In FY 2020, PHMSA will lead the response to set safety standards for the safe shipment of lithium batteries by air, continue to address the safety of shipments of liquefied natural gas, and support the safe operation of storage of natural gas in underground facilities.

Key Components of the Request Include

PIPELINE SAFETY: \$149.0 million is requested to develop and promote national pipeline safety standards and policy, conduct inspections to validate the safe operation of pipeline systems, investigate pipeline incidents, promote safety management systems, and conduct research to inform safety regulation and policy.

HAZARDOUS MATERIALS SAFETY: \$53.0

million is requested to respond to the inherent risks in packaging and shipping hazardous materials, with a commitment to support safe packaging, train first responders, and invest in promising research and development that solves complex packaging and shipping challenges.

EMERGENCY PREPAREDNESS GRANTS: \$28.3 million is requested to help communities develop hazardous materials emergency response plans

hazardous materials emergency response plans and to train first responders to deal with releases of hazardous materials in local communities.

OPERATIONAL EXPENSES: \$24.2 million is requested for operational expenses to support the safety management organization, including \$1.0 million to expedite compliance with statutory mandates and regulatory reform efforts, and \$2.0

million for grants to communities facing safety impacts of pipeline and hazardous material routes. The request includes a proposal to consolidate the Community Safety Grant program into the Information Grants to Communities program, and to execute the single program with a continued focus on improving safety in local communities. Both Information Grants to Communities and Community Safety Grants assist localities prepare for and respond to the unique risks hazardous materials and pipelines pose. Through increased preparedness and public awareness, the program improves safety outcomes while supporting economic growth. The program also benefits underserved rural areas through greater access to grant funds for smaller communities located near hazardous materials transportation routes.

The Pipeline and Hazardous Materials Safety Administration supports America's economic growth by...

- **> Oversight of a growing domestic pipeline network** of more than 2.7 million miles that moves more than 16 billion barrels of crude oil, hazardous liquids and gases safely. This network of pipelines transports 65 percent of the energy consumed in the United States, helping to power nearly every facet of our daily lives.
- **Inspecting new pipelines during construction** to ensure that energy is delivered safely and without incident to U.S. homes and businesses. The new pipelines create jobs and promote export of energy products. In 2018 more than 2,500 jobs were created from the construction of more than 10,000 miles of new high-volume pipelines.
- **Working across multiple transportation sectors to improve safety by raising public awareness of the potential dangers from undeclared shipments of hazardous materials**. Some everyday items may become dangerous when packed or stored for transport in airplanes, trucks, trains or ships. PHMSA works with more than 40,000 companies world-wide involved in the packaging and shipment of 2.7 billion tons of regulated hazardous materials (e.g., crude oil, explosives, fireworks, lithium batteries, etc.) valued at more than \$3.1 trillion annually.
- **> Working closely with the emergency response communities** to ensure they are fully prepared to deal with any type of hazmat or pipeline incident. One way PHMSA does so is producing critical training and reference materials such as the Emergency Response Guidebook.
- **Assisting FERC with safety assessments that help to expedite siting of liquefied natural gas facilities**, to support the rapid growth in demand for energy. These facilities convert natural gas to a liquid state for safe shipment within the U.S. and to markets abroad. In FY 2019 PHMSA will provide safety letters of determination for 12 new or expanded liquefaction facilities.

MARITIME ADMINISTRATION

BUDGETARY RESOURCES

in millions of dollars

Account	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
OPERATIONS AND TRAINING (GF)	513.6	513.6	149.4	377.5
STATE MARITIME ACADEMY OPERATIONS (GF) 1/	[300.0]	[300.0]	345.2	[242.3]
SHIP DISPOSAL (GF)	116.0	116.0	5.0	5.0
ASSISTANCE TO SMALL SHIPYARDS (GF)	20.0	20.0	20.0	0.0
MARITIME SECURITY PROGRAM (GF)	300.0	300.0	300.0	300.0
MARITIME GUARANTEED LOANS (TITLE XI) (GF)	30.0	30.0	3.0	0.0
PORT INFRASTRUCTURE DEVELOPMENT PROGRAM (GF)	0.0	0.0	292.7	0.0
CANCELLATION—(GF) (Non-add)	0.0	0.0	0.0	-25.0
TOTAL	979.6	979.6	1,115.4	682.5
OPERATIONS AND TRAINING EMERGENCY RELIEF (GF) 2/	10.0			
Full Time Equivalent Employment	724	821	821	812

1/ The FY 2019 Consolidated Appropriations Act (P.L. 116-6) enacted on February 15, 2019 provided funding for the six State Maritime Academies (SMAs) under a new "State Maritime Academy Operations" appropriations account. The enactment of this bill occurred during final production of the FY 2020 Budget and therefore funding to support the SMAs in this request remains under MARAD's Operations and Training (O&T) appropriation.

