



**U.S. Department
of Transportation**

BUDGET ESTIMATES

FISCAL YEAR 2023

FEDERAL HIGHWAY ADMINISTRATION

**SUBMITTED FOR THE USE OF
THE COMMITTEES ON APPROPRIATIONS**

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FHWA FY 2023 BUDGET

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FEDERAL HIGHWAY ADMINISTRATION (FHWA) FISCAL YEAR 2023 BUDGET

BUDGET SUMMARY OVERVIEW

Every day people, communities and businesses throughout our Nation rely on highways, roads and bridges. Our transportation system gets goods to markets and people to work, school, medical services, and so much more. It provides access to economic and other opportunities, allows people to explore our Nation and its natural treasures, and visit family and friends from coast-to-coast.

But we do not yet have a safe, multimodal transportation system that provides reliable, accessible, resilient, and equitable travel for everyone. Instead, our aging infrastructure too often results in unsafe conditions, congestion and delays for both people and goods, unacceptable environmental and community impacts and ongoing inequities. Too many people die and are seriously injured on our roads every day and a growing number are pedestrians and cyclists and other vulnerable users. Despite many years of investment, too many bridges are in poor condition and too much travel on the National Highway System occurs on pavement that lacks good ride quality. Too many roads are not yet Complete Streets, defined in the Infrastructure Investment and Jobs Act (IIJA) as those that “ensure the safe and adequate accommodation of all users of the transportation system, including pedestrians, bicyclists, public transportation users, children, older individuals, individuals with disabilities, motorists, and freight vehicles.”

With the generational investment enabled by IIJA, the time has come to upgrade the condition of the Nation’s streets, highways and bridges and make them safe for all users, while at the same time modernizing them so that the transportation network is accessible for all users, provides people with better choices across all modes, accommodates new and emerging technologies, is more sustainable and resilient to a changing climate, and is more equitable.

The mission of Federal Highway Administration (FHWA) is to work with our Federal, State, Tribal and local partners to advance a safe, multimodal, reliable, sustainable and equitable transportation system that meets the needs of all communities and all users. FHWA has a critical role to play in addressing the needs of the Nation’s transportation infrastructure, including the \$1 trillion backlog in repairs and maintenance needed to improve the condition of the more than 619,000 bridges and 4 million miles of public roads. FHWA’s FY 2023 Budget reflects the second year of investments enabled by the IIJA; the Budget request will set the stage for a transformative transportation infrastructure program that will spur long-needed investments in the Nation’s roads and bridges.

FHWA’s fiscal year (FY) 2023 Budget requests \$68.9 billion to advance the Secretary of Transportation’s vision of building America’s economy and infrastructure back better. This request will continue to prioritize safety as the foundation of everything we do, while helping our Nation’s economy recover and rebuild, rising to the climate challenge, and ensuring transportation equity across all communities. The total request amount is comprised of \$59.4 billion in contract authority from the Highway Trust Fund and \$9.5 billion in General Fund supplemental appropriations.

With some of the world's most innovative road and bridge engineering and planning expertise, FHWA is well situated to help lead America towards a safe, multimodal, reliable, sustainable, and equitable transportation system. Since the enactment of the IIJA, FHWA has reached several significant milestones. In December 2021, FHWA distributed to States \$52.5 billion in Federal-aid highway formula funding, the largest Federal Highway apportionment in decades. This accounted for 78 percent of all FY 2022 highway funding under the IIJA. In January 2022, FHWA launched the Bridge Replacement, Rehabilitation, Preservation, Protection, and Construction Program (Bridge Formula Program), which will provide a historic level of bridge investment to communities across our Nation. Also, in January 2022, FHWA continued its commitment to safe, accessible, and efficient transportation in rural areas through the release of dedicated funding for the Appalachian Development Highway System. In February 2022, FHWA launched the National Electric Vehicle Infrastructure (NEVI) Formula Program, a crucial step towards making electric vehicles accessible for all people and for combating climate change.

Focusing on Safety

The safety of all roadway users – drivers and passengers, pedestrians on foot and in wheelchairs, cyclists, and transit passengers as they are going to or from their station or stop – continues to be FHWA's top priority. In 2020, the National Highway Traffic Safety Administration's (NHTSA) estimates show that 38,680 people died in motor vehicle crashes. This represents the largest projected number of fatalities since 2007. NHTSA estimates that 31,720 people died in motor vehicle crashes in the first nine months of 2021. This is an approximately 12 percent increase above the projection for the first nine months of 2020.

FHWA believes that zero is the only acceptable number of deaths on our roads and that a Safe System is how we get there. FHWA will play an important role in implementing the Department of Transportation's National Roadway Safety Strategy, which has formally adopted zero deaths as the DOT-wide vision and emphasizes the Safe System Approach. This approach acknowledges that people make mistakes and we are responsible for putting safeguards in place to prevent those mistakes from being fatal. Two of the areas where FHWA must and will take a leadership role are Safer Roads and Safer Speeds.

Safer roads incorporate design elements that both help prevent crashes from occurring and mitigate harm when they do. Safer roads encourage safer behavior and facilitate safe travel. To this end, FHWA will update its Manual on Uniform Traffic Control Devices and will also update roadway design guidance and regulations to reflect best practices for designing and operating safer roadways and work with States and other owners of highways, roads, and streets to achieve safer roadway design. Additionally, FHWA will be implementing the findings and actions in our 2022 report to Congress, "Moving to a Complete Streets Design Model," as we work to increase the proportion of Federal-aid funded projects that are routinely planned, designed, built, and operated as Complete Streets that are safe and accessible for all users.

Setting safer speed limits is another critical tool for reducing crashes and injury. FHWA will improve the information available for setting speed limits, provide a range of methodologies for setting speed limits depending on the context of the roadway, and provide technical assistance to communities on appropriate speed limit setting.

- FHWA has released new guidance to implement changes in the vital **Highway Safety Improvement Program (HSIP) (\$3.0 billion)**, which seeks to reduce the number of lives lost on our Nation’s highways, bridges, and roads. The HSIP is one of the most important Federal programs for transportation agencies in their efforts to protect all road users, and the IIJA bolsters it with an infusion of additional funds. The new guidance ensures that funds are used strategically to make travel safer, including protecting people outside of vehicles, such as people walking, biking, or using mobility assistive devices.
- Consistent with the National Roadway Safety Strategy, FHWA recommends that HSIP funds be used to incorporate a more data-driven, holistic and equitable Safe System Approach to roadway safety that builds in redundancies so if one element of a transportation system fails, other elements provide protection to save lives and prevent serious injuries on our roads.
- The HSIP places a focus on infrastructure safety improvements, and under the IIJA, States now have more flexibility to use up to 10 percent of their HSIP funds for “specified safety projects” that include non-infrastructure safety projects such as public awareness campaigns, research, automated traffic enforcement systems, emergency services, and efforts to protect children such as Safe Routes to School activities.
- FHWA is focused on enhancing the safety of vulnerable road users, such as pedestrians and bicyclists. The FHWA issued guidance that implements the provisions of the IIJA that will help vulnerable road users who are considered to be most at risk for being involved in traffic crashes that result in fatalities. These road users include people who walk, bike, and use personal conveyances. To protect them, the IIJA adds a Vulnerable Road User Safety Special Rule to the HSIP. Under the rule, if vulnerable road users make up 15 percent or more of the total number of fatalities in a State in a given year, the State is required to dedicate at least 15 percent of its HSIP funds the following fiscal year to projects that address the safety of these road users. Additionally, the new guidance incorporates legislative changes to permit 100 percent Federal funding for certain pedestrian and bicyclist projects.
- The **Railway-Highway Crossing Program (\$245 million)**, a set-aside from HSIP, supports projects to reduce the number of fatalities, injuries, and crashes at public railway-highway grade crossings. Through this program, State and local agencies are implementing data-driven practices to successfully address highway-railway crossing safety planning, implementation, and evaluation challenges.
- FHWA’s holistic approach to safety considers all aspects of the roadway experience, from drivers, pedestrians, and cyclists, to how the neighboring natural environment impacts roadway safety. For example, the new **Wildlife Crossings Pilot Program (\$65 million)** will award grants for projects designed to reduce wildlife-vehicle collisions and improve habitat connectivity.

Restoring Economic Strength

The construction of the Interstate System helped our Nation prosper and grow. The National Highway System (NHS), a roughly 220,000-mile network of high-volume roads and over 145,000 bridges, is vital to the movement of people and goods throughout the Nation. The National Highway Freight Network consists of nearly 60,000 miles of highways that play a critical role in the U.S. freight transportation system. Yet all of these, along with more than 619,000 bridges in the National Bridge Inventory and the 1 million miles of highways and streets that are Federal-aid eligible, are in need of investment so that they can continue to underpin our Nation's economic prosperity. The IIJA took action, providing historic investment in our roads and bridges. For example, the IIJA includes the single largest dedicated bridge investment since the construction of the Interstate System and increases funding for the Appalachian Development Highway System by 150 percent compared to FY 2021.

- The new **Bridge Formula Program (\$5.5 billion)** will provide funds to States by formula for bridge replacement, rehabilitation, preservation, protection, or construction projects on public roads. Portions of this funding will be dedicated to off-system bridges, which are often owned by local authorities, and to Tribal transportation facilities.
- The new **Bridge Investment Program (\$2.5 billion)** will award grants to rehabilitate or replace bridges. This program will focus on projects with national or regional significance, while setting aside a portion of funding for Tribal bridge projects.
- The **Nationally Significant Freight and Highway Projects Program (\$1.6 billion)** will support highway and freight projects of national or regional significance. This program—also referred to as the “Infrastructure for Rebuilding America (INFRA)” program—will award grants for projects that will have a significant effect on the ability of our Nation to meet the growth in freight and passenger demand in a responsible, effective, and safer way.
- The **National Highway Freight Program (\$1.4 billion)** will invest in infrastructure and operational improvements on the National Highway Freight Network that reduce congestion, improve safety and productivity, and strengthen our Nation's economy. This program addresses a longstanding need to reduce the existing backlog in freight infrastructure investment.
- Additionally, through the new **Congestion Relief Program (\$50 million)**, FHWA will help to address the negative impacts congestion has on safety, mobility, climate, and quality of life. This program will award competitive grants for projects in large urbanized areas to advance innovative, integrated, and multimodal solutions to mitigate congestion in the most densely populated metropolitan areas.
- The **National Highway Performance Program (\$29.0 billion)** will improve the National Highway System (NHS), a roughly 220,000-mile network of high-volume roads and over 145,000 bridges. The NHS is a vital, national network of roads. Preserving and improving the NHS through the NHPP keeps our Nation's highways and bridges safe and benefits both urban and rural areas nationwide and strengthens the economy through the efficient

movement of freight. While the NHPP continues to support progress toward the achievement of performance targets established in a State's asset management plan for the NHS, IIJA adds an additional purpose for this program: to increase the resiliency of the NHS to mitigate the cost of damages from sea level rise, extreme weather events, flooding, wildfires, or other natural disasters.

- The **Surface Transportation Block Grant Program (STBG) (\$14.1 billion)** will provide flexible funding that States and localities can use to best address State and local transportation needs and increase mobility, access to community resources, and improve quality of life for all communities. Under IIJA, 10 percent of STBG funds are set aside for Transportation Alternatives, which funds a variety of smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, and other community improvements.
- The IIJA provided dedicated funding to the **Appalachian Development Highway System (ADHS) (\$250 million)** to spur economic growth in this historically isolated region. The construction of the ADHS has increased economic activity, job creation, and business expansion across the region. This investment will help meet the goal of completing 100 percent of the network by 2040.
- The **Territorial and Puerto Rico Highway Programs (\$224 million)** will increase safety and mobility, improve transportation equity, and bring about economic growth benefits by funding the construction of critical transportation infrastructure in Puerto Rico and the territories of American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and the United States Virgin Islands.

Ensuring Transportation Equity

Too often our transportation system has failed to serve historically disadvantaged communities. At times, highways have even fragmented communities. FHWA will work towards creating a more equitable transportation system that provides affordable access to transportation for all communities and redresses prior inequities and barriers to opportunity created by the transportation system.

FHWA intends to conduct a program evaluation on the agency's Americans with Disabilities Act (ADA) program to assess whether the program has been implemented as intended. As part of this evaluation, FHWA will evaluate their Office of Civil Rights' regulatory responsibilities under Title II of the ADA and Section 504 of the Rehabilitation Act of 1973 including the office's oversight of State and local entities and recipients of Federal funds that are responsible for roadways and pedestrian facilities to ensure that they do not discriminate on the basis of disability in any highway transportation program, activity, service, or benefit they provide to the public. The assessment will evaluate FHWA's Office of Civil Rights' processes for assuring ADA program compliance, and the effectiveness and efficiency of resource use. Related data quality assurance and governance policies will also be evaluated. As part of the assessment, opportunities to improve effectiveness, efficiency, and compliance, as well as, opportunities to

streamline and/or reduce effort will be identified. This evaluation will support the Department's strategic goal of equity.

With additional funds made available by IIJA, FHWA's Federal, State, Tribal and local partners will be delivering more projects this year and in years to come and these investments create opportunities for advancing equity. FHWA is, of course, committed to ensuring that all recipients of Federal aid comply with important equity requirements including Title VI, requirements for use of Disadvantaged Business Enterprises and the Americans with Disabilities Act. In addition, FHWA will be working to expand and diversify the workforce that builds Federally funded highway projects. FHWA has been actively encouraging recipients to consider implementing Local Hire programs, given that IIJA authorizes a recipient or subrecipient of Federal-aid highway funding to implement a local or other geographical or economic hiring preference relating to the use of labor for construction of the funded project, subject only to any applicable State and local laws, policies, and procedures. Federal-aid recipients are no longer required to receive any permission or approval from FHWA to use local hire programs, which can be used to ensure that the jobs created by investing in roads and bridges go to a diverse group of local residents.

FHWA is administering both existing and new programs to proactively address racial equity, workforce development, economic development and removing barriers to opportunity.

- The history of our transportation system has far too many examples of highways built through disadvantaged communities, effectively tearing these communities apart. The new **Reconnecting Communities Pilot Program (\$198 million)** will fund planning efforts and projects with the goal of removing or retrofitting existing transportation facilities that create barriers within communities.
- Equitable transportation begins with planning. The new **Prioritization Process Pilot Program (\$10 million)** will focus on equity, transparency, and accessibility in transportation planning. This program will award grants to States and (metropolitan planning organizations) MPOs to fund the development of publicly accessible, transparent prioritization processes to assess and score projects according to locally determined priorities, and to use such evaluations to inform the selection of projects to include in transportation plans.
- The **Metropolitan Planning Program (\$447 million)** will support MPOs in conducting multimodal transportation planning and programming in metropolitan areas. This program will help MPOs direct investments toward improving transportation system outcomes in a safe, transparent, equitable, and accountable manner while engaging the public, elected officials, and other stakeholders in the process.
- The new **Rural Surface Transportation Grant Program (\$350 million)** will award competitive grants to eligible entities to improve and expand the surface transportation infrastructure in rural areas. The goals of the program include increasing connectivity, improving safety and reliability of the movement of people and freight, generating regional economic growth, and improving quality of life. At least 25 percent of funds

will be reserved for projects that further the completion of designated routes of the ADHS.

- One important equity strategy is investing in the road and bridge infrastructure that serves Federal lands and Tribal nations such as the **Federal Lands Transportation and Access Programs** and **Tribal Transportation Program**. Investments in Federal lands help ensure that they are available to all Americans; investments in Tribal nations improve roadway safety and create access to opportunity.
 - The **Federal Lands Transportation and Access Programs (\$722 million)** support projects in and around Federal Lands. The Federal Government owns approximately 30 percent of the land in the United States. These programs are vital in keeping these national treasures safely accessible for millions of visitors and help grow local economies that are often in rural areas.
 - The **Tribal Transportation Program (\$590 million)** provides safer and better access to housing, emergency services, schools, stores, jobs, and medical services. The Native American and Alaska Native populations of our country experience higher rates of fatal injuries associated with transportation than does the population as a whole. This program will support projects that will make transportation in these communities safer, more accessible, and more efficient.
 - The **Nationally Significant Federal Lands and Tribal Projects Program (\$55 million)** will provide needed funds for Tribes and Federal lands management agencies to complete projects that will provide substantial benefits to their communities or parklands.
- The **On-the-Job Training Supportive Services (OJT) and Disadvantaged Business Enterprise (DBE) Supportive Services programs (\$20 million)** will support the highway construction industry in establishing and maintaining apprenticeship and training programs targeted to move minorities, women, and disadvantaged individuals into journey-level positions, and assist with creating a more diverse make-up of firms participating on improving America's infrastructure that, in turn, contributes toward ensuring competition, job creation, and strengthens the economic base of our country.
- FHWA aims to expand and diversify the workforce that builds Federally funded highway projects. The **Construction Workforce Partnerships (HCWP)** program is central to this goal. The HCWP strives to increase the capacity and capability of the highway construction workforce by partnering with key organizations to develop and deploy highway construction training and placement programs. FHWA will assess the number of training and placement programs developed and/or implemented and, ultimately, the number of individuals enrolled in and/or completing highway construction skill development/training programs, including the number of women, minorities and disadvantaged individuals.

Addressing Climate Change

FHWA has a key role to play both in reducing greenhouse gas emissions from transportation consistent with national goals and in making our transportation infrastructure more resilient to climate change impacts now and in the future. The President has set a goal of reaching net-zero emissions economy-wide by no later than 2050. The IIJA makes the most transformative investment in Electric Vehicle (EV) charging in United States (U.S.) history that will put us on a path to a nationwide network of 500,000 EV chargers that ensures a convenient, affordable, reliable and equitable charging experience for all users. Together with the newly formed Joint Office of Energy and Transportation, a collaborative teaming of the Departments of Energy and Transportation, FHWA will work towards significantly reducing transportation emissions by supporting both electrification and decarbonization of the transportation system and safer and more convenient options for walking, biking and using transit.

With the designation of **Alternative Fuel Corridors (AFC)**, FHWA is establishing a national network of alternative fueling and charging infrastructure along NHS corridors. This national network will: Accelerate equitable adoption of EVs, including for those who cannot reliably charge at home; reduce transportation-related greenhouse gas emissions and help put the U.S. on a path to net-zero emissions by no later than 2050; and position U.S. industries to lead global transportation electrification efforts and help create family-sustaining union jobs that cannot be outsourced.

AFCs recognize highway segments that have infrastructure plans to allow travel using alternative fuels, including electricity. The first five rounds of designations included 125 nominations received from State and local officials, included portions of 134 Interstates and 125 U.S. highways and State roads, comprised 49 States and the District of Columbia, and covered approximately 165,722 miles of the NHS. In February 2022, FHWA issued the request for nominations for Round 6 of AFC designations. Progress of this program will be measured by number of miles of designated AFCs and the proportion that is “corridor-ready” (i.e., charging stations are located no more than 50 miles apart and no more than 1 mile off the highway) versus “corridor-pending”.

The IIJA also recognizes that our transportation system must adapt to be more resilient in the face of natural disasters and changing climate conditions. New programs will support projects that make our roads and bridges more resilient thereby helping to safeguard communities against extreme events. Through existing and new programs, FHWA will help to fight climate change while making our roads and bridges more resilient to disasters and changing climate conditions.

- The new **National Electric Vehicle Infrastructure (NEVI) Formula Program (\$1.0 billion)** will help States create a network of convenient, affordable, reliable, and equitable electric vehicle charging stations along designated AFCs, particularly along the Interstate Highway System.
- The new **Charging and Fueling Infrastructure Grants Program (\$400 million)** will award competitive grants designed to further increase electric vehicle charging access in locations throughout the country, including in rural and underserved communities.

- The new **Promoting Resilient Operations for Transformative, Efficient, and Cost-savings Transportation (PROTECT) formula program (\$1.4 billion)** will apportion funding to States for resilience improvements, including projects that use materials, structural techniques, or non-structural techniques to prepare more of the Nation's infrastructure for the impacts of climate change and extreme weather events.
- The new **PROTECT discretionary program (\$250 million)** will award competitive grants for activities that enable communities to address vulnerabilities to current and future weather events, natural disasters, and changing conditions, including sea level rise, and plan transportation improvements and emergency response strategies to address those vulnerabilities.
- The new **Carbon Reduction Program (\$1.3 billion)** will provide formula grants to States to reduce transportation emissions. Approximately two-thirds of the funding under this program will be suballocated by population. The program will also require States to develop a carbon reduction strategy that supports efforts to reduce transportation emissions within two years of enactment.
- The new **Reduction of Truck Emissions at Port Facilities (\$80 million)** will fund competitive grants for eligible projects that reduce port-related emissions from idling trucks, including through the advancement of port electrification, improvements in efficiency, and other emerging technologies and strategies.
- The **Congestion Mitigation and Air Quality Improvement Program (\$2.6 billion)** will continue to support transportation investments that reduce highway congestion and harmful emissions. The Congestion Mitigation and Air Quality Improvement Program enhances quality of life and improves health nationwide through its contributions to attainment and maintenance of the National Ambient Air Quality Standards that act as a public health benchmark for many of the densely populated areas of the country.
- The **Emergency Relief Program (\$100 million)** will help restore and repair roads and bridges following disasters or catastrophic failures. Natural disasters and catastrophes that destroy highways and bridges are unpredictable events and can occur anywhere in the country. This program is critical to maintaining mobility and safety following a disaster and new provisions in IIJA will focus the program more on making the replaced infrastructure more resilient in the future.
- **Transportation Alternatives (\$1.4 billion)**, a set-aside from STBG, helps States, local governments, and communities pursue transportation improvements that create safe, accessible, and environmentally-sensitive communities through projects that provide access to jobs, services, housing, and recreation, and enhance and preserve the human and natural environment. Funding can be used for vital transportation investments such as pedestrian and bicycle facilities, recreational trails, and safe routes to school projects, as well as environmental mitigation related to stormwater and habitat connectivity.

Pursuing Innovation

FHWA's contributions to researching and implementing transformative innovations and technologies are changing the way roads, bridges, and other facilities are planned, designed, built, managed, and maintained across the country to be more responsive to current and future needs. FHWA is in a unique leadership position to identify and address issues of national significance that require high-risk, long-term, distinctive areas of research. In this role, FHWA plans to shape and execute a national research and innovation technology development, deployment, and training program that produces and delivers the solutions needed to meet current challenges, assesses future needs, and responds to those needs proactively and effectively.

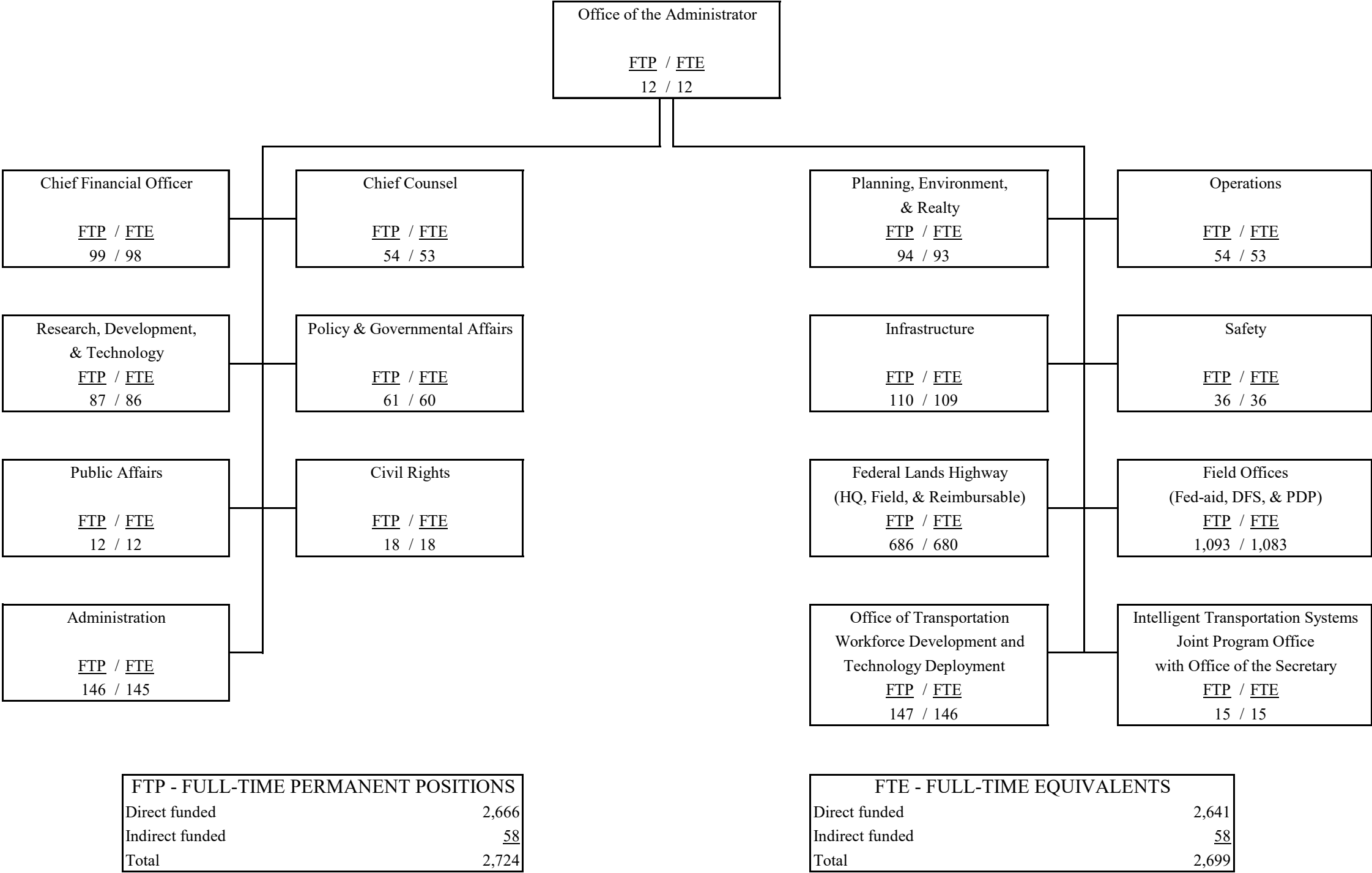
- FHWA's **Research, Technology, and Education (RT&E) Program (\$518 million)** strives to generate new solutions, build more effective partnerships, and provide better information and tools for decision-making, which will enable our Nation to enhance and make the best investments in the transportation system.
- The entire innovation life cycle is covered under the RT&E program umbrella—including agenda setting; research and development; technology testing and evaluation; and deployment and impact evaluation of market-ready technologies and innovations.
- Additionally, the RT&E program is committed to providing superior training and education to transportation professionals. Through several programs, FHWA provides resources for the development and delivery of technical assistance, training, professional development, and education programs to improve the professional capacity of the workforce.
- FHWA's ability to lead research innovation is exemplified by the **Exploratory Advanced Research (EAR) Program**, which conducts longer-term, higher-risk research in all the research program areas. These research products have the potential for dramatic breakthroughs in transportation. For example, highway transportation researchers are collecting and analyzing an increasing amount of video data that provide new and enhanced visual and other sensors for conducting research in multiple areas such as system planning, operations, safety, and infrastructure condition assessment. While the research community is fortunate to be able to collect more and better data, the amount of data has the potential to overwhelm the capacity to assess the data using current methods. FHWA's EAR Program is sponsoring research projects that will explore breakthroughs in machine learning to automate extraction of safety data. Automating data extraction from video files is expected to dramatically reduce the costs of using these data, making them accessible to the widest possible pool of researchers.
- FHWA's **Every Day Counts (EDC)** is a proven, State-based model that works with State DOT partners to identify, promote and rapidly deploy proven, yet underutilized, innovations that facilitate greater efficiency at the State and local levels, saving time, money and resources. The sixth EDC cycle for 2021 and 2022 is underway, and the seventh cycle is slated to begin in Fall 2022. FHWA will focus the seventh cycle on market-ready, but underutilized practices or technologies that deliver not just more roads but safer and better roads that enhance roadway safety for all users, support sustainable

and resilient infrastructure, and/or address equity as part of project planning and delivery. A measure of the success of this initiative is the number of States that commit to implementing and/or begin to implement EDC innovations that support key priorities such as equity, safety, economic growth, sustainable and resilient infrastructure, or workforce development.

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EXHIBIT I-A

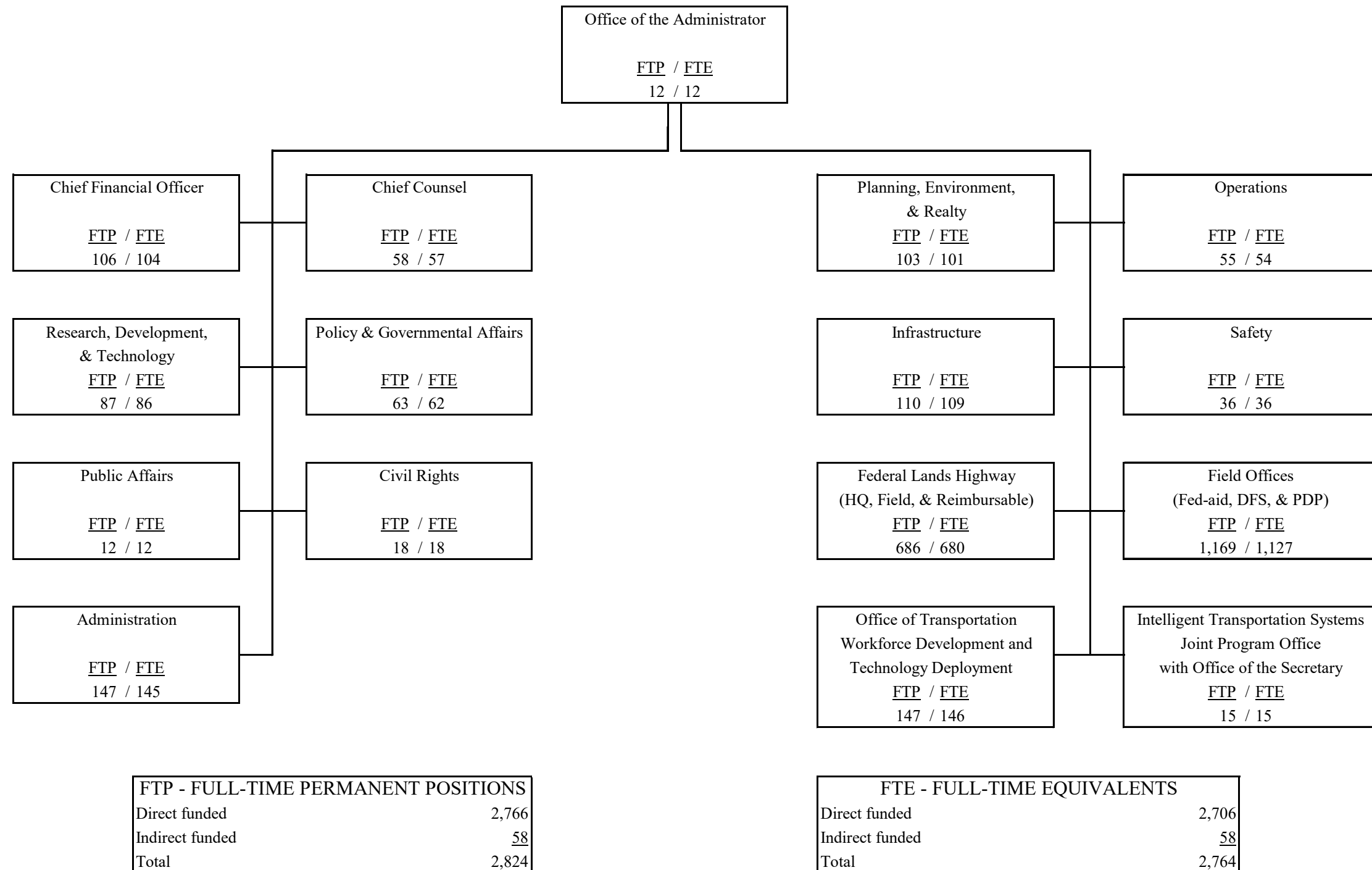
FEDERAL HIGHWAY ADMINISTRATION ORGANIZATION CHART
FY 2022 ESTIMATED FTP BY OFFICE AND ESTIMATED FTE BY OFFICE



Direct funded FTP presented by office reflects an estimated on-board level at fiscal year end, not total positions including vacancies. This is consistent with Exhibit II-8. Direct funded FTE presented by office reflects an illustrative proration of total FTE. Indirect funded FTP & FTE include Federal Lands Highway reimbursable FTE and allocation FTE from OST. The FTP and FTE levels include estimated increases to properly execute the increased amount of programs and funding in the IJA. FTP/FTE numbers and their allocation among FHWA offices is to be determined, with the amounts shown above being illustrative.

EXHIBIT I-B

FEDERAL HIGHWAY ADMINISTRATION ORGANIZATION CHART FY 2023 ESTIMATED FTP BY OFFICE AND ESTIMATED FTE BY OFFICE



Direct funded FTP presented by office reflects an estimated on-board level at fiscal year end, not total positions including vacancies. This is consistent with Exhibit II-8. Direct funded FTE presented by office reflects an illustrative proration of total FTE. Indirect funded FTP & FTE include Federal Lands Highway reimbursable FTE and allocation FTE from OST. The FTP and FTE levels include estimated increases to properly execute the increased amount of programs and funding in the IJA. FTP/FTE numbers and their allocation among FHWA offices is to be determined, with the amounts shown above being illustrative.