2/ Includes \$10.0 million supplemental funding from the Further Additional Supplemental Appropriations for Disaster Relief Requirements Act, 2018 (P.L. 115-123).

The Maritime Administration's (MARAD's) programs strengthen and promote the economic competitiveness, efficiency, and productivity of the U.S. maritime transportation system as well as help to ensure sealift capacity is available to support the military defense and economic security needs of the Nation. A strong, resilient marine transportation system is required to keep the United States competitive in the global economy and to maintain our military strength.

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 supporting the health of the Merchant Marine that is vital for supporting our economic and national security. A strong U.S. Merchant Marine enables expanding trade and commerce, creating quality jobs in the United States. As part of this effort, 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 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.

HIGHLIGHTS OF THE FY 2020 PRESIDENT'S BUDGET

The FY 2020 President's Budget requests \$682.5 million to further MARAD's mission by investing in U.S. Mariner training, and programs that help U.S. flag commercial vessels compete globally, while maintaining sealift readiness to meet national security requirements.

Key Components of the Request Include

OPERATIONS AND TRAINING: \$377.5 million is requested to support the USMMA, the SMAs, and MARAD Operations and Programs. This funding will support training needs for future merchant mariners and prepare them to serve the economic

and national defense needs of the Nation, and will provide for agency infrastructure, staff and programs supporting maritime initiatives.

- **Note** States Merchant Marine Academy: \$81.9 million is requested for the USMMA to provide mission-essential program requirements to support the highest standards of excellence to educate and train the next generation of seagoing officers and maritime leaders who will also serve as officers in our active and reserve Armed Forces. Funding will support \$77.9 million for operating expenses, and \$4 million for the maintenance and repair of the Academy's buildings and infrastructure.
- > State Maritime Academies: \$242.3 million is requested to provide support to the six SMAs as they educate and train mariners and future leaders to support the U.S. marine transportation infrastructure.

- Training ship: \$205 million is requested for the design and construction of a training ship scaled to meet the at-sea training needs of the smaller SMAs. MARAD training ships are the primary means by which more than two-thirds of cadets and midshipmen are trained each year, and the training ship is an essential piece of each SMA training program and curricula. The new school ship will serve a critical role in providing the necessary at-sea training that cadets and midshipmen need to qualify for unlimited merchant mariner credentials. It will also provide a modern, functional and environmentally compliant vessel, which meets increased domestic and international training requirements.
- Ship Maintenance: \$30.1 million is requested to maintain the six current SMA training ships in accordance with the U.S. Coast Guard and American Bureau of Shipping requirements, and training ship capacity-sharing measures to allow uninterrupted availability of mandatory atsea training opportunities for SMA cadets. The training ships are the single most important element provided by the Federal Government to enable these schools to operate as maritime academies, and graduate students qualified to take the U.S. Coast Guard licensing examination.

Additionally, \$3 million will provide direct support payments to each of the SMAs, \$2.4 million for student tuition assistance support, and \$1.8 million for training ship fuel assistance payments.

> Operations and Programs: \$53.3 million is requested for MARAD Operations and Programs to support agency infrastructure, professional staff for its operating mission, and support program initiatives.

Maritime Security Program: \$300

million is requested for the Maritime Security Program (MSP) to support a commercial fleet of 60 militarily useful vessels. MSP provides the Nation with assured access to sealift, including transporting critical military equipment and supplies during times of conflict, national emergencies, and other contingency situations. The MSP fleet provides employment for 2,400 highly trained, qualified U.S. Merchant Mariners, who are critical to manning the U.S. Government-owned surge sealift fleet in times of war or national emergency. Additionally, the MSP program supports more than 5,000 shore side maritime industry jobs.

SHIP DISPOSAL: \$5 million is requested for the Ship Disposal Program, which includes \$3 million to maintain the Nuclear Ship SAVANNAH in protective storage according to Nuclear Regulatory Commission license requirements, while decommissioning of the vessel's defueled nuclear reactor, components, and equipment is in progress. The remaining \$2 million is for program support, including salaries and overhead.

The Maritime Administration supports America's economic growth by...

- > Activating MARAD's ships of the Ready Reserve Force (RRF) to support quick economic recovery from natural disaster relief efforts and Department of Defense (DoD) missions. In addition to providing strategic sealift support for DoD, the RRF vessels are heavily relied upon to provide meals, beds, and other support services to emergency response personnel, and deliver relief supplies, equipment, vehicles and emergency personnel to the impacted areas during hurricane season and other severe weather events.
- **Maintaining 60 Maritime Security Program (MSP) ships to** provide access to sealift during times of conflict, national emergencies, and other contingency situations. Overall, the MSP fleet's military capacity is at the highest level in the program's history. The MSP fleet strengthens National Security and allows MARAD and the U.S. Merchant Marine to meet its DoD mission requirement while providing assured access to global supply chains.
- > Acquiring the next generation of training ships from U.S.-based shipyards to provide a modern training platform for the State Maritime Academies to train mariners. This recapitalization effort continues the Federal Government's support of merchant mariner training and demonstrates a strong commitment from the Administration to the U.S. Maritime Industry. In addition to training future mariners, these ships can be deployed and respond to a variety of national emergency or humanitarian relief efforts.
- Increasing the number of credentialed U.S. merchant mariners to meet the economic and national security needs of the Nation. Each year the USMMA and the SMA's graduate about 1,100 cadets with U.S. Coast Guard Merchant Marine officer credentials, qualifying them to sail in DoD and other government sealift assets. Many of these graduates serve in one of the armed services branches, directly supporting national defense needs.

SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION

BUDGETARY RESOURCES	in millions of dollars			ollars
Account	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
Agency Operations (TF)	40.0	40.0	36.0	28.0
Full Time Equivalent Employment	127	144	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 (Eisenhower and Snell) located in Massena, N.Y., and performing vessel traffic control operations in areas of the St. Lawrence River and Lake Ontario.

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.

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.

Over its 60-year history, nearly 3 billion metric tons of cargo valued at more than \$450 billion has moved through the St. Lawrence Seaway. SLSDC operations and maintenance activities have resulted in a near-perfect reliability rate of 99 percent for commercial users.

HIGHLIGHTS OF THE FY 2020 PRESIDENT'S BUDGET

The FY 2020 President's Budget requests \$28.0 million from the Harbor Maintenance Trust Fund (HMTF) 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, N.Y. SLSDC activities in this request support the Secretary's priorities of safety and infrastructure.

Key Components of the Request Include

AGENCY OPERATIONS: \$20 million is requested for the operations and maintenance of the U.S. portion of the binational St. Lawrence Seaway. This request will provide the SLSDC with the financial and the financial and personnel resources (144 full-time equivalents) necessary to perform the operational, maintenance, and administrative functions of the agency, including lock operations, marine services, vessel traffic control, asset maintenance, ballast water management, safety and environmental inspections, and trade promotion and economic development.

Asset Renewal Program (ARP): \$8 million is requested to fund infrastructure-related capital expenses as part of the SLSDC's on-going Asset Renewal Program (ARP). The request includes:

- **> \$4.3 million** for rehabilitation of concrete walls, sills, and culverts at both SLSDC locks and the concrete diffusers at Eisenhower Lock;
- **> \$2.1 million** for ice management to include air curtains and compressed air systems at both SLSDC locks;
- **> \$1.5 million** for the ice flushing system at Snell Lock; and,
- **> \$100,000** for lock control upgrades at both locks.

The Saint Lawrence Seaway Development Corporation (SLSDC) supports America's economic growth by...