EXHIBIT II-1
FY 2023 BUDGET AUTHORITY
FEDERAL HIGHWAY ADMINISTRATION
(\$000)

ACCOUNT NAME	M / D	FY 2021 ENACTED	FY 2022 CR (w/ IIJA Oblim)	FY 2022 ENACTED	FY 2023 PRES. BUDGET
Federal-aid Highways	M	\$47,104,092	\$58,212,430	\$58,212,430	\$59,503,511
Contract Authority (subject to limitation)		\$46,365,092	\$57,473,430	\$57,473,430	\$58,764,511
[Administrative Expenses] ^{1/}		[\$456,798]	[\$466,965]	[\$466,965]	[\$476,784]
Exempt Contract Authority ^{2/}		\$739,000	\$739,000	\$739,000	\$739,000
Flex Transfers to/from FTA		-\$848,830	-\$1,300,000	-\$1,300,000	-\$1,300,000
Transfer to NHTSA ^{3/}		-\$105,117	-\$125,976	-\$125,976	-----
Transfer to/from OST ^{4/}		-\$8,552	-----	-----	-----
Sequestered Exempt Contract Authority ^{5/}		-\$42,123	-\$42,123	-\$42,123	-\$42,123
Highway Infrastructure Programs (GF) ^{6/}	D	\$2,000,000	\$2,000,000	\$2,444,928	-----
Emergency Relief (GF) ^{7/}	D	-----	\$2,600,000	\$2,600,000	-----
Miscellaneous Trust Funds (TF)	M	\$2,694	\$2,694	\$2,694	\$2,694
Gross New Budget Authority		\$49,106,786	\$62,815,124	\$63,260,052	\$59,506,205
Transfers ^{8/}		-\$962,499	-\$1,425,976	-\$1,425,976	-\$1,300,000
Sequestration		-\$42,123	-\$42,123	-\$42,123	-\$42,123
NET NEW BUDGET AUTHORITY REQUESTED		\$48,102,164	\$61,347,025	\$61,791,953	\$58,164,082
[Mandatory BA]		\$46,102,164	\$56,747,025	\$56,747,025	\$58,164,082
[Discretionary BA]		2,000,000	4,600,000	5,044,928	-----
Supplemental Funding					
COVID-19 Supplementals					
Highway Infrastructure Programs ^{9/}	D	\$10,000,000	-----	-----	-----
IIJA Supplemental (Division J)					
Highway Infrastructure Programs	D	-----	\$9,454,400	\$9,454,400	\$9,454,400
[Administrative Expenses] ^{10/}		-----	[\$86,816]	[\$86,816]	[\$86,816]
Transfer to OIG		-----	-\$1,000	-\$1,000	-\$1,000
Grand Total, All Appropriations		\$58,102,164	\$70,800,425	\$71,245,353	\$67,617,482

[] Non-add

1/ All fiscal years include FHWA General Operating Expenses (GOE) and transfers to the Appalachian Regional Commission (ARC) for administrative activities associated with the Appalachian Development Highway System. All fiscal years do not include amounts for other non-administrative programs authorized under Administrative Expenses. For FY 2021, FHWA used carryover administrative expenses Contract Authority (CA) to fully utilize the Limitation on Administrative Expenses (LAE) provided in the Appropriations Act.

2 /In all years, the exempt contract authority is comprised of \$639 million for the National Highway Performance Program and \$100 million for the Emergency Relief Program.

3/ FHWA anticipates transfers to NHTSA in FY 2023 in an amount to be determined based on State penalty information.

4/ FHWA does not anticipate net transfers of new contract authority in FY 2021, FY 2022, and FY 2023, but does anticipate net transfers of carryover contract authority to be determined based on TIFIA loan activity.

5/ FY 2021 reflects sequestration of 5.7 percent of contract authority exempt from obligation limitation per Sequestration Order dated February 10, 2020. FY 2022 reflects sequestration of 5.7 percent of contract authority exempt from obligation limitation per Sequestration Order dated May 28, 2021. FY 2023 reflect sequestration of 5.7 percent of contract authority exempt from obligation limitation pursuant to 2 U.S.C. 901a(6)(B)(ii).

6/ The Department of Transportation Appropriations Act, 2021 (Public Law 116-260) provided \$2 billion in additional highway funding from the General Fund in FY 2021. The Department of Transportation Appropriations Act, 2022 (Public Law 117-103) provided \$2.4 billion in additional highway funding from the General Fund in FY 2022.

7/ The Disaster Relief Supplemental Appropriations Act, 2022 (Public Law 117-43) provided \$2.6 billion in additional emergency relief funding from the General Fund for FY 2022.

8/ Exhibit does not reflect transfers of carryover contract authority transferred to FTA and OST.

9/ The Coronavirus Response and Relief Supplemental Appropriations Act, 2021 (Public Law 116-260) provided \$10 billion in additional highway funding from the General Fund for FY 2021.

10/ The IIJA provides funding for administrative expenses as a takedown from the Highway Infrastructure Programs. Amounts shown reflect the aggregate of such takedowns.

EXHIBIT II-2
FY 2023 TOTAL BUDGETARY RESOURCES BY APPROPRIATION ACCOUNT
FEDERAL HIGHWAY ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations
(\$000)

ACCOUNT NAME	M / D	FY 2021 ENACTED	FY 2022 CR (w/ IIJA Oblim)	FY 2022 ENACTED	FY 2023 PRES. BUDGET
[Limitation on Administrative Expenses] ^{1/}	D	[\$478,897]	[\$466,965]	[\$466,965]	[\$476,784]
Federal-aid Highways		\$47,061,969	\$58,170,307	\$58,170,307	\$59,461,388
Obligation Limitation	D	\$46,365,092	\$57,473,430	\$57,473,430	\$58,764,511
Exempt Contract Authority ^{2/ 3/}	M	\$696,877	\$696,877	\$696,877	\$696,877
[Liquidation of contract authorization]	D	[\$47,104,092]	[\$58,170,307]	[\$58,170,307]	[\$59,461,388]
Flex Transfers to/from FTA	D	-\$848,830	-\$1,300,000	-\$1,300,000	-\$1,300,000
Transfer to NHTSA ^{4/}	D	-\$105,117	-\$125,976	-\$125,976	-----
Transfer to/from OST ^{5/}	D	-\$8,552	-----	-----	-----
Highway Infrastructure Programs (GF) ^{6/}	D	\$2,000,000	\$2,000,000	\$2,444,928	-----
Emergency Relief (GF) ^{7/}	D	-----	\$2,600,000	\$2,600,000	-----
TOTAL BASE APPROPRIATION		\$48,099,470	\$61,344,331	\$61,789,259	\$58,161,388
Gross New Budgetary Resources		\$49,061,969	\$62,770,307	\$63,215,235	\$59,461,388
Transfers ^{8/}		-\$962,499	-\$1,425,976	-\$1,425,976	-\$1,300,000
Supplemental Funding					
COVID-19 Supplementals					
Highway Infrastructure Programs ^{9/}	D	\$10,000,000	-----	-----	-----
IIJA Supplemental (Division J)					
Highway Infrastructure Programs	D	-----	\$9,454,400	\$9,454,400	\$9,454,400
[Administrative Expenses] ^{10/}		-----	[\$86,816]	[\$86,816]	[\$86,816]
Transfer to OIG		-----	-\$1,000	-\$1,000	-\$1,000
Grand Total, All Appropriations		\$58,099,470	\$70,797,731	\$71,242,659	\$67,614,788

[] Non-add

1/ All fiscal years include FHWA General Operating Expenses (GOE) and transfers to the Appalachian Regional Commission (ARC) for administrative activities associated with the Appalachian Development Highway System. All fiscal years do not include amounts for other non-administrative programs authorized under Administrative Expenses.

2 /In all years, the exempt contract authority is comprised of \$639 million for the National Highway Performance Program and \$100 million for the Emergency Relief Program.

3/ FY 2021 reflects sequestration of 5.7 percent of contract authority exempt from obligation limitation per Sequestration Order dated February 10, 2020. FY 2022 reflects sequestration of 5.7 percent of contract authority exempt from obligation limitation per Sequestration Order dated May 28, 2021. FY 2023 reflect sequestration of 5.7 percent of contract authority exempt from obligation limitation pursuant to 2 U.S.C. 901a(6)(B)(ii).

4/ FHWA anticipates transfers to NHTSA in FY 2023 in an amount to be determined based on State penalty information.

5/ FHWA does not anticipate net transfers of new contract authority in FY 2021, FY 2022, and FY 2023, but does anticipate net transfers of carryover contract authority to be determined based on TIFIA loan activity.

6/ The Department of Transportation Appropriations Act, 2021 (Public Law 116-260) provided \$2 billion in additional highway funding from the General Fund in FY 2021. The Department of Transportation Appropriations Act, 2022 (Public Law 117-103) provided \$2.4 billion in additional highway funding from the General Fund in FY 2022.

7/ The Disaster Relief Supplemental Appropriations Act, 2022 (Public Law 117-43) provided \$2.6 billion in additional emergency relief funding from the General Fund for FY 2022.

8/ Exhibit does not reflect transfers of obligation limitation for carryover contract authority transferred to FTA and OST.

9/ The Coronavirus Response and Relief Supplemental Appropriations Act, 2021 (Public Law 116-260) provided \$10 billion in additional highway funding from the General Fund for FY 2021.

10/ The IIJA provides funding for administrative expenses as a takedown from the Highway Infrastructure Programs. Amounts shown reflect the aggregate of such takedowns.

EXHIBIT II-3
FY 2023 BUDGET REQUEST BY DOT STRATEGIC AND ORGANIZATIONAL GOALS
FEDERAL HIGHWAY ADMINISTRATION
Appropriations, Obligation Limitations, & Exempt Obligations
(\$000)

	Safety	Economic Strength	Equity	Climate & Sustainability	Transformation	Organizational Excellence	Total
Federal-aid Highways							
Bridge Investment Program	\$128,000	\$288,000	\$64,000	\$32,000	\$64,000	\$64,000	\$640,000
Carbon Reduction Program	\$62,917	\$62,917	\$125,833	\$754,998	\$125,833	\$125,833	\$1,258,330
Charging and Fueling Infrastructure Grants	\$20,000	\$20,000	\$40,000	\$240,000	\$40,000	\$40,000	\$400,000
Congestion Mitigation & Air Quality Improvement Program	\$258,722	\$517,444	\$517,444	\$776,166	\$258,722	\$258,722	\$2,587,221
Congestion Relief Program	\$10,000	\$10,000	\$10,000	\$10,000	\$5,000	\$5,000	\$50,000
Construction of Ferry Boats and Ferry Terminal Facilities	\$22,400	\$22,400	\$22,400	\$22,400	\$11,200	\$11,200	\$112,000
Disadvantaged Business Enterprise	\$0	\$4,000	\$4,000	\$0	\$1,000	\$1,000	\$10,000
Emergency Relief	\$28,290	\$18,860	\$0	\$28,290	\$9,430	\$9,430	\$94,300
Federal Lands and Tribal Transportation Programs	\$262,380	\$262,380	\$262,380	\$262,380	\$131,190	\$131,190	\$1,311,900
Highway Safety Improvement Program	\$2,963,543	\$0	\$0	\$0	\$0	\$329,283	\$3,292,826
Highway Use Tax Evasion Projects	\$720	\$720	\$720	\$720	\$720	\$400	\$4,000
Metropolitan Transportation Planning	\$89,377	\$89,377	\$89,377	\$89,377	\$44,688	\$44,688	\$446,884
National Highway Freight Program	\$420,423	\$420,423	\$0	\$280,282	\$140,141	\$140,141	\$1,401,411
National Highway Performance Program	\$5,794,362	\$11,588,724	\$2,897,181	\$2,897,181	\$2,897,181	\$2,897,181	\$28,971,809
Nationally Significant Federal Lands and Tribal Projects	\$11,000	\$11,000	\$11,000	\$11,000	\$5,500	\$5,500	\$55,000
Nationally Significant Freight and Highway Projects Program (INFRA)	\$200,000	\$200,000	\$200,000	\$200,000	\$100,000	\$100,000	\$1,000,000
On-the-Job Training	\$0	\$3,500	\$3,500	\$1,000	\$1,000	\$1,000	\$10,000
Prioritization Process Pilot Program	\$1,000	\$1,000	\$5,000	\$1,000	\$1,000	\$1,000	\$10,000
PROTECT Formula and Discretionary Programs	\$168,081	\$84,041	\$84,041	\$1,008,487	\$168,081	\$168,081	\$1,680,811
Reconnecting Communities Pilot Program	\$9,800	\$9,800	\$49,000	\$9,800	\$9,800	\$9,800	\$98,000
Reduction of Truck Emissions at Port Facilities	\$5,000	\$10,000	\$0	\$25,000	\$5,000	\$5,000	\$50,000
Research, Technology, and Education Program	\$108,250	\$91,350	\$49,900	\$49,900	\$149,700	\$49,900	\$499,000
Rural Surface Transportation Grant Program	\$70,000	\$70,000	\$105,000	\$35,000	\$35,000	\$35,000	\$350,000
Surface Transportation Block Grant Program	\$4,233,634	\$4,233,634	\$1,411,211	\$1,411,211	\$1,411,211	\$1,411,211	\$14,112,112
Territorial and Puerto Rico Highway Program	\$67,200	\$44,800	\$44,800	\$22,400	\$22,400	\$22,400	\$224,000
TIFIA	\$50,000	\$50,000	\$50,000	\$50,000	\$25,000	\$25,000	\$250,000
Wildlife Crossings Pilot Program	\$58,500	\$0	\$0	\$0	\$0	\$6,500	\$65,000
Administrative Expenses	\$128,732	\$109,660	\$81,053	\$61,982	\$47,678	\$47,678	\$476,784
Subtotal, Federal-aid Highways	\$15,172,330	\$18,224,029	\$6,127,840	\$8,280,574	\$5,710,476	\$5,946,139	\$59,461,388
IJA Supplemental Appropriations (Highway Infrastructure Programs)							
Appalachian Development Highway System	\$50,000	\$50,000	\$50,000	\$50,000	\$25,000	\$25,000	\$250,000
Bridge Investment Program	\$369,400	\$831,150	\$184,700	\$92,350	\$184,700	\$184,700	\$1,847,000
Bridge Formula Program	\$1,100,000	\$2,475,000	\$550,000	\$275,000	\$550,000	\$550,000	\$5,500,000
Construction of Ferry Boats and Ferry Terminal Facilities	\$13,680	\$13,680	\$13,680	\$13,680	\$6,840	\$6,840	\$68,400
National Electric Vehicle Formula Program	\$50,000	\$50,000	\$100,000	\$600,000	\$100,000	\$100,000	\$1,000,000
Nationally Significant Freight and Highway Projects Program (INFRA)	\$128,000	\$128,000	\$128,000	\$128,000	\$64,000	\$64,000	\$640,000
Reconnecting Communities Pilot Program	\$10,000	\$10,000	\$50,000	\$10,000	\$10,000	\$10,000	\$100,000
Reduction of Truck Emissions at Port Facilities	\$3,000	\$6,000	\$0	\$15,000	\$3,000	\$3,000	\$30,000
University Transportation Centers Program	\$4,750	\$2,850	\$1,900	\$1,900	\$5,700	\$1,900	\$19,000
Subtotal, IJA Supplemental Appropriations (Highway Infrastructure Programs)	\$1,728,830	\$3,566,680	\$1,078,280	\$1,185,930	\$949,240	\$945,440	\$9,454,400
Total, All Programs	\$16,901,160	\$21,790,709	\$7,206,120	\$9,466,504	\$6,659,716	\$6,891,579	\$68,915,788

Safety: Make our transportation system safer for all people. Advance a future without transportation-related serious injuries and fatalities.
Economic Strength and Global Competitiveness: Grow an inclusive and sustainable economy. Invest in our transportation system to provide American workers and businesses reliable and efficient access to resources, markets, and good-paying jobs.
Equity: Reduce inequities across our transportation systems and the communities they affect. Support and engage people and communities to promote safe, affordable, accessible, and multimodal access to opportunities and services while reducing transportation-related disparities, adverse community impacts, and health effects.
Climate and Sustainability: Tackle the climate crisis by ensuring that transportation plays a central role in the solution. Substantially reduce greenhouse gas emissions and transportation-related pollution and build more resilient and sustainable transportation systems to benefit and protect communities.
Transformation: Design for the future. Invest in purpose-driven research and innovation to meet the challenge of the present and modernize a transportation system of the future that serves everyone today and in the decades to come.
Organizational Excellence: Strengthen our world class organization. Advance the Department’s mission by establishing policies, processes, and an inclusive and innovative culture to effectively serve communities and responsibly steward the public's resources.
* The amounts in this table reflect an illustrative distribution among the Strategic Goals. In most cases, activities funded through these programs will overlap with more than one of the Strategic Goals, as they are not mutually exclusive.