- > Operating and maintaining a binational commercial waterway system that directly supports 33,000 U.S. jobs with associated annual benefits of \$4.7 billion in business revenue from transportation firms, \$2.4 billion in personal income, \$1.3 billion in local purchases, and \$1.1 billion in federal, State, and local tax revenues.
- > Rehabilitating the U.S. Seaway infrastructure to ensure the safe and efficient waterborne movement of cargo through the commercial waterway. Commercial trade through the Great Lakes St. Lawrence Seaway System produces significant economic benefits to the Great Lakes region. In fact, during the 2018 navigation season, nearly 41 million metric tons of cargo moved through the binational waterway valued at more than \$8 billion.
- > Moving commercial ships through its locks using state-of-the-art Hands-Free Mooring (HFM) technology that produces several significant benefits including workplace safety, reduced carrier operating costs, lower emissions, transit efficiencies, and system economic competitiveness.
- > Managing and improving safety, operations, and maintenance activities to maintain the Seaway's near-perfect commercial reliability rate of 99 percent to insure the vital flow of the Nation's cargo.
- **> Promoting Great Lakes Seaway System maritime transportation** as a safe, efficient, and dependable mode for the movement of commercial goods.

OFFICE OF THE SECRETARY

BUDGETARY RESOURCES

in millions of dollars

Account	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
SALARIES AND EXPENSES (GF)	112.8	112.8	113.9	118.0
NAT'L SURFACE TRANSP. AND INNOVATIVE FINANCE BUREAU (GF)	3.0	3.0	5.0	4.0
TRANSPORTATION PLANNING, RESEARCH & DEVELOPMENT (GF)	14.0	14.0	7.9	8.0
OFFICE OF CIVIL RIGHTS (GF)	9.5	9.5	9.5	9.0
FINANCIAL MANAGEMENT CAPITAL (GF)	6.0	6.0	2.0	2.0
ESSENTIAL AIR SERVICE (SF)	133.7	145.4	145.4	150.5
PAYMENTS TO AIR CARRIERS (TF)	155.0	155.0	175.0	125.0
NATIONAL INFRASTRUCTURE INVESTMENTS (BUILD) (GF)	1,500.0	1,500.0	900.0	1,000.0
INFRASTRUCTURE FOR REBUILDING AMERICA GRANTS (GF)	0.0	0.0	0.0	1,035.0
RESEARCH AND TECHNOLOGY (GF)	23.5	23.5	8.5	22.0
CYBER SECURITY INITIATIVES (GF)	15.0	15.0	15.0	15.0
SMALL AND DISADVANTAGED BUSINESS UTILIZ. & OUTREACH/MBRC (GF)	5.1	5.1	4.0	3.0
TOTAL	1,977.7	1,989.4	1,386.2	2,491.5
Full Time Equivalent Employment	1,417	1,502	1,502	1,666

OVERVIEW

The Office of the Secretary (OST), in recent years, has been tasked by Congress with expanding upon its traditional role of program and policy oversight within the Department of Transportation. OST's role has come to include implementation of essential infrastructure grant and financing programs.

For instance, OST is responsible for the selection, award, and oversight of billions of dollars of multimodal infrastructure funding, the Better Utilization of Investments to Leverage Development (BUILD) Transportation Grants program and the Infrastructure for Rebuilding America (INFRA) grant program. These programs serve to repair and modernize the Nation's infrastructure, promote economic growth, and help meet the demands of expanding freight movement across the country. In addition to direct grants to local project sponsors, OST also works closely with sponsors and stakeholders to identify and provide the most appropriate low-cost financing or loan guarantee vehicle for a variety of projects.

Separately, OST continues to conduct and provide research, data, and analysis in support of the development of national transportation policy that promotes the Secretary's priorities of safety, infrastructure, and innovation. OST also continues to implement numerous non-capital programs that address many issues such as the advancement of automated vehicles, commercial flight access for rural communities, preventing alcohol and illegal drug use in the transportation sector, and enforcing airline consumer protections.

HIGHLIGHTS OF THE FY 2020 PRESIDENT'S BUDGET

The FY 2020 President's Budget requests \$2.5 billion to invest in the Nation's infrastructure and support the programs and activities of the Office of the Secretary. Of the total President's Budget request, approximately \$2.04 billion is proposed for the INFRA and BUILD grant programs. The remaining funds will support core OST programs and oversight responsibilities, as well as continue strategic Departmental priorities such as addressing emerging transportation

technologies, investing in cyber security, and improving corporate efficiencies through the establishment of a shared service environment.

Key Components of the Request Include

BUILD TRANSPORTATION GRANTS PROGRAM: \$1 billion is requested. The

PROGRAM: \$1 billion is requested. The proposed funding and program provisions will provide an equitable geographic distribution of funds and ensure balance in addressing both rural and urban communities' needs with infrastructure investments across a variety of transportation modes. These funds will enable the Department to fund critical transportation projects will have a significant impact on the Nation, a metropolitan area, or a region through a merit-based, competitive program. Recent

awards include a multimodal freight project to nearly double a port's capacity to safely transport energy exports, a transit efficiency project that used fiber optic cables to connect bus rapid transit stations and intersection signals to the local traffic management center, and a roadway project that ensured emergency and transportation access to a tribal community.

INFRA GRANT PROGRAM: \$1 billion will supplement the currently authorized FY 2020 program level from the FAST Act for a combined funding level of \$2 billion. The INFRA program rewards project sponsors who propose cost effective freight and congestion relief projects, leverage federal assistance, and incorporate innovation into their projects. While the FAST Act authorized program focuses the bulk of its resources on the national highways, the supplemental \$1 billion proposed in the FY 2020 Budget will have increased flexibility to address multimodal freight projects, including freight rail, port, and inland waterway surface transportation projects which enhance the Nation's supply chains and economic competitiveness.

SALARIES AND EXPENSES: \$118 million is requested for the Secretarial offices. The OST Offices serve as advisors to the Secretary on a wide range of areas while also maintaining oversight controls on the Department's programs, initiatives, and policies. These Offices contribute to the advancement of the Department's strategic goals, from safety to infrastructure and innovation, to regulatory reform with a focus on efficiency and the elimination of duplicative efforts.

TRANSPORTATION PLANNING, RESEARCH AND DEVELOPMENT: \$8 million is requested for research activities and studies required to support the Secretary's formulation of national

transportation policies. Within this amount, the Interagency Infrastructure Permitting Improvement Center and dashboard will receive \$1.25 million to streamline permitting review processes.

NATIONAL SURFACE TRANSPORTATION AND INNOVATIVE FINANCE BUREAU: \$4 million is requested to facilitate targeted Federal investments in infrastructure by streamlining the Department's innovative finance programs. The budget request will also allow OST to further build upon its initial progress of consolidating these credit programs, and continue to develop and promote best practices for innovative financing and public-private partnerships, including the management of the Title XI program.

million is included in the Budget for the program, including obligations of \$151 million of mandatory resources from overflight fees collected by the Federal Aviation Administration and a \$125 million discretionary appropriation. OST looks forward to working with Congress on reforms to the existing program that ensure Federal funds are efficiently targeted at the communities most in need. The reforms include adjustments to eligibility and limitations to the per-passenger subsidies for communities that are relatively close to larger airports.

OFFICE OF CIVIL RIGHTS: \$9 million is requested to support and advance internal and external civil rights initiatives, administer Federal civil rights statutes, and investigate EEO complaints.

SMALL AND DISADVANTAGED BUSINESS
UTILIZATION AND OUTREACH: \$3 million
is requested for activities which assist small,
disadvantaged, and women-owned businesses in

participating in DOT and DOT-assisted contracts and grants.

CYBER SECURITY: \$15 million is requested to continue to improve the compliance of DOT's cyber security posture, and continue to expand upon accomplishments achieved in prior fiscal years.

FINANCIAL MANAGEMENT CAPITAL: \$2

million is requested to continue the execution of the DATA Act compliance requirements and also allow the Department to develop and implement an Enterprise Content Management (ECM) system to electronically manage sensitive hardcopy financial documents.

RESEARCH AND DEVELOPMENT: \$22 million is requested for the Office of the Assistant Secretary for Research and Technology to coordinate research initiatives across the Department. The proposed funding level includes \$15 million for civil monitoring of the GPS signal.

WORKING CAPITAL FUND: A total of \$724 million in obligations are estimated across the Working Capital Fund in FY 2020, including \$219 million to continue the Department's move towards implementing Shared Services. The Department's shared services initiative will improve mission delivery in acquisition, human resources, and information technology (IT) by consolidating separate, overlapping, and duplicative processes and functions. As a key part of this effort, the Department is currently embarking upon a more modern, centralized approach to IT investment and management through the use of shared services. In FY 2020, the Department will continue consolidating its commodity IT and begin to coordinate programmatic applications across Operating Administrations. Utilizing shared services will

enable the Department to improve cybersecurity, increase efficiencies, and improve transparency in IT spending.