EXHIBIT II-4
FY 2023 OUTLAYS
FEDERAL HIGHWAY ADMINISTRATION
(\$000)

ACCOUNT NAME	M / D	FY 2021 ENACTED	FY 2022 CR (w/ IIJA Oblim)	FY 2023 REQUEST
Federal-aid Highways (TF)		\$43,618,854	\$46,737,765	\$52,899,003
Subject to Obligation Limitation	D	\$42,998,697	\$46,083,123	\$52,144,957
Exempt Contract Authority	M	\$600,063	\$645,253	\$744,394
Emergency Relief Supplementals	D	\$20,094	\$9,389	\$9,652
Highway Infrastructure Program (GF)	D	\$536,280	\$529,098	\$390,538
Miscellaneous Highway Trust Funds (TF)	D	\$6,570	\$9,137	\$8,228
Right of Way Revolving Fund (TF)	M	-----	\$4,279	-----
Miscellaneous Trust Funds (TF)	M	\$107,838	\$13,161	\$12,164
Appalachian Development Highway System (GF)	D	\$12,487	\$8,692	\$7,361
Emergency Relief Program (GF)	D	\$635,315	\$1,284,501	\$1,314,845
Miscellaneous Appropriations (GF)	D	\$13,623	\$9,560	\$8,567
TOTAL		\$44,930,967	\$48,596,193	\$54,640,706
Mandatory		\$707,901	\$662,693	\$756,558
Discretionary		\$44,223,066	\$47,933,500	\$53,884,148
Supplemental Funding				
COVID-19 Supplementals				
Highway Infrastructure Programs		\$2,682,280	\$2,646,098	\$1,956,538
IIJA Supplemental (Division J)				
Highway Infrastructure Programs		-----	\$851,099	\$4,726,538
Grand Total, Outlays from all Appropriations		\$47,613,247	\$52,093,390	\$61,323,782

EXHIBIT II-5A
SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE
FEDERAL HIGHWAY ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations

ADMINISTRATIVE EXPENSES
LIMITATION ON ADMINISTRATIVE EXPENSES
(\$000)

			Baseline Changes									
	FY 2021 Actual	FY 2022 CR (with IJA Oblim)	Annualization of Prior Pay Raises	Annualization of new FY 2022 FTE	FY 2023 Pay Raises	Adjustment for Compensable Days (260 days)	GSA Rent	WCF Increase/ Decrease	Inflation and other adjustments to base	FY 2023 Baseline Estimate	Program Increases/ Decreases	FY 2023 Request
PERSONNEL RESOURCES (FTE)												
Direct FTE ^{1/}	2,008	2,023		15						2,038	50	2,088
<u>FINANCIAL RESOURCES</u>												
LIMITATION ON ADMINISTRATIVE EXPENSES (LAE)												
Salaries and Benefits	\$340,644	\$350,167	\$2,364	\$2,625	\$ 12,253	(\$1,408)				\$366,001	\$8,979	\$374,980
Travel	\$1,342	\$8,715							\$174	\$8,889		\$8,889
Transportation	\$945	\$1,579							\$32	\$1,611		\$1,611
GSA Rent	\$25,480	\$25,030					\$820			\$25,850		\$25,850
Communications & Utilities	\$909	\$909							\$18	\$927		\$927
Printing	\$336	\$336							\$7	\$343		\$343
Other Services:												
-WCF	\$49,857	\$49,751						\$2,536		\$52,287		\$52,287
-Other ^{2/}	\$44,790	\$21,610							\$432	\$22,042	(\$19,125)	\$2,917
Supplies	\$720	\$1,207							\$24	\$1,231		\$1,231
Equipment	\$4,457	\$4,413							\$88	\$4,501		\$4,501
Appalachian Regional Commission (ARC)	\$2,149	\$3,248								\$3,248		\$3,248
Subtotal, LAE ^{2/}	\$471,629	\$466,965	\$2,364	\$2,625	\$12,253	(\$1,408)	\$820	\$2,536	\$775	\$486,930	(\$10,146)	\$476,784
OJT Support Services	\$10,000	\$10,000								\$10,000		\$10,000
Disadvantaged Business Enterprise	\$10,000	\$10,000								\$10,000		\$10,000
Highway Use Tax Evasion	\$4,000	\$4,000								\$4,000		\$4,000
Total, LAE	\$495,629	\$490,965	\$2,364	\$2,625	\$12,253	(\$1,408)	\$820	\$2,536	\$775	\$510,930	(\$10,146)	\$500,784

1/ The FTE shown in this exhibit are funded by General Operating Expenses and exclude additional FTEs funded by reimbursements, allocations from BUILD Grants, and other programs (primarily Federal Lands Highways).

2/ In FY 2022 and FY 2023, the "Other" category depicts illustrative reductions in order to reflect the full utilization of administrative resources subject to the limitation on administrative expenses which expires after one year. Administrative expenses funding from IJA supplemental appropriations (multi-year and available until expended funding) will be used to fully fund the administrative resources required to support the implementation and administration of the IJA.

EXHIBIT II-5B
SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE
FEDERAL HIGHWAY ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations

ADMINISTRATIVE EXPENSES
HIGHWAY INFRASTRUCTURE PROGRAMS
(\$000)

	FY 2021 Actual	FY 2022 CR (with IIJA Oblim)	Baseline Changes							FY 2023 Baseline Estimate	Program Increases/ Decreases	FY 2023 Request
			Annualization of Prior Pay Raises	Annualization of new FY 2022 FTE	FY 2023 Pay Raises	Adjustment for Compensable Days (260 days)	GSA Rent	WCF Increase/ Decrease	Inflation and other adjustments to base			
PERSONNEL RESOURCES (FTE)												
Direct FTE		----								----		----
FINANCIAL RESOURCES												
HIGHWAY INFRASTRUCTURE PROGRAMS ^{1/}												
Salaries and Benefits		----								----		----
Travel		----								----		----
Transportation		----								----		----
GSA Rent		----								----		----
Communications & Utilities		----								----		----
Printing		----								----		----
Other Services:												
-WCF		----								----		----
-Other		\$68,898							\$1,378	\$70,276	(\$1,736)	\$68,540
Supplies		\$3,848							\$77	\$3,925		\$3,925
Equipment		\$14,070							\$281	\$14,351		\$14,351
Total, Highway Infrastructure Programs		\$86,816	----	----	----	----	----	----	\$1,736	\$88,552	(\$1,736)	\$86,816

1/ The IIJA provides funding for administrative expenses as takedowns from the Highway Infrastructure Programs (HIP). The HIP administrative expenses funding will be used for information technology investments, contractual services, and other investments and services to support the implementation and administration of the IIJA on a to-be-determined basis. This table is an illustrative example of how HIP administrative expenses funding may be utliized. Actual utilization of HIP administrative expenses funding is to be determined.

EXHIBIT II-5C
SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE
FEDERAL HIGHWAY ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations

ADMINISTRATIVE EXPENSES
LIMITATION ON ADMINISTRATIVE EXPENSES AND HIGHWAY INFRASTRUCTURE PROGRAMS
(\$000)

	Baseline Changes											
	FY 2021 Actual	FY 2022 CR (with IIJA Oblim)	Annualization of Prior Pay Raises	Annualization of new FY 2022 FTE	FY 2023 Pay Raises	Adjustment for Compensable Days (260 days)	GSA Rent	WCF Increase/ Decrease	Inflation and other adjustments to base	FY 2023 Baseline Estimate	Program Increases/ Decreases	FY 2023 Request
PERSONNEL RESOURCES (FTE)												
Direct FTE ^{1/}	2,008	2,023		15						2,038	50	2,088
FINANCIAL RESOURCES												
ADMINISTRATIVE EXPENSES												
Salaries and Benefits	\$340,644	\$350,167	\$2,364	\$2,625	\$ 12,253	\$ (1,408)				\$366,001	\$8,979	\$374,980
Travel	\$1,342	\$8,715							\$174	\$8,889	\$0	\$8,889
Transportation	\$945	\$1,579							\$32	\$1,611	\$0	\$1,611
GSA Rent	\$25,480	\$25,030					\$820		\$0	\$25,850	\$0	\$25,850
Communications & Utilities	\$909	\$909							\$18	\$927	\$0	\$927
Printing	\$336	\$336							\$7	\$343	\$0	\$343
Other Services:												
-WCF	\$49,857	\$49,751						\$2,536	\$0	\$52,287	\$0	\$52,287
-Other ^{2/}	\$44,790	\$90,508						\$0	\$1,810	\$92,318	(\$20,861)	\$71,457
Supplies	\$720	\$5,055						\$0	\$101	\$5,156	\$0	\$5,156
Equipment	\$4,457	\$18,483						\$0	\$369	\$18,852	\$0	\$18,852
Appalachian Regional Commission (ARC)	\$2,149	\$3,248								\$3,248		\$3,248
Total, Limitation on Administrative Expenses (LAE) and HIP ^{2/,3/}	\$471,629	\$553,781	\$2,364	\$2,625	\$12,253	(\$1,408)	\$820	\$2,536	\$2,511	\$575,482	(\$11,882)	\$563,600
OJT Support Services	\$10,000	\$10,000								\$10,000		\$10,000
Disadvantaged Business Enterprise	\$10,000	\$10,000								\$10,000		\$10,000
Highway Use Tax Evasion	\$4,000	\$4,000								\$4,000		\$4,000
Total	\$495,629	\$577,781	\$2,364	\$2,625	\$12,253	-\$1,408	\$820	\$2,536	\$2,511	\$599,482	(\$11,882)	\$587,600

1/ The FTE shown in this exhibit are funded by General Operating Expenses and exclude additional FTEs funded by reimbursements, allocations from BUILD Grants, and other programs (primarily Federal Lands Highways).

2/ In FY 2022 and FY 2023, the "Other" category depicts illustrative reductions in order to reflect the full utilization of administrative resources subject to the limitation on administrative expenses which expires after one year. Administrative expenses funding from IIJA supplemental appropriations (multi-year and available until expended funding) will be used to fully fund the administrative resources required to support the implementation and administrative of the IIJA.

3/ The IIJA provides funding for administrative expenses as takedowns from the Highway Infrastructure Programs (HIP). The HIP administrative expenses funding will be used for information technology investments, contractual services, and other investments and services to support the implementation and administration of the IIJA on a to-be-determined basis.

EXHIBIT II-6
WORKING CAPITAL FUND
FEDERAL HIGHWAY ADMINISTRATION
(\$000)

	<u>FY 2021 ENACTED</u>	<u>FY 2022 CR (w/ IIJA Oblim)</u>	<u>FY 2023 PRES. BUD.</u>
DIRECT:			
Federal-aid Highways			
Limitation on Administrative Expenses (LAE)	\$49,857	\$49,751	\$52,287
Program Funding (Federal Lands Highways, Research)	\$6,176	\$8,207	\$8,625
TOTAL	\$56,033	\$57,958	\$60,912

EXHIBIT II-7
FEDERAL HIGHWAY ADMINISTRATION
PERSONNEL RESOURCE - SUMMARY
TOTAL FULL-TIME EQUIVALENTS

	FY 2021 ACTUAL	FY 2022 CR (w/ IIJA Oblim)	FY 2023 PRES. BUD.
<u>DIRECT FUND, BY APPROPRIATION</u>			
Federal-aid Highways ^{1/ 2/ 3/}	2,626	2,641	2,706
SUBTOTAL, DIRECT FUNDED	2,626	2,641	2,706
<u>REIMBURSEMENT / ALLOCATIONS / OTHER</u> ^{4/ 5/}			
Reimbursements			
Federal-aid Highways	54	54	54
Allocations from other Organizations			
BUILD Grants (from OST)	4	4	4
SUBTOTAL, REIMBURSEMENTS / ALLOCATIONS / OTHER	58	58	58
BASE TOTAL FTEs	2,684	2,699	2,764
IIJA Supplemental Funding			
Highway Infrastructure Programs	----	----	----
CRRSA ACT			
Highway Infrastructure Programs	----	----	----
SUBTOTAL, COVID-19 / SUPPLEMENTALS	----	----	----
TOTAL FTEs	2,684	2,699	2,764

1/ Includes staff funded through General Operating Expenses (GOE) and direct program funded staff.

2/ FY 2022 and FY 2023 include estimated increases in FTE to levels necessary to properly execute the increased amount of programs and funding in the IIJA. FHWA is currently undergoing an analysis of needs to determine exact increases.

3/ Amounts include estimates of staff that support work focused on climate change (101 FTE), transportation equity and civil rights (72 FTE), and the Department's supply chain and Made in America/Buy America strategy (3 FTE). Addressing these areas are agency-wide priorities and are emphasized throughout FHWA's operations.

4/ Additional staff may be hired in FY 2022 and/or FY 2023 under reimbursable agreements or parent-child allocations for work performed on behalf of other agencies with funding from the Great American Outdoors Act.

5/ Additional staff may be hired in FY 2022 and/or FY 2023 under allocations from other organizations for work performed on IIJA grant programs, such as the National Infrastructure Project Assistance Program (MEGA).

EXHIBIT II-8
FEDERAL HIGHWAY ADMINISTRATION
RESOURCE SUMMARY - STAFFING
FULL-TIME PERMANENT POSITIONS

	FY 2021 ACTUAL	FY 2022 CR (w/ IIJA Oblim)	FY 2023 PRES. BUD.
<u>DIRECT FUND, BY APPROPRIATION</u>			
Federal-aid Highways ^{1/ 2/ 3/4/}	2,636	2,666	2,766
SUBTOTAL, DIRECT FUNDED	2,636	2,666	2,766
<u>REIMBURSEMENT / ALLOCATIONS / OTHER</u> ^{5/ 6/}			
Reimbursements			
Federal-aid Highways	54	54	54
Allocations from other Organizations			
BUILD Grants (from OST)	4	4	4
SUBTOTAL, REIMBURSEMENT / ALLOCATION / OTHER	58	58	58
BASE TOTAL FTEs	2,694	2,724	2,824
IIJA Supplemental Funding			
Highway Infrastructure Programs	----	----	----
CRRSA ACT			
Highway Infrastructure Programs	----	----	----
SUBTOTAL, COVID-19 / SUPPLEMENTALS	----	----	----
TOTAL POSITIONS	2,694	2,724	2,824

1/ Includes staff funded through General Operating Expenses (GOE) and direct program funded staff.

2/ FY 2022 and FY 2023 include estimated increases in FTP to levels necessary to properly execute the increased amount of programs and funding in the IIJA. FHWA is currently undergoing an analysis of needs to determine exact increases.

3/ Students are not part of full-time permanent positions.

4/ Amounts include estimates of staff that support work focused on climate change (101 FTP), transportation equity and civil rights (72 FTP), and the Department's supply chain and Made in America/Buy America strategy (3 FTP). Addressing these areas are agency-wide priorities and are emphasized throughout FHWA's operations.

5/ Additional staff may be hired in FY 2022 and/or FY 2023 under reimbursable agreements or parent-child allocations for work performed on behalf of other agencies with funding from the Great American Outdoors Act.

6/ Additional staff may be hired in FY 2022 and/or FY 2023 under allocations from other organizations for work performed on IIJA grant programs, such as the National Infrastructure Project Assistance Program (MEGA).

FEDERAL HIGHWAY ADMINISTRATION

LIMITATION ON ADMINISTRATIVE EXPENSES

(HIGHWAY TRUST FUND)

(INCLUDING TRANSFER OF FUNDS)

Not to exceed [\$492,000,000]\$476,783,991 together with advances and reimbursements received by the Federal Highway Administration, shall be obligated for necessary expenses for administration and operation of the Federal Highway Administration or transferred to the Appalachian Regional Commission for administrative activities associated with the Appalachian Development Highway System.

FEDERAL-AID HIGHWAYS

(LIMITATION ON OBLIGATIONS)

(HIGHWAY TRUST FUND)

Funds available for the implementation or execution of *authorized* Federal-aid highway and highway safety construction programs [authorized under titles 23 and 49, United States Code, and the provisions of the applicable surface transportation authorization act]shall not exceed total obligations of [\$46,365,092,000]\$58,764,510,674 for fiscal year [2022]2023. *Provided, That the limitation on obligations under this heading shall only apply to contract authority authorized from the Highway Trust Fund (other than the Mass Transit Account), unless otherwise specified in law.*

(LIQUIDATION OF CONTRACT AUTHORIZATION)

(HIGHWAY TRUST FUND)

For the payment of obligations incurred in carrying out *authorized* Federal-aid highway and highway safety construction programs [authorized under title 23, United States Code], [\$47,104,092,000]\$59,461,387,674 derived from the Highway Trust Fund (other than the Mass Transit Account), to remain available until expended.