The Office of the Secretary supports America's economic growth by...

- > Rebuilding, updating, and expanding our Nation's multimodal transportation and freight infrastructure which is vital to economic growth by awarding and overseeing over \$5 billion in grants through both the BUILD and INFRA grant programs.
- **> Promoting the advancement of innovative transportation technologies** such as the safe testing and integration of Autonomous Vehicles (AV) and Unmanned Aircraft Systems (UAS) to keep our economy at the forefront of technology.
- **> Building a One-Stop Credit Shop to invest in infrastructure** to accelerate investment in our economy. Since the inception of the Build America Bureau, DOT has facilitated over \$13 billion in financing for 25 projects with over \$32 billion in total project costs. The projects include TIFIA loans, RRIF loans, and Private Activity Bonds.
- > Reducing Regulatory Burden which saves consumers and businesses money and time. Since January 2017, the Department has made significant progress advancing regulatory reform in a prudent and careful manner consistent with enhancing safety, streamlining the infrastructure permitting process, and preparing for the future by enabling innovation. The Department has done this by focusing on identifying and removing unnecessary regulatory costs and unnecessary rulemakings. To date, the Department has reduced regulatory costs imposed on the public by over \$2 billion in net present value cost savings consistent with safety.
- **Reducing Project Delay and Providing Transparency.** The Interagency Infrastructure Permitting Improvement Center (IIPIC) is the central resource for accelerating delivery of all DOT projects. IIPIC advances reforms to improve interagency coordination and expedite permitting and environmental review of major infrastructure projects accelerating the benefit to our economy.
- **Representing and Defending U.S. Transportation Interests Abroad** to increase trade and level global competition. DOT in coordination with other federal agency leadership, advocates on behalf of U.S. companies facing technical barriers to trade, particularly in the automotive sector, and those facing stiff international competition on transportation procurements abroad. In addition, the Department's "Open-Skies" policy is designed to eliminate government involvement in airline decision-making about routes, capacity, and pricing in international markets. DOT has negotiated over 120 "Open-Skies" agreements, which are pro-consumer, pro-competition, and pro-growth.

OFFICE OF THE INSPECTOR GENERAL

BUDGETARY RESOURCES		in millions of dollars			
Account	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget	
Salaries and Expenses	92.2	92.2	92.6	92.2	
Full Time Equivalent Employment	407	416	416	416	

OVERVIEW

The Department of Transportation's Office of Inspector General (OIG) is committed to providing relevant and timely information about transportation issues to Congress, the Department, and the American public. The OIG accomplishes this by fulfilling its statutory responsibilities under the Inspector General Act of 1978, as amended, while supporting DOT's mission and strategic goals, particularly its focus on safety. The OIG works 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.

The 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. Its audit recommendations lead to substantial financial, programmatic and safety improvements, and its investigations enhance safety by thwarting criminal activities that put lives at risk, and protecting taxpayer investments through court-ordered fines, restitutions and recoveries.

During FY 2018, the OIG issued 106 audit reports containing 315 recommendations and concluded investigations resulting in 168 indictments and 89 convictions. From FY 2014 through FY 2018, OIG achieved an average return on investment (ROI) of \$27 for every appropriated dollar.

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

Safety is DOT's highest priority and central to OIG's mission. The 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 the OIG's work. Through independent and fair audits and investigations, the OIG seeks to ensure that all DOT agencies are accountable for their results and for the resources invested in them.

Integrity is the OIG's foundation. The 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.

HIGHLIGHTS OF THE FY 2020 PRESIDENT'S BUDGET

The FY 2020 President's Budget requests \$92.2 million to support OIG. These funds will be used to support 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.

The Office of Inspector General supports America's economic growth by...

- **> Providing the only source of internal, independent, and objective recommendations** for the Department.
- **>** Focusing on issues that impact public safety through program reviews and investigations.
- Adding value for the American taxpayer by promoting economy, efficiency, and effectiveness in the administration of DOT programs and spending, enabling the best use of taxpayer dollars.
- **Enhancing the effectiveness and integrity** of the programs that DOT administers through **savings**, **recoveries**, **and efficiency gains**.
- **Seeking to prevent and detect waste, fraud, and abuse** in DOT programs and keep the Secretary and Congress fully and currently informed.