[HIGHWAY INFRASTRUCTURE PROGRAMS
(INCLUDING TRANSFER OF FUNDS)]

For an additional amount for "Highway Infrastructure Programs", \$47,272,000,000, to remain available until expended except as otherwise provided under this heading: *Provided*, That of the amount provided under this heading in this Act, \$9,454,400,000, to remain available until September 30, 2025, shall be made available for fiscal year 2022, \$9,454,400,000, to remain available until September 30, 2026, shall be made available for fiscal year 2023, \$9,454,400,000, to remain available until September 30, 2027, shall be made available for fiscal year 2024, \$9,454,400,000, to remain available until September 30, 2028, shall be made available for fiscal year 2025, and \$9,454,400,000, to remain available until September 30, 2029, shall be made available for fiscal year 2026: *Provided further*, That the funds made available under this heading in this Act shall be derived from the general fund of the Treasury, shall be in addition to any other amounts made available for such purpose, and shall not affect the distribution or amount of funds provided in any Act making annual appropriations: *Provided further*, That, except for funds provided in paragraph (1) under this heading in this Act, up to 1.5 percent of the amounts made available under this heading in this Act in each of fiscal years 2022 through 2026 shall be for operations and administrations of the Federal Highway Administration, of which \$1,000,000 in each fiscal year shall be transferred to the Office of the Inspector General of the Department of Transportation for oversight of funding provided to the Department of Transportation in this title in this Act: *Provided further*, That the amounts made available in the preceding proviso may be combined with the funds made available in paragraph (1) under this heading in this Act for the same purposes in the same account: *Provided further*, That the funds made available under this heading in this Act shall not be subject to any limitation on obligations for Federal-aid highways or highway safety construction programs set forth in any Act making annual appropriations: *Provided further*, That, of the amount provided under this heading in this Act, the following amounts shall be for the following purposes in equal amounts for each of fiscal years 2022 through 2026—

(1) \$27,500,000,000 shall be for a bridge replacement, rehabilitation, preservation, protection, and construction program: *Provided further*, That, except as otherwise provided under this paragraph in this Act, the funds made available under this paragraph in this Act shall be administered as if apportioned under chapter 1 of title 23, United States Code: *Provided further*, That a project funded with funds made available under this paragraph in this Act shall be treated as a project on a Federal-aid highway: *Provided further*, That, of the funds made available under this paragraph in this Act for a fiscal year, 3 percent shall be set aside to carry out section 202(d) of title 23, United States Code: *Provided further*, That funds set aside under the preceding proviso to carry out section 202(d) of such title shall be in addition to funds otherwise made available to carry out such section and shall be administered as if made available under such section: *Provided further*, That for funds set aside under the third proviso of this paragraph in this Act to carry out section 202(d) of title 23, United States Code, the Federal share of the costs shall be 100 percent: *Provided further*, That, for the purposes of funds made

available under this paragraph in this Act: (1) the term “State” has the meaning given such term in section 101 of title 23, United States Code; (2) the term “off-system bridge” means a highway bridge located on a public road, other than a bridge on a Federal-aid highway; and (3) the term “Federal-aid highway” means a public highway eligible for assistance under chapter 1 of title 23, United States Code, other than a highway functionally classified as a local road or rural minor collector: *Provided further*, That up to one-half of one percent of the amounts made available under this paragraph in this Act in each fiscal year shall be for the administration and operations of the Federal Highway Administration: *Provided further*, That, after setting aside funds under the third proviso of this paragraph in this Act the Secretary shall distribute the remaining funds made available under this paragraph in this Act among States as follows—

(A) 75 percent by the proportion that the total cost of replacing all bridges classified in poor condition in such State bears to the sum of the total cost to replace all bridges classified in poor condition in all States; and

(B) 25 percent by the proportion that the total cost of rehabilitating all bridges classified in fair condition in such State bears to the sum of the total cost to rehabilitate all bridges classified in fair condition in all States:

Provided further, That the amounts calculated under the preceding proviso shall be adjusted such that each State receives, for each of fiscal years 2022 through 2026, no less than \$45,000,000 under such proviso: *Provided further*, That for purposes of the preceding 2 provisos, the Secretary shall determine replacement and rehabilitation costs based on the average unit costs of bridges from 2016 through 2020, as submitted by States to the Federal Highway Administration, as required by section 144(b)(5) of title 23, United States Code: *Provided further*, That for purposes of determining the distribution of funds to States under this paragraph in this Act, the Secretary shall calculate the total deck area of bridges classified as in poor or fair condition based on the National Bridge Inventory as of December 31, 2020: *Provided further*, That, subject to the following proviso, funds made available under this paragraph in this Act that are distributed to States shall be used for highway bridge replacement, rehabilitation, preservation, protection, or construction projects on public roads: *Provided further*, That of the funds made available under this paragraph in this Act that are distributed to a State, 15 percent shall be set aside for use on off-system bridges for the same purposes as described in the preceding proviso: *Provided further*, That, except as provided in the following proviso, for funds made available under this paragraph in this Act that are distributed to States, the Federal share shall be determined in accordance with section 120 of title 23, United States Code: *Provided further*, That for funds made available under this paragraph in this Act that are distributed to States and used on an off-system bridge that is owned by a county, town, township, city, municipality or other local agency, or federally-recognized Tribe the Federal share shall be 100 percent;

(2) \$5,000,000,000, to remain available until expended for amounts made available for each of fiscal years 2022 through 2026, shall be to carry out a National Electric Vehicle Formula Program (referred to in this paragraph in this Act as the

"Program") to provide funding to States to strategically deploy electric vehicle charging infrastructure and to establish an interconnected network to facilitate data collection, access, and reliability: *Provided*, That funds made available under this paragraph in this Act shall be used for: (1) the acquisition and installation of electric vehicle charging infrastructure to serve as a catalyst for the deployment of such infrastructure and to connect it to a network to facilitate data collection, access, and reliability; (2) proper operation and maintenance of electric vehicle charging infrastructure; and (3) data sharing about electric vehicle charging infrastructure to ensure the long-term success of investments made under this paragraph in this Act: *Provided further*, That for each of fiscal years 2022 through 2026, the Secretary shall distribute among the States the funds made available under this paragraph in this Act so that each State receives an amount equal to the proportion that the total base apportionment or allocation determined for the State under subsection (c) of section 104 or under section 165 of title 23, United States Code, bears to the total base apportionments or allocations for all States under subsection (c) of section 104 and section 165 of title 23, United States Code: *Provided further*, That the Federal share payable for the cost of a project funded under this paragraph in this Act shall be 80 percent: *Provided further*, That the Secretary shall establish a deadline by which a State shall provide a plan to the Secretary, in such form and such manner that the Secretary requires (to be made available on the Department's website), describing how such State intends to use funds distributed to the State under this paragraph in this Act to carry out the Program for each fiscal year in which funds are made available: *Provided further*, That, not later than 120 days after the deadline established in the preceding proviso, the Secretary shall make publicly available on the Department's website and submit to the House Committee on Transportation and Infrastructure, the Senate Committee on Environment and Public Works, and the House and Senate Committees on Appropriations, a report summarizing each plan submitted by a State to the Department of Transportation and an assessment of how such plans make progress towards the establishment of a national network of electric vehicle charging infrastructure: *Provided further*, That if a State fails to submit the plan required under the fourth proviso of this paragraph in this Act to the Secretary by the date specified in such proviso, or if the Secretary determines a State has not taken action to carry out its plan, the Secretary may withhold or withdraw, as applicable, funds made available under this paragraph in this Act for the fiscal year from the State and award such funds on a competitive basis to local jurisdictions within the State for use on projects that meet the eligibility requirements under this paragraph in this Act: *Provided further*, That, prior to the Secretary making a determination that a State has not taken actions to carry out its plan, the Secretary shall notify the State, consult with the State, and identify actions that can be taken to rectify concerns, and provide at least 90 days for the State to rectify concerns and take action to carry out its plan: *Provided further*, That the Secretary shall provide notice to a State on the intent to withhold or withdraw funds not less than 60 days before withholding or withdrawing any funds, during which time the States shall have an opportunity to appeal a decision to withhold or withdraw funds directly to the Secretary: *Provided further*, That if the Secretary determines that any funds withheld or withdrawn from a State under the preceding proviso cannot be fully awarded to local jurisdictions within the State under the preceding proviso in a manner consistent with the purpose of this paragraph in this Act, any such funds remaining shall be distributed among other States (except States for

which funds for that fiscal year have been withheld or withdrawn under the preceding proviso) in the same manner as funds distributed for that fiscal year under the second proviso under this paragraph in this Act, except that the ratio shall be adjusted to exclude States for which funds for that fiscal year have been withheld or withdrawn under the preceding proviso: *Provided further*, That funds distributed under the preceding proviso shall only be available to carry out this paragraph in this Act: *Provided further*, That funds made available under this paragraph in this Act may be used to contract with a private entity for acquisition and installation of publicly accessible electric vehicle charging infrastructure and the private entity may pay the non-Federal share of the cost of a project funded under this paragraph: *Provided further*, That funds made available under this paragraph in this Act shall be for projects directly related to the charging of a vehicle and only for electric vehicle charging infrastructure that is open to the general public or to authorized commercial motor vehicle operators from more than one company: *Provided further*, That any electric vehicle charging infrastructure acquired or installed with funds made available under this paragraph in this Act shall be located along a designated alternative fuel corridor: *Provided further*, That no later than 90 days after the date of enactment of this Act, the Secretary of Transportation, in coordination with the Secretary of Energy, shall develop guidance for States and localities to strategically deploy electric vehicle charging infrastructure, consistent with this paragraph in this Act: *Provided further*, That the Secretary of Transportation, in coordination with the Secretary of Energy, shall consider the following in developing the guidance described in the preceding proviso: (1) the distance between publicly available electric vehicle charging infrastructure; (2) connections to the electric grid, including electric distribution upgrades; vehicle-to-grid integration, including smart charge management or other protocols that can minimize impacts to the grid; alignment with electric distribution interconnection processes, and plans for the use of renewable energy sources to power charging and energy storage; (3) the proximity of existing off-highway travel centers, fuel retailers, and small businesses to electric vehicle charging infrastructure acquired or funded under this paragraph in this Act; (4) the need for publicly available electric vehicle charging infrastructure in rural corridors and underserved or disadvantaged communities; (5) the long-term operation and maintenance of publicly available electric vehicle charging infrastructure to avoid stranded assets and protect the investment of public funds in that infrastructure; (6) existing private, national, State, local, Tribal, and territorial government electric vehicle charging infrastructure programs and incentives; (7) fostering enhanced, coordinated, public-private or private investment in electric vehicle charging infrastructure; (8) meeting current and anticipated market demands for electric vehicle charging infrastructure, including with regard to power levels and charging speed, and minimizing the time to charge current and anticipated vehicles; and (9) any other factors, as determined by the Secretary: *Provided further*, That if a State determines, and the Secretary certifies, that the designated alternative fuel corridors in the States are fully built out, then the State may use funds provided under this paragraph for electric vehicle charging infrastructure on any public road or in other publically accessible locations, such as parking facilities at public buildings, public schools, and public parks, or in publically accessible parking facilities owned or managed by a private entity: *Provided further*, That subject to the minimum standards and requirements established under the following proviso, funds made available under this paragraph in

this Act may be used for: (1) the acquisition or installation of electric vehicle charging infrastructure; (2) operating assistance for costs allocable to operating and maintaining electric vehicle charging infrastructure acquired or installed under this paragraph in this Act, for a period not to exceed five years; (3) the acquisition or installation of traffic control devices located in the right-of-way to provide directional information to electric vehicle charging infrastructure acquired, installed, or operated under this paragraph in this Act; (4) on-premises signs to provide information about electric vehicle charging infrastructure acquired, installed, or operated under this paragraph in this Act; (5) development phase activities relating to the acquisition or installation of electric vehicle charging infrastructure, as determined by the Secretary; or (6) mapping and analysis activities to evaluate, in an area in the United States designated by the eligible entity, the locations of current and future electric vehicle owners, to forecast commuting and travel patterns of electric vehicles and the quantity of electricity required to serve electric vehicle charging stations, to estimate the concentrations of electric vehicle charging stations to meet the needs of current and future electric vehicle drivers, to estimate future needs for electric vehicle charging stations to support the adoption and use of electric vehicles in shared mobility solutions, such as micro-transit and transportation network companies, and to develop an analytical model to allow a city, county, or other political subdivision of a State or a local agency to compare and evaluate different adoption and use scenarios for electric vehicles and electric vehicle charging stations: *Provided further*, That not later than 180 days after the date of enactment of this Act, the Secretary of Transportation, in coordination with the Secretary of Energy and in consultation with relevant stakeholders, shall, as appropriate, develop minimum standards and requirements related to: (1) the installation, operation, or maintenance by qualified technicians of electric vehicle charging infrastructure under this paragraph in this Act; (2) the interoperability of electric vehicle charging infrastructure under this paragraph in this Act; (3) any traffic control device or on-premises sign acquired, installed, or operated under this paragraph in this Act; (4) any data requested by the Secretary related to a project funded under this paragraph in this Act, including the format and schedule for the submission of such data; (5) network connectivity of electric vehicle charging infrastructure; and (6) information on publicly available electric vehicle charging infrastructure locations, pricing, real-time availability, and accessibility through mapping applications: *Provided further*, That not later than 1 year after the date of enactment of this Act, the Secretary shall designate national electric vehicle charging corridors that identify the near- and long-term need for, and the location of, electric vehicle charging infrastructure to support freight and goods movement at strategic locations along major national highways, the National Highway Freight Network established under section 167 of title 23, United States Code, and goods movement locations including ports, intermodal centers, and warehousing locations: *Provided further*, That the report issued under section 151(e) of title 23, United States Code, shall include a description of efforts to achieve strategic deployment of electric vehicle charging infrastructure in electric vehicle charging corridors, including progress on the implementation of the Program under this paragraph in this Act: *Provided further*, That, for fiscal year 2022, before distributing funds made available under this paragraph in this Act to States, the Secretary shall set aside from funds made available under this paragraph in this Act to carry out this paragraph in this Act not more than \$300,000,000, which may be transferred to the Joint

Office described in the twenty-fourth proviso of this paragraph in this Act, to establish such Joint Office and carry out its duties under this paragraph in this Act: *Provided further*, That, for each of fiscal years 2022 through 2026, after setting aside funds under the preceding proviso, and before distributing funds made available under this paragraph in this Act to States, the Secretary shall set aside from funds made available under this paragraph in this Act for such fiscal year to carry out this paragraph in this Act 10 percent for grants to States or localities that require additional assistance to strategically deploy electric vehicle charging infrastructure: *Provided further*, That not later than 1 year after the date of enactment of this Act, the Secretary shall establish a grant program to administer to States or localities the amounts set aside under the preceding proviso: *Provided further*, That, except as otherwise specified under this paragraph in this Act, funds made available under this paragraph in this Act, other than funds transferred under the nineteenth proviso of this paragraph in this Act to the Joint Office, shall be administered as if apportioned under chapter 1 of title 23, United States Code: *Provided further*, That funds made available under this paragraph in this Act shall not be transferable under section 126 of title 23, United States Code: *Provided further*, That there is established a Joint Office of Energy and Transportation (referred to in this paragraph in this Act as the "Joint Office") in the Department of Transportation and the Department of Energy to study, plan, coordinate, and implement issues of joint concern between the two agencies, which shall include: (1) technical assistance related to the deployment, operation, and maintenance of zero emission vehicle charging and refueling infrastructure, renewable energy generation, vehicle-to-grid integration, including microgrids, and related programs and policies; (2) data sharing of installation, maintenance, and utilization in order to continue to inform the network build out of zero emission vehicle charging and refueling infrastructure; (3) performance of a national and regionalized study of zero emission vehicle charging and refueling infrastructure needs and deployment factors, to support grants for community resilience and electric vehicle integration; (4) development and deployment of training and certification programs; (5) establishment and implementation of a program to promote renewable energy generation, storage, and grid integration, including microgrids, in transportation rights-of-way; (6) studying, planning, and funding for high-voltage distributed current infrastructure in the rights-of way of the Interstate System and for constructing high-voltage and or medium-voltage transmission pilots in the rights-of-way of the Interstate System; (7) research, strategies, and actions under the Departments' statutory authorities to reduce transportation-related emissions and mitigate the effects of climate change; (8) development of a streamlined utility accommodations policy for high-voltage and medium-voltage transmission in the transportation right-of-way; and (9) any other issues that the Secretary of Transportation and the Secretary of Energy identify as issues of joint interest: *Provided further*, That the Joint Office of Energy and Transportation shall establish and maintain a public database, accessible on both Department of Transportation and Department of Energy websites, that includes: (1) information maintained on the Alternative Fuel Data Center by the Office of Energy Efficiency and Renewable Energy of the Department of Energy with respect to the locations of electric vehicle charging stations; (2) potential locations for electric vehicle charging stations identified by eligible entities through the program; and (3) the ability to sort generated results by various

characteristics with respect to electric vehicle charging stations, including location, in terms of the State, city, or county; status (operational, under construction, or planned); and charging type, in terms of Level 2 charging equipment or Direct Current Fast Charging Equipment: *Provided further*, That the Secretary of Transportation and the Secretary of Energy shall cooperatively administer the Joint Office consistent with this paragraph in this Act: *Provided further*, That the Secretary of Transportation and the Secretary of Energy may transfer funds between the Department of Transportation and the Department of Energy from funds provided under this paragraph in this Act to establish the Joint Office and to carry out its duties under this paragraph in this Act and any such funds or portions thereof transferred to the Joint Office may be transferred back to and merged with this account: *Provided further*, That the Secretary of Transportation and the Secretary of Energy shall notify the House and Senate Committees on Appropriations not less than 15 days prior to transferring any funds under the previous proviso: *Provided further*, That for the purposes of funds made available under this paragraph in this Act: (1) the term “State” has the meaning given such term in section 101 of title 23, United States Code; and (2) the term “Federal-aid highway” means a public highway eligible for assistance under chapter 1 of title 23, United States Code, other than a highway functionally classified as a local road or rural minor collector: *Provided further*, That, of the funds made available in this division or division A of this Act for the Federal lands transportation program under section 203 of title 23, United States Code, not less than \$7,000,000 shall be made available for each Federal agency otherwise eligible to compete for amounts made available under that section for each of fiscal years 2022 through 2026;

(3) \$3,200,000,000 shall be to carry out the Nationally Significant Freight and Highway Projects program under section 117 of title 23, United States Code;

(4) \$9,235,000,000 shall be to carry out the Bridge Investment Program under section 124 of title 23, United States Code: *Provided*, That, of the funds made available under this paragraph in this Act for a fiscal year, \$20,000,000 shall be set aside to carry out section 202(d) of title 23, United States Code: *Provided further*, That, of the funds made available under this paragraph in this Act for a fiscal year, \$20,000,000 shall be set aside to provide grants for planning, feasibility analysis, and revenue forecasting associated with the development of a project that would subsequently be eligible to apply for assistance under this paragraph: *Provided further*, That funds set aside under the first proviso of this paragraph in this Act to carry out section 202(d) of such title shall be in addition to funds otherwise made available to carry out such section and shall be administered as if made available under such section: *Provided further*, That for funds set aside under the first proviso of this paragraph in this Act to carry out section 202(d) of title 23, United States Code, the Federal share of the costs shall be 100 percent;

(5) \$150,000,000 shall be to carry out the Reduction of Truck Emissions at Port

Facilities Program under section 11402 of division A of this Act: *Provided*, That, except as otherwise provided in section 11402 of division A of this Act, the funds made available under this paragraph in this Act shall be administered as if apportioned under chapter 1 of title 23, United States Code;

(6) \$95,000,000, to remain available until expended for amounts made available for each of fiscal years 2022 through 2026, shall be to carry out the University Transportation Centers Program under section 5505 of title 49, United States Code;

(7) \$500,000,000, to remain available until expended for amounts made available for each of fiscal years 2022 through 2026, shall be to carry out the Reconnecting Communities Pilot Program (referred to under this paragraph in this Act as the "pilot program") under section 11509 of division A of this Act, of which \$100,000,000 shall be for planning grants under section 11509(c) of division A of this Act and of which \$400,000,000 shall be available for capital construction grants under section 11509(d) of division A of this Act: *Provided*, That of the amounts made available under this paragraph in this Act for section 11509(c) of division A of this Act, the Secretary may use not more than \$15,000,000 during the period of fiscal years 2022 through 2026 to provide technical assistance under section 11509(c)(3) of division A of this Act: *Provided further*, That, except as otherwise provided in section 11509 of division A of this Act, amounts made available under this paragraph in this Act shall be administered as if made available under chapter 1 of title 23, United States Code;

(8) \$342,000,000, to remain available until expended for amounts made available for each of fiscal years 2022 through 2026, shall be to carry out the Construction of Ferry Boats and Ferry Terminal Facilities program under section 147 of title 23, United States Code: *Provided*, That amounts made available under this paragraph in this Act shall be administered as if made available under section 147 of title 23, United States Code; and

(9) \$1,250,000,000, to remain available until expended for amounts made available for each of fiscal years 2022 through 2026, shall be for construction of the Appalachian Development Highway System as authorized under section 1069(y) of Public Law 102-240: *Provided*, That, for the purposes of funds made available under this paragraph in this Act for construction of the Appalachian Development Highway System, the term "Appalachian State" means a State that contains 1 or more counties (including any political subdivision located within the area) in the Appalachian region, as defined in section 14102(a) of title 40, United States Code: *Provided further*, That a project carried out with funds made available under this paragraph in this Act for construction of the Appalachian Development Highway System shall be made available for obligation in the same manner as if apportioned under chapter 1 of title 23, United States Code, except that: (1) the Federal share of the cost of any project carried out with those amounts shall be determined in accordance with section 14501 of title 40, United States

Code; and (2) the amounts shall be available to construct highways and access roads under section 14501 of title 40, United States Code: *Provided further*, That, subject to the following two provisos, in consultation with the Appalachian Regional Commission, the funds made available under this paragraph in this Act for construction of the Appalachian Development Highway System shall be apportioned to Appalachian States according to the percentages derived from the 2021 Appalachian Development Highway System Cost-to-Complete Estimate, dated March 2021, and confirmed as each Appalachian State's relative share of the estimated remaining need to complete the Appalachian Development Highway System, adjusted to exclude those corridors that such States have no current plans to complete, as reported in the 2013 Appalachian Development Highway System Completion Report, unless those States have modified and assigned a higher priority for completion of an Appalachian Development Highway System corridor, as reported in the 2020 Appalachian Development Highway System Future Outlook: *Provided further*, That the Secretary shall adjust apportionments made under the third proviso in this paragraph in this Act so that no Appalachian State shall be apportioned an amount in excess of 30 percent of the amount made available for construction of the Appalachian Development Highway System under this heading: *Provided further*, That the Secretary shall adjust apportionments made under the third proviso in this paragraph in this Act so that: (1) each State shall be apportioned an amount not less than \$10,000,000 for each of fiscal years 2022 through 2026; and (2) notwithstanding paragraph (1) of this proviso, a State shall not receive an apportionment that exceeds the remaining funds needed to complete the Appalachian development highway corridor or corridors in the State, as identified in the latest available cost to complete estimate for the system prepared by the Appalachian Regional Commission: *Provided further*, That the Federal share of the cost of any project carried out with funds made available under this paragraph in this Act shall be up to 100 percent, as determined by the State:

Provided further, That such amount is designated by the Congress as being for an emergency requirement pursuant to section 4112(a) of H. Con. Res. 71 (115th Congress), the concurrent resolution on the budget for fiscal year 2018, and to section 251(b) of the Balanced Budget and Emergency Deficit Control Act of 1985.]

(Infrastructure Investment and Jobs Act.)

****Reason for excluding the Highway Infrastructure Programs: Funding for fiscal year 2023 was provided in the Infrastructure Investment and Jobs Act as advance appropriations. The FY 2023 Budget does not request additional funding for the program beyond amounts appropriated in the Infrastructure Investment and Jobs Act.****

[EMERGENCY RELIEF PROGRAM

For an additional amount for the "Emergency Relief Program" as authorized under section 125 of title 23, United States Code, \$2,600,000,000, to remain available until expended.]

(Disaster Relief Supplemental Appropriations Act, 2022)

****Reason for excluding:** The FY 2023 Budget does not request General Fund appropriations for the Emergency Relief Program.******

ADMINISTRATIVE PROVISIONS—FEDERAL HIGHWAY ADMINISTRATION

SEC. 120. (a) For fiscal year [2022]2023, the Secretary of Transportation shall—

(1) not distribute from the obligation limitation for Federal-aid highways—

(A) amounts authorized for administrative expenses and programs by section 104(a) of title 23, United States Code; and

(B) amounts authorized for the Bureau of Transportation Statistics;

(2) not distribute an amount from the obligation limitation for Federal-aid highways that is equal to the unobligated balance of amounts—

(A) made available from the Highway Trust Fund (other than the Mass Transit Account) for Federal-aid highway and highway safety construction programs for previous fiscal years the funds for which are allocated by the Secretary (or apportioned by the Secretary under sections 202 or 204 of title 23, United States Code); and

(B) for which obligation limitation was provided in a previous fiscal year;

(3) determine the proportion that—

(A) the obligation limitation for Federal-aid highways, less the aggregate of amounts not distributed under paragraphs (1) and (2) of this subsection; bears to

(B) the total of the sums authorized to be appropriated for the Federal-aid highway and highway safety construction programs (other than sums authorized to be appropriated for provisions of law described in paragraphs (1) through (11) of subsection (b) and sums authorized to be appropriated for section 119 of title 23, United States Code, equal to the amount referred to in subsection (b)(12) for such fiscal year), less the aggregate of the amounts not distributed under paragraphs (1) and (2) of this subsection;

(4) distribute the obligation limitation for Federal-aid highways, less the aggregate amounts not distributed under paragraphs (1) and (2), for each of the programs (other than programs to which paragraph (1) applies) that are allocated by the Secretary under *authorized Federal-aid highway and highway safety construction programs* [the applicable surface transportation authorization act and

title 23, United States Code], or apportioned by the Secretary under sections 202 or 204 of [that] title 23, *United States Code*, by multiplying—

(A) the proportion determined under paragraph (3); by

(B) the amounts authorized to be appropriated for each such program for such fiscal year; and

(5) distribute the obligation limitation for Federal-aid highways, less the aggregate amounts not distributed under paragraphs (1) and (2) and the amounts distributed under paragraph (4), for Federal-aid highway and highway safety construction programs that are apportioned by the Secretary under title 23, United States Code (other than the amounts apportioned for the National Highway Performance Program in section 119 of title 23, United States Code, that are exempt from the limitation under subsection (b)(12) and the amounts apportioned under sections 202 and 204 of that title) in the proportion that—

(A) amounts authorized to be appropriated for the programs that are apportioned under title 23, United States Code, to each State for such fiscal year; bears to

(B) the total of the amounts authorized to be appropriated for the programs that are apportioned under title 23, United States Code, to all States for such fiscal year.

(b) EXCEPTIONS FROM OBLIGATION LIMITATION.—The obligation limitation for Federal-aid highways shall not apply to obligations under or for—

(1) section 125 of title 23, United States Code;

(2) section 147 of the Surface Transportation Assistance Act of 1978 (23 U.S.C. 144 note; 92 Stat. 2714);

(3) section 9 of the Federal-Aid Highway Act of 1981 (95 Stat. 1701);

(4) subsections (b) and (j) of section 131 of the Surface Transportation Assistance Act of 1982 (96 Stat. 2119);

(5) subsections (b) and (c) of section 149 of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (101 Stat. 198);

(6) sections 1103 through 1108 of the Intermodal Surface Transportation Efficiency Act of 1991 (105 Stat. 2027);

(7) section 157 of title 23, United States Code (as in effect on June 8, 1998);

(8) section 105 of title 23, United States Code (as in effect for fiscal years 1998 through 2004, but only in an amount equal to \$639,000,000 for each of those fiscal years);

(9) Federal-aid highway programs for which obligation authority was made available under the Transportation Equity Act for the 21st Century (112 Stat. 107) or subsequent Acts for multiple years or to remain available until expended, but only to the extent that the obligation authority has not lapsed or been used;

(10) section 105 of title 23, United States Code (as in effect for fiscal years 2005 through 2012, but only in an amount equal to \$639,000,000 for each of those fiscal years);

(11) section 1603 of SAFETEA-LU (23 U.S.C. 118 note; 119 Stat. 1248), to the extent that funds obligated in accordance with that section were not subject

to a limitation on obligations at the time at which the funds were initially made available for obligation; and

(12) section 119 of title 23, United States Code (but, for each of fiscal years 2013 through [2022]2023, only in an amount equal to \$639,000,000).

(c) REDISTRIBUTION OF UNUSED OBLIGATION AUTHORITY.—

Notwithstanding subsection (a), the Secretary shall, after August 1 of such fiscal year—

(1) revise a distribution of the obligation limitation made available under subsection (a) if an amount distributed cannot be obligated during that fiscal year; and

(2) redistribute sufficient amounts to those States able to obligate amounts in addition to those previously distributed during that fiscal year, giving priority to those States having large unobligated balances of funds apportioned under sections 144 (as in effect on the day before the date of enactment of Public Law 112–141) and 104 of title 23, United States Code.

(d) APPLICABILITY OF OBLIGATION LIMITATIONS TO TRANSPORTATION RESEARCH PROGRAMS.—

(1) IN GENERAL.—Except as provided in paragraph (2), the obligation limitation for Federal-aid highways shall apply to contract authority for transportation research programs carried out under—

(A) chapter 5 of title 23, United States Code; [and]

(B) an applicable surface transportation authorization act[.], and

(C) *title III of Division A of the Infrastructure Investment and Jobs Act.*

(2) EXCEPTION.—Obligation authority made available under paragraph (1) shall—

(A) remain available for a period of 4 fiscal years; and

(B) be in addition to the amount of any limitation imposed on obligations for Federal-aid highway and highway safety construction programs for future fiscal years.

(e) REDISTRIBUTION OF CERTAIN AUTHORIZED FUNDS.—

(1) IN GENERAL.—Not later than 30 days after the date of distribution of obligation limitation under subsection (a), the Secretary shall distribute to the States any funds (excluding funds authorized for the program under section 202 of title 23, United States Code) that—

(A) are authorized to be appropriated for such fiscal year for Federal-aid highway programs; and

(B) the Secretary determines will not be allocated to the States (or will not be apportioned to the States under section 204 of title 23, United States Code), and will not be available for obligation, for such fiscal year because of the imposition of any obligation limitation for such fiscal year.

(2) RATIO.—Funds shall be distributed under paragraph (1) in the same proportion as the distribution of obligation authority under subsection (a)(5).

(3) AVAILABILITY.—Funds distributed to each State under paragraph (1) shall be available for any purpose described in section 133(b) of title 23, United States Code.

SEC. 121. Notwithstanding 31 U.S.C. 3302, funds received by the Bureau of Transportation Statistics from the sale of data products, for necessary expenses incurred pursuant to chapter 63 of title 49, United States Code, may be credited to the Federal-aid highways account for the purpose of reimbursing the Bureau for such expenses[: *Provided*, That such funds shall be subject to the obligation limitation for Federal-aid highway and highway safety construction programs].

****Reason for excluding the last proviso: Funds received by the Bureau of Transportation Statistics under this section are collections rather than contract authority.****

SEC. 122. Not less than 15 days prior to waiving, under his or her statutory authority, any Buy America requirement for Federal-aid highways projects, the Secretary of Transportation shall make an informal public notice and comment opportunity on the intent to issue such waiver and the reasons therefor.

SEC. 123. None of the funds provided in this Act may be used to make a grant for a project under section 117 of title 23, United States Code, unless the Secretary, at least 60 days before making a grant under that section, provides written notification to the House and Senate Committees on Appropriations of the proposed grant, including an evaluation and justification for the project and the amount of the proposed grant award.

SEC. 124. (a) A State or territory, as defined in section 165 of title 23, United States Code, may use for any project eligible under section 133(b) of title 23 or section 165 of title 23 and located within the boundary of the State or territory any earmarked amount, and any associated obligation limitation: *Provided*, That the Department of Transportation for the State or territory for which the earmarked amount was originally designated or directed notifies the Secretary of Transportation of its intent to use its authority under this section and submits an annual report to the Secretary identifying the projects to which the funding would be applied. Notwithstanding the original period of availability of funds to be obligated under this section, such funds and associated obligation limitation shall remain available for obligation for a period of 3 fiscal years after the fiscal year in which the Secretary of Transportation is notified. The Federal share of the cost of a project carried out with funds made available under this section shall be the same as associated with the earmark.

(b) In this section, the term “earmarked amount” means

(1) congressionally directed spending, as defined in rule XLIV of the Standing Rules of the Senate, identified in a prior law, report, or joint explanatory statement, which was authorized to be appropriated or appropriated more than 10 fiscal years prior to the current fiscal year, and administered by the Federal Highway Administration; or

(2) a congressional earmark, as defined in rule XXI of the Rules of the House of Representatives, identified in a prior law, report, or joint explanatory statement, which was authorized to be appropriated or appropriated more than 10 fiscal years prior to the current fiscal year, and administered by the Federal Highway Administration.

(c) The authority under subsection (a) may be exercised only for those projects or activities that have obligated less than 10 percent of the amount made available for obligation as of October 1 of the current fiscal year, and shall be applied to projects within the same general geographic area within 25 miles for which the funding was designated, except that a State or territory may apply such authority to unexpended balances of funds from projects or activities the State or territory certifies have been closed and for which payments have been made under a final voucher.

(d) The Secretary shall submit consolidated reports of the information provided by the States and territories annually to the House and Senate Committees on Appropriations.