Supporting Summary Tables

BUDGETARY RESOURCES

Appropriations, Obligation Limitations, and FHWA and OST Exempt Obligations (in millions of dollars)

Administration	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
Federal Aviation Administration	18,001	18,001	17,452	17,105
Federal Highway Administration	47,449	47,448	49,212	47,404
Federal Motor Carrier Safety Administration	845	845	667	676
National Highway Traffic Safety Administration	947	947	966	929
Federal Transit Administration	13,480	13,480	13,460	12,416
Federal Railroad Administration	3,091	3,091	2,891	1,999
Pipeline and Hazardous Materials Safety Administration	270	270	273	255
Maritime Administration	980	980	1,115	682
Saint Lawrence Seaway Development Corporation	40	40	36	28
Office of the Secretary	1,978	1,989	1,386	2,492
Office of Inspector General	92	92	93	92
PHMSA User Fee Offsetting Receipt	-139	-139	-142	-127
Cancellation of Discretionary Unobligated Balances	0	0	-47	-290
Total DOT Budgetary Resources	87,035	86,863	87,363	83,660

${\color{red} BUDGET\, AUTHORITY} \ (\text{in millions of dollars})$

Administration	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
Federal Aviation Administration	18,125	18,001	17,452	17,105
Federal Highway Administration	47,814	47,240	47,963	38,346
Federal Motor Carrier Safety Administration	658	666	665	676
National Highway Traffic Safety Administration	1,051	1,065	1,071	929
Federal Transit Administration	15,101	14,780	13,414	13,716
Federal Railroad Administration	3,192	3,152	2,952	1,943
Pipeline and Hazardous Materials Safety Administration	270	271	275	255
Maritime Administration	997	1,034	1,117	659
Saint Lawrence Seaway Development Corporation	40	40	36	28
Office of the Secretary	1,978	1,989	1,386	2,492
Office of Inspector General	92	92	93	92
Offsetting Receipts	-2,292	-1,922	-1,922	-1,209
Total DOT Budget Authority	87,026	86,409	84,501	75,032

OUTLAYS (in millions of dollars)

Administration	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
Federal Aviation Administration	15,999	18,646	18,687	18,265
Federal Highway Administration	45,064	45,481	45,762	46,894
Federal Motor Carrier Safety Administration	581	681	655	808
National Highway Traffic Safety Administration	1,014	1,011	1,011	1,030
Federal Transit Administration	12,782	13,601	13,613	14,443
Federal Railroad Administration	2,450	2,411	2,411	2,024
Pipeline and Hazardous Materials Safety Administration	240	286	289	294
Maritime Administration	512	661	659	654
Saint Lawrence Seaway Development Corporation	30	55	51	40
Office of the Secretary	992	1,020	1,064	1,341
Office of Inspector General	91	93	94	93
Offsetting Receipts	-2,292	-1,922	-1,922	-1,209
Total DOT Outlays	77,462	82,125	82,374	84,676

FULL TIME EQUIVALENT EMPLOYMENT - TOTAL

Administration	FY 2018 Actual	FY 2019 Annualized Continuing Resolution	FY 2019 Enacted	FY 2020 President's Budget
Federal Aviation Administration	44,851	45,491	45,491	45,647
Federal Highway Administration	2,640	2,674	2,674	2,693
Federal Motor Carrier Safety Administration	1,145	1,202	1,202	1,170
National Highway Traffic Safety Administration	557	626	626	619
Federal Transit Administration	549	563	563	554
Federal Railroad Administration	903	932	932	911
Pipeline and Hazardous Materials Safety Administration	538	581	581	571
Maritime Administration	724	821	821	812
Saint Lawrence Seaway Development Corporation	127	144	144	144
Office of the Secretary	1,417	1,502	1,502	1,666
Office of Inspector General	407	416	416	416
Total DOT Full Time Equivalent Employment	53,858	54,952	54,952	55,203



U.S. Department of Transportation

1200 New Jersey Avenue, SE Washington DC 20590