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FEDERAL HIGHWAY ADMINISTRATION
FEDERAL-AID HIGHWAY PROGRAM AUTHORIZATIONS OF CONTRACT AUTHORITY AND GENERAL FUND (GF) SUPPLEMENTAL APPROPRIATIONS
UNDER THE INFRASTRUCTURE INVESTMENT AND JOBS ACT (PUBLIC LAW 117-58), ALSO KNOWN AS THE BIPARTISAN INFRASTRUCTURE LAW

	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total Contract Authority	Total General Fund Supplemental Appropriations	Grand Total
<i>(From the Highway Account of the Highway Trust Fund Unless Otherwise Indicated)</i>								
Program								
Federal-aid Highway Program Apportioned Programs	52,488,065,375	53,537,826,683	54,608,583,217	55,700,754,881	56,814,769,844	273,150,000,000	-	273,150,000,000
Highway Safety Improvement Program (23 USC 148) 3/	[2,979,761,019]	[3,044,326,241]	[3,110,182,769]	[3,177,356,425]	[3,245,873,542]	[15,557,499,996]	-	[15,557,499,996]
Rail-Highway Grade Crossings Program (Set-aside NLT) (23 USC 130)	[245,000,000]	[245,000,000]	[245,000,000]	[245,000,000]	[245,000,000]	[1,225,000,000]	-	[1,225,000,000]
Safety-Related Activities (MAP21 §1519) (Allocated Set-aside)	[3,500,000]	[3,500,000]	[3,500,000]	[3,500,000]	[3,500,000]	[17,500,000]	-	[17,500,000]
National Highway Performance Program (23 USC 119) 1/	[28,439,442,345]	[29,008,231,188]	[29,588,395,810]	[30,180,163,727]	[30,783,766,930]	[148,000,000,000]	-	[148,000,000,000]
Surface Transportation Block Grant Program (23 USC 133) 2/	[13,835,404,382]	[14,112,112,470]	[14,394,354,721]	[14,682,241,816]	[14,975,886,619]	[72,000,000,008]	-	[72,000,000,008]
Congestion Mitigation & Air Quality Improvement Program (23 USC 149)	[2,536,490,803]	[2,587,220,620]	[2,638,965,032]	[2,691,744,332]	[2,745,579,213]	[13,200,000,000]	-	[13,200,000,000]
Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) (23 USC 176)	[1,402,756,277]	[1,430,811,405]	[1,459,427,633]	[1,488,616,183]	[1,518,388,500]	[7,299,999,998]	-	[7,299,999,998]
National Highway Freight Program (23 USC 167)	[1,373,932,519]	[1,401,411,169]	[1,429,439,392]	[1,458,028,180]	[1,487,188,740]	[7,150,000,000]	-	[7,150,000,000]
Carbon Reduction Program (23 USC 175)	[1,233,656,891]	[1,258,330,028]	[1,283,496,627]	[1,309,166,561]	[1,335,349,891]	[6,419,999,998]	-	[6,419,999,998]
Metropolitan Planning (23 USC 134)	[438,121,139]	[446,883,562]	[455,821,233]	[464,937,657]	[474,236,409]	[2,280,000,000]	-	[2,280,000,000]
Highway Infrastructure Program Formula Programs	6,750,000,000	6,750,000,000	6,750,000,000	6,750,000,000	6,750,000,000	-	33,750,000,000	33,750,000,000
Appalachian Development Highway System GF	250,000,000	250,000,000	250,000,000	250,000,000	250,000,000	-	1,250,000,000	1,250,000,000
Bridge Replacement, Rehabilitation, Preservation, Protection, and Construction Program GF	5,500,000,000	5,500,000,000	5,500,000,000	5,500,000,000	5,500,000,000	-	27,500,000,000	27,500,000,000
National Electric Vehicle Infrastructure Formula Program GF	1,000,000,000	1,000,000,000	1,000,000,000	1,000,000,000	1,000,000,000	-	5,000,000,000	5,000,000,000
Federal Lands and Tribal Transportation Programs	1,341,400,000	1,366,900,000	1,393,400,000	1,419,900,000	1,447,900,000	6,969,500,000	-	6,969,500,000
Federal Lands Transportation Program (23 USC 203)	421,965,000	429,965,000	438,965,000	447,965,000	455,965,000	2,194,825,000	-	2,194,825,000
Federal Lands Access Program (23 USC 204)	285,975,000	291,975,000	296,975,000	303,975,000	308,975,000	1,487,875,000	-	1,487,875,000
Tribal Transportation Program (23 USC 202)	578,460,000	589,960,000	602,460,000	612,960,000	627,960,000	3,011,800,000	-	3,011,800,000
Nationally Significant Federal Lands and Tribal Projects (FAST Act §1123)	55,000,000	55,000,000	55,000,000	55,000,000	55,000,000	275,000,000	-	275,000,000
Competitive Programs	5,067,000,000	5,257,000,000	5,467,000,000	5,542,000,000	5,717,000,000	14,465,000,000	12,585,000,000	27,050,000,000
Bridge Investment Program (23 USC 124) HTF/FGF	2,447,000,000	2,487,000,000	2,497,000,000	2,522,000,000	2,547,000,000	3,265,000,000	9,235,000,000	12,500,000,000
Charging & Fueling Infrastructure Grants (23 USC 151(f))	300,000,000	400,000,000	500,000,000	600,000,000	700,000,000	2,500,000,000	-	2,500,000,000
Congestion Relief Program (23 USC 129(d))	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	250,000,000	-	250,000,000
Nationally Significant Freight & Highway Projects (23 USC 117) HTF/FGF	1,640,000,000	1,640,000,000	1,640,000,000	1,540,000,000	1,540,000,000	4,800,000,000	3,200,000,000	8,000,000,000
PROTECT Grants (23 USC 176(d))	250,000,000	250,000,000	300,000,000	300,000,000	300,000,000	1,400,000,000	-	1,400,000,000
Reduction of Truck Emissions at Port Facilities (§11402) HTF/FGF	80,000,000	80,000,000	80,000,000	80,000,000	80,000,000	250,000,000	150,000,000	400,000,000
Rural Surface Transportation Grant Program (23 USC 173)	300,000,000	350,000,000	400,000,000	450,000,000	500,000,000	2,000,000,000	-	2,000,000,000
Federal Allocation Programs	521,400,000	528,400,000	534,400,000	540,900,000	547,400,000	2,330,500,000	342,000,000	2,672,500,000
Construction of Ferry Boats and Ferry Terminal Facilities (23 USC 147) HTF/FGF	178,400,000	180,400,000	182,400,000	184,400,000	186,400,000	570,000,000	342,000,000	912,000,000
Disadvantaged Business Enterprises (23 USC 140(c))	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	50,000,000	-	50,000,000
Emergency Relief (23 USC 125) 1/	100,000,000	100,000,000	100,000,000	100,000,000	100,000,000	500,000,000	-	500,000,000
Highway Use Tax Evasion Projects (23 USC 143)	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	20,000,000	-	20,000,000
On-the-Job Training (23 USC 140(b))	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	50,000,000	-	50,000,000
Territorial & Puerto Rico Highway Program (23 USC 165)	219,000,000	224,000,000	228,000,000	232,500,000	237,000,000	1,140,500,000	-	1,140,500,000
Research, Technology, and Education	517,000,000	518,000,000	519,000,000	520,000,000	521,000,000	2,500,000,000	95,000,000	2,595,000,000
Highway Research & Development Program (23 USC 503(b))	147,000,000	147,000,000	147,000,000	147,000,000	147,000,000	735,000,000	-	735,000,000
Technology & Innovation Deployment Program (23 USC 503(c))	110,000,000	110,000,000	110,000,000	110,000,000	110,000,000	550,000,000	-	550,000,000
Intelligent Transportation Systems Program (23 USC 512-518)	110,000,000	110,000,000	110,000,000	110,000,000	110,000,000	550,000,000	-	550,000,000
Training & Education (23 USC 504)	25,000,000	25,250,000	25,500,000	25,750,000	26,000,000	127,500,000	-	127,500,000
University Transportation Centers Program (49 USC 5505) HTF/FGF	99,000,000	99,500,000	100,000,000	100,500,000	101,000,000	405,000,000	95,000,000	500,000,000
Bureau of Transportation Statistics (49 USC Ch. 63)	26,000,000	26,250,000	26,500,000	26,750,000	27,000,000	132,500,000	-	132,500,000
Pilot Programs	265,000,000	273,000,000	280,000,000	287,000,000	295,000,000	900,000,000	500,000,000	1,400,000,000
Prioritization Process Pilot Program (§11204)	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	50,000,000	-	50,000,000
Reconnecting Communities Pilot Program (§11509) HTF/FGF	195,000,000	198,000,000	200,000,000	202,000,000	205,000,000	500,000,000	500,000,000	1,000,000,000
Wildlife Crossings Pilot Program (23 USC 171)	60,000,000	65,000,000	70,000,000	75,000,000	80,000,000	350,000,000	-	350,000,000
THIA (23 USC 601-609)	250,000,000	250,000,000	250,000,000	250,000,000	250,000,000	1,250,000,000	-	1,250,000,000
FHWA Administrative Expenses (23 USC 104(a)) 4/	466,964,697	476,783,991	486,799,671	497,015,664	507,435,977	2,435,000,000	-	2,435,000,000
Total, FHWA 5/	67,666,830,072	68,957,910,674	70,289,182,888	71,507,570,545	72,850,505,821	304,000,000,000	47,272,000,000	351,272,000,000
Contract Authority from the Highway Account of the Highway Trust Fund	58,212,430,072	59,503,510,674	60,834,782,888	62,053,170,545	63,396,105,821	304,000,000,000	-	304,000,000,000
<i>Exempt from Obligation Limitation</i>	<i>739,000,000</i>	<i>739,000,000</i>	<i>739,000,000</i>	<i>739,000,000</i>	<i>739,000,000</i>	<i>3,695,000,000</i>	-	<i>3,695,000,000</i>
<i>Subject to Obligation Limitation</i>	<i>57,473,430,072</i>	<i>58,764,510,674</i>	<i>60,095,782,888</i>	<i>61,314,170,545</i>	<i>62,657,105,821</i>	<i>300,305,000,000</i>	-	<i>300,305,000,000</i>
Budget Authority from General Fund Supplemental Appropriations	9,454,400,000	9,454,400,000	9,454,400,000	9,454,400,000	9,454,400,000	-	47,272,000,000	47,272,000,000

1/ Amounts exempt from obligation limitation include \$639 million of the National Highway Performance Program apportionments and \$100 million for Emergency Relief. Amounts do not reflect sequestration of 5.7 percent of contract authority exempt from obligation limitation.

2/ Amounts for the Surface Transportation Block Grant Program include the 10 percent set aside for Transportation Alternatives.

3/ Amounts exclude \$245 million for Railway-Highway Grade Crossings Program and \$3.5 million takedown for safety-related programs. Such amounts are shown on a separate line.

4/ Includes FHWA Federal-aid Highway Program General Operating Expenses (GOE) and transfers to the Appalachian Regional Commission (ARC) for administrative activities associated with the Appalachian Development Highway System. Excludes administrative takedowns from the General Fund Supplemental Appropriations.

5/ Includes \$100 million per fiscal year that is permanently authorized under 23 U.S.C. 125.

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EXHIBIT III-1
FEDERAL HIGHWAY ADMINISTRATION
Summary by Program Activity
Appropriations, Obligation Limitations, and Exempt Obligations
(\$000)

	FY 2021 ENACTED	FY 2022 CR (w/ IIJA Oblim)	FY 2023 PRES. BUD.
[Limitation on Administrative Expenses] ^{1/}	[\$478,897]	[\$466,965]	[\$476,784]
Federal-aid Highways	\$47,061,969	\$58,170,307	\$59,461,388
Obligation Limitation	\$46,365,092	\$57,473,430	\$58,764,511
Exempt Programs ^{2/ 3/}	\$696,877	\$696,877	\$696,877
Total, Federal-aid Highways	\$47,061,969	\$58,170,307	\$59,461,388
Highway Infrastructure Programs (GF) ^{4/}	\$2,000,000	\$2,000,000	-----
Supplemental Funding			
COVID-19 Supplementals			
Highway Infrastructure Programs ^{5/}	\$10,000,000	-----	-----
IIJA Supplemental (Division J)			
Highway Infrastructure Programs	-----	\$9,454,400	\$9,454,400
[Administrative Expenses] ^{6/}	-----	[\$86,816]	[\$86,816]
Total, Highway Infrastructure Programs	\$12,000,000	\$11,454,400	\$9,454,400
Emergency Relief (GF) ^{7/}	-----	\$2,600,000	-----
Grand Total	\$59,061,969	\$72,224,707	\$68,915,788
FTEs			
Federal-aid Highways			
Direct Funded ^{8/}	2,626	2,641	2,706
Reimbursable, allocated, other	58	58	58
Highway Infrastructure Programs			
Direct Funded	-----	-----	-----
Reimbursable, allocated, other	-----	-----	-----
Emergency Relief			
Direct Funded	-----	-----	-----
Reimbursable, allocated, other	-----	-----	-----

Program and Performance Statement

These accounts provide necessary resources to support Federal-aid Highways Program activities, Highway Infrastructure Program activities, Emergency Relief activities, and maintain the agency's administrative and oversight functions. Funding will aid in the development, operations, and management of an intermodal transportation system that is safe for all users, provides equitable travel for all people, addresses the climate change challenge, and spurs innovation.

[] Non-add

1/ All fiscal years include FHWA General Operating Expenses (GOE) and transfers to the Appalachian Regional Commission (ARC) for administrative activities associated with the Appalachian Development Highway System. All fiscal years do not include amounts for other non-administrative programs authorized under Administrative Expenses.

2/ In all years, the exempt contract authority is comprised of \$639 million for the National Highway Performance Program and \$100 million for the Emergency Relief Program.

3/ FY 2021 reflects sequestration of 5.7 percent of contract authority exempt from obligation limitation per Sequestration Order dated February 10, 2020. FY 2022 reflects sequestration of 5.7 percent of contract authority exempt from obligation limitation per Sequestration Order dated May 28, 2021. FY 2023 reflect sequestration of 5.7 percent of contract authority exempt from obligation limitation pursuant to 2 U.S.C. 901a(6)(B)(ii).

4/ The Department of Transportation Appropriations Act, 2021 (Public Law 116-260) provided \$2 billion in additional highway funding from the General Fund.

5/ The Coronavirus Response and Relief Supplemental Appropriations Act, 2021 (Public Law 116-260) provided \$10 billion in additional highway funding from the General Fund for FY 2021.

6/ The IIJA provides funding for administrative expenses as a takedown from the Highway Infrastructure Programs. Amounts shown reflect the aggregate of such takedowns.

7/ The Disaster Relief Supplemental Appropriations Act, 2022 (Public Law 117-43) provided \$2.6 billion in additional emergency relief funding from the General Fund for FY 2022.

8/ FY 2022 and FY 2023 include increases in FTE to levels necessary to properly execute the increased amount of programs and funding in the IIJA.

EXHIBIT III-1a
FEDERAL HIGHWAY ADMINISTRATION
SUMMARY ANALYSIS OF CHANGE FROM FY 2022 TO FY 2023
Appropriations, Obligation Limitations, and Exempt Obligations
(\$000)

	<u>(\$000)</u>	<u>FTE</u>
FY 2022 CR with IIJA Oblim Levels (OBLIGATION LIMITATION + EXEMPT CA)	\$58,170,307	2,641
<u>ITEM</u>		
ADJUSTMENTS TO BASE:		
Annualization of FY 2022 pay raise (2.7 percent)	\$2,364	
Annualization of new FY 2022 FTE	\$2,625	15
FY 2023 pay raise (4.6 percent)	\$12,253	
Adjustment for one less compensable day in FY 2023	-\$1,408	
GSA rent	\$820	
Increase in Working Capital Fund (WCF)	\$2,536	
Non-pay inflation	\$2,511	
SUBTOTAL, ADJUSTMENTS TO BASE	\$21,701	15
PROGRAM DECREASES		
Reduction in other services	-\$20,861	
SUBTOTAL, PROGRAM DECREASES	-\$20,861	
PROGRAM INCREASES		
Salaries and benefits	\$8,979	50
Federal-aid Highway Program	\$1,290,241	
SUBTOTAL, PROGRAM INCREASES	\$1,290,241	50
FY 2023 REQUEST	\$59,461,388	
SUPPLEMENTAL APPROPRIATIONS		
IIJA HIP Supplemental Appropriations (GF) ^{1/}	\$9,454,400	
SUBTOTAL, SUPPLEMENTAL APPROPRIATIONS	\$9,454,400	
TOTAL	\$68,915,788	2,706

1/ The IIJA provides funding for administrative expenses as takedowns from the Highway Infrastructure Programs (HIP). The HIP administrative expenses funding will be used for information technology investments, contractual services, and other investments and services to support the implementation and administration of the IIJA on a to-be-determined basis.

Executive Summary

Highway Safety Improvement Program

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$3.3 billion for the Highway Safety Improvement Program (HSIP), consistent with the 34 percent increase in HSIP funding Congress made under the IIJA to address the safety crisis on our roads. This core Federal-aid highway program supports the Secretary's safety priority by aiming to reduce fatalities and serious injuries on all public roads and for all road users. The FY 2021 enacted funding level was \$2.66 billion. The IIJA provided \$3.2 billion for HSIP in FY 2022. This program is funded through the Highway Trust Fund.

What is this program and what does this funding level support?

The Department of Transportation is committed to providing national leadership in highway safety as demonstrated by launching the National Roadway Safety Strategy (NRSS) in January 2022. The NRSS is built around the Safe Systems approach, which includes multiple components including safer roads, and identifies actions the Department will take to enable safer roads, including supporting the planning, design and implementation of safer roads and streets in all communities using all available and applicable Federal funding resources, including the HSIP. Making highways, roads, and streets safer will help decrease deaths and serious injuries on all public roads and for all road users and will help improve the social and economic well-being of our Nation.

The purpose of the HSIP directly aligns with the Department's Safety Strategic Goal. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads and for all road users, with a focus on performance. HSIP plays a critical role in helping States meet their safety performance targets as part of FHWA's transportation performance management framework. Accountability for meeting those targets is addressed through the HSIP.

What benefits will be provided to the American public through this request and why is this program necessary?

In 2020, the National Highway Traffic Safety Administration's (NHTSA) estimates show that 38,680 people died in motor vehicle crashes. This represents the largest projected number of fatalities since 2007. NHTSA estimates that 31,720 people died in motor vehicle crashes in the first nine months of 2021. This is an approximately 12 percent increase above the projection for the first nine months of 2020.

Although many types of Federal-aid funds can and should be used to make roads safer, the HSIP anchors FHWA's safety efforts, providing States with critical safety funding that is used to save lives and prevent serious injuries on all public roads and for all road users. HSIP will support States in the implementation of the Safe System Approach, in which human life and health are primary considerations when designing a road. Furthermore, FHWA will work with States to encourage prioritizing safety-related investments in communities that have been historically underserved and adversely affected by past infrastructure decisions, with a focus on disadvantaged communities including high poverty and rural areas.

Detailed Justification Highway Safety Improvement Program

What is the request and what funds are currently spent on the program?

FY 2023 – Highway Safety Improvement Program (\$3.3 billion) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Highway Safety Improvement Program	2,656,343	3,228,261	3,292,826
Total	2,656,343	3,228,261	3,292,826

What is this program and what does this funding level support?

The HSIP is a core Federal-aid highway program that supports the Secretary’s safety priority by aiming to reduce fatalities and serious injuries on all public roads and for all road users. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads and for all road users with a focus on performance. The HSIP is legislated under sections 130, 148 and 150 of title 23, United States Code, and regulated under parts 490 and 924 of title 23, Code of Federal Regulations. The HSIP is a State-administered program that is driven by the Strategic Highway Safety Plan (SHSP) that each State creates and by a program of highway safety improvement projects. The HSIP also includes a set-aside for railway-highway crossing improvements and special rules for high-risk rural road safety, older driver and pedestrian safety, and vulnerable road user safety.

The HSIP provides resources that allow the States to implement innovations resulting from the latest highway safety research such as those disseminated through FHWA’s Every Day Counts (EDC) program and Proven Safety Countermeasures (PSC) initiative. EDC aims to identify and rapidly deploy proven, yet underutilized innovations to, among other things, enhance road safety. The PSC initiative consists of a collection of proven countermeasures and strategies, updated in 2021, that provide options for immediate action to accelerate the achievement of local, State, and National safety goals.

In addition, \$245 million of HSIP funding in FY 2023 is set aside for the Railway-Highway Crossings program to reduce the number of fatalities, injuries, and crashes at public railway-highway grade crossings. Through this program, State and local agencies implement data-driven practices and methodologies to administer their programs and to prioritize projects.

Another \$3.5 million of HSIP funding is set aside for transportation safety outreach, training, and education through the following activities: Operation Lifesaver, the Public Road Safety Clearinghouse, Work Zone Safety Grants, the National Work Zone Safety Information Clearinghouse, and guardrail training. These programs support training and public education focused on work zones, railway-highway crossings, and other safety efforts.

The HSIP is a critical component of implementation of the performance management system first put in place by Congress in MAP-21 and then continued under the FAST Act and now under

the IJIA. States and metropolitan planning organizations (MPOs) set annual safety performance targets that are used to assess fatalities and serious injuries on their roads. Unfortunately, at the two-year mark the majority of States failed to meet or make progress toward at least one of their annual safety performance targets. States that do not meet their safety targets are required to direct funds toward safety projects and develop a plan that describes the actions the State will take to meet or make significant progress toward their future safety targets.

In addition to these safety performance targets, the HSIP also includes three special rules for high-risk rural road safety, older driver and pedestrian safety, and vulnerable road user safety. FHWA assesses States' safety performance in each of these areas based on specific criteria established in legislation. States that do not meet the conditions are subject to either financial or programmatic requirements.

The HSIP also supports implementation of the USDOT NRSS. The Safe System Approach (SSA) is at the core of the NRSS and aims to eliminate fatal and serious injuries for all road users through a holistic view of the road system that anticipates human mistakes and develops the road system to be forgiving of human errors. Safety is the Department's number one priority, and the NRSS represents a Department-wide approach to working with stakeholders across the country to achieve this goal. The HSIP is a critical Federal-aid program used for the planning, design and implementation of safer roads and streets in all communities. The HSIP sets the funding and policy tone for national safety implementation efforts and therefore serves as the springboard for States and communities to accelerate their full adoption of the SSA and implementation of the NRSS.

The program emphasizes coordination among all surface transportation safety modes, including the National Highway Traffic Safety Administration (NHTSA), Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and Federal Motor Carrier Safety Administration (FMCSA).

One of the core principles of the SSA is that safety is a shared responsibility. The HSIP requires coordination with NHTSA on its Highway Safety Program as it relates to Highway Safety Plans, Safety Performance Targets, and State Safety Data Information Systems. FHWA also coordinates with other modes on the USDOT Traffic Records Executive Committee and the USDOT Safety Council. The HSIP also requires States to collaborate and coordinate with stakeholders on emphasis areas of concern and develop strategies to address their safety challenges. Additionally, FHWA recognizes that achieving continued success requires teamwork with external organizations. The agency coordinates and collaborates on safety programming with the American Association of State Highway and Transportation Officials, The National Association of City Transportation Officials, the Roadway Safety Foundation, the Road to Zero Coalition and many other associations and organizations. By working together, the United States can achieve our goal of zero fatalities on our Nation's roadways.

What benefits will be provided to the American public through this request and why is this program necessary?

The HSIP provides funds to States to address safety challenges on all public roads, including local and rural roads, and for all road users. The HSIP provides States the resources to address areas of risk, including vulnerable road user safety, with innovative proven safety interventions. Funding the program at the requested level will help States to achieve the goal of zero deaths on our Nation's roads.

Under the first five years of the FAST Act (FY 2016 to FY 2020), States obligated \$22.72 billion for approximately 23,500 highway safety improvement projects.

Rural and local areas benefit from the HSIP. Based on information reported by the States in their 2020 annual HSIP reports, at least 30 percent of the States' HSIP projects are on rural roads representing on average 38 percent of HSIP expenditures. In addition, 34 States obligated at least 17 percent of the States' HSIP funds for projects on local and Tribal roads, representing on average 10 percent of HSIP expenditures in 2020.

The HSIP provides resources that allow the States to implement innovations resulting from the latest highway safety research. The HSIP often funds new and innovative countermeasures to address high crash locations. Once those countermeasures are proven to be effective at reducing fatalities and serious injuries, they are deployed widely across the network via systemic safety improvements and integrated in State design standards and policies and systematically integrated across all projects. In 2020, States obligated 38 percent of their HSIP funds for systemic safety improvement projects. These projects, of which there were 1,858 in 2020 totaling \$1.9 billion, included traffic signal improvements such as retiming, backplates and flashing yellow arrow, wrong way driving treatments, clear zone improvements, high friction surface treatments, lighting, pedestrian and traffic calming improvements, rumble strips, and more.

In FY 2023, the HSIP program will continue to help State, local and Tribal agencies address their safety needs to reduce fatalities and injuries on our Nation's roadways. The HSIP continues to provide a platform for State, local and Tribal agencies to advance implementation of the Safe System Approach by making roads safer, as well as to address equity in their data driven safety analysis.

Executive Summary

National Highway Performance Program

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$29.0 billion for the National Highway Performance Program (NHPP), which supports the Secretary's key priorities of preserving safety, improving core assets, and investing in the transformation of our Nation's transportation infrastructure by improving the condition and performance of the National Highway System (NHS). Performance management requirements represent a key component of the NHPP. These requirements hold States accountable for achieving performance targets while continuing to give them the flexibility to make transportation investment decisions. The FY 2021 enacted funding level is \$24.2 billion. The IIJA provided \$28.4 billion for NHPP in FY 2022. This program is funded through the Highway Trust Fund.

What is this program and what does this funding level support?

The NHPP provides funds to the States on a formula basis. In direct support of the Secretary's key priorities of safety and infrastructure, the NHPP's purpose is to preserve and improve the NHS. Due to expected population and economic growth, freight and passenger transportation demands are projected to increase 250 percent by 2050. Modernizing and preserving an efficient transportation system in this environment is critical to maintaining economic competitiveness.

Funding the NHPP at \$29.0 billion in FY 2023 supports improvements toward achieving a state of good repair and improved operations on the NHS, and is consistent with the analyses presented in the biennial *Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance* report to Congress (23rd Edition). Maintaining a state of good repair on the NHS reduces costly improvements that would be required if infrastructure were allowed to deteriorate.

What benefits will be provided to the American public through this request and why is this program necessary?

Preserving and improving the NHS through the NHPP keeps our Nation's highways and bridges safe, benefits both urban and rural areas nationwide, creates employment opportunities to support the development of a skilled and diverse transportation workforce, and strengthens the economy through the efficient movement of freight. It binds the country together by making interstate and intra-state commerce possible; helping connect people to their communities, jobs, and other vital resources. The NHPP emphasizes preservation of the NHS while giving States flexibility to make additional investments to enhance NHS condition and operational performance and to build new capacity. Furthermore, improvements to the NHS benefit both urban and rural areas nationwide.

Detailed Justification National Highway Performance Program

What is the request and what funds are currently spent on the program?

FY 2023 – National Highway Performance Program (\$29.0 billion) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
National Highway Performance Program ^{1/}	24,239,437	28,439,442	29,008,231
Total	24,239,437	28,439,442	29,008,231

1/ \$639 million in FY 2021, FY 2022, and FY 2023 is exempt from obligation limitation of which \$36.4 million is sequestered each year (sequestration not reflected in table).

What is this program and what does this funding level support?

The NHPP, requested at \$29.0 billion in FY 2023, is a formula-based program that supports the Secretary's key priorities of preserving safety and infrastructure by improving the condition of highways and bridges. It helps to keep roads and bridges safe; improves the Nation's competitiveness in global trade; and maximizes the economic returns from transportation policies and investments.

Key features of the program include:

- a focus on improving and preserving the NHS;
- a performance-based framework;
- flexibility to the States for making transportation investment decisions; and
- requirements for risk-based asset management plans.

The NHPP requires a risk-based asset management approach. States must have a strategic and systematic process for operating, preserving, and improving physical assets on the NHS. It focuses on engineering and economic analysis using quality information to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve a desired state of good repair over the lifecycle of the assets at minimum cost. The intent of this approach is to better manage system condition and performance.

The National Highway System (NHS)

The Federal Government has periodically defined and focused resources on the roads that were critical to national interests and that enhanced mobility, security, economic growth, and quality of life. Each time, the decision was made to emphasize a limited network of roads of critical national priority – the Federal-aid system (1921), the Interstate System (1956), and the National Highway System (1995). MAP-21 defined the NHS as a network comprised of the Interstate System, all principal arterials including border crossings, intermodal connectors, and roads important to national defense. The FAST Act maintained this network and added provisions for removing some principal arterials from the NHS after review and reclassification by the States

and FHWA.

The NHS totals approximately 220,000 miles. It provides mobility to the vast majority of the Nation's population and almost all of its commerce, supports national defense, and promotes intermodal connectivity. While NHS mileage is only a small portion of the Nation's overall public road mileage, it carries 55 percent of all vehicular traffic. Furthermore, the NHS is vital to rural communities. In rural areas, the NHS carries just under 50 percent of all vehicle miles traveled, and provides critical access for jobs, health care, and commerce.

The NHPP will continue to direct Federal funds towards addressing national performance goals for the NHS. Among these are the condition of pavements and bridges. Past performance has demonstrated that sustained investment in the Nation's roads and bridges leads to better roadway and bridge conditions. A couple examples of this include:

- The share of travel on NHS pavements with good ride quality rose from 48 percent in 2000 to 62 percent in 2019. This improvement came despite MAP-21 increasing NHS mileage by almost 60,000 miles. Bringing pavements up to a state of good repair provides the following benefits: decreased wear and tear on vehicles, and reduced repair costs; reduced traveler delays; and lowered crash rates. Given that the NHS carries the majority of all vehicular traffic, a one percent increase translates into 18 billion more vehicle miles travelled occurring on pavements with good ride quality.
- Even as the total number of NHS bridges in the Nation's inventory increased from 117,485 in 2012 to 146,073 in 2021 the percentage of the deck area on NHS bridges classified as in "Poor" condition dropped from 7.0 percent to 4.2 percent¹.

Additionally, the NHPP has performance provisions that will improve investment decision-making through a greater level of accountability for States to improve or preserve the condition of NHS pavements and bridges, and the performance of the system. These provisions require States to carry out a risk-based asset management process to monitor and evaluate conditions, establish future condition targets for eight performance measures, plan investment strategies, and program funding in support of these strategies. The NHPP has additional requirements for States to maintain minimum-level conditions for NHS bridges and interstate pavements, and to make significant progress in meeting their NHPP conditions and performance targets. The regulations to implement these new requirements took effect on May 20, 2017.

What benefits will be provided to the American public through this request and why is this program necessary?

Preserving and improving the NHS through the NHPP keeps our Nation's highways and bridges safe, benefits both urban and rural areas nationwide, creates employment opportunities to support the development of a skilled and diverse transportation workforce, and strengthens the economy through the efficient movement of freight. The NHPP emphasizes preservation of the NHS while

¹ In 2012, the Moving Ahead to Progress in the 21st Century Act (P.L. 112-141) required the establishment of measures to assess the condition of bridges on the NHS. Beginning in 2018, FHWA transitioned from the bridge classification of structurally deficient to various measures to assess the condition of NHS bridges established in 23 CFR 490 Subpart D.

giving States the flexibility to make additional investments to enhance NHS condition and operational performance and to build new capacity while holding them accountable to minimum infrastructure condition requirements and the achievement of NHPP condition and performance targets.

Furthermore, the public investment in transportation will be more effectively utilized through improved decision-making that emphasizes safety for all users, equity in transportation, addressing climate change, and resilience in transportation infrastructure.

Executive Summary

Surface Transportation Block Grant Program

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$14.11 billion for the Surface Transportation Block Grant (STBG) Program to support the Secretary's infrastructure priority by providing flexible funding that States and localities can use to improve the condition and performance of their multimodal transportation networks through a wide range of eligible projects including roads and bridges, transit and bicycle and pedestrian facilities. The FY 2021 enacted funding level is \$12.14 billion. The IIJA provided \$13.84 billion for STBG in FY 2022. This program is funded through the Highway Trust Fund.

What is this program and what does this funding level support?

In direct support of the Secretary's key priorities of safety, transportation equity, addressing climate change and resilience, improving core assets, and transforming our Nation's transportation infrastructure, the STBG is a formula-based program that helps States and localities to invest in Federal-aid roads and support safe, multimodal transportation networks within urban and rural communities.

The STBG program has the greatest flexibility of FHWA's core highway programs. Whereas the National Highway Performance Program (NHPP) is limited to the approximately 220,000-mile National Highway System (NHS); the STBG program is available for the roughly 1,034,000 miles of Federal-aid highways (including bicycle and pedestrian facilities on those roads), for bridges on any public road, and for transit capital projects. This program gives transportation agencies, local governments, and communities the ability to direct funding to address State and local priorities.

This program provides flexible funding that States and localities can use to develop and improve interconnected, multimodal transportation networks, preserve and improve the condition and performance on the over 1,000,000 miles Federal-aid eligible roads, bridges on any public road, and transit capital projects, including intercity bus terminals and vehicles. Additionally, this program will, help improve roadway safety for all road users, including pedestrians and bicyclists, improve air quality, reduce congestion, foster affordable transportation, and improve quality of life.

What benefits will be provided to the American public through this request and why is this program necessary?

The flexibility of the STBG program provides transportation agencies with the ability to direct funding to State and local priorities. It increases mobility, access to community resources, and improves quality of life for all communities. Projects funded through this program enjoy broad popularity with communities across the country.

Detailed Justification Surface Transportation Block Grant Program

What is the request and what funds are currently spent on the program?

FY 2023 – Surface Transportation Block Grant Program (\$14.11 billion) (\$000)			
Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Surface Transportation Block Grant Program	12,138,746	13,835,404	14,112,112
Total	12,138,746	13,835,404	14,112,112

What is this program and what does this funding level support?

The STBG program supports the Secretary’s key priorities of safety, transportation equity, addressing climate change and resilience, improving core assets, and transforming our Nation’s transportation infrastructure by providing funds to the States to invest in Federal-aid eligible highways to replace, rehabilitate, and preserve roads, bridges, and other highway infrastructure, and to expand or build new transportation facilities. The STBG program is the most flexible of the core highway programs. The STBG program is available for the roughly 1,034,000 miles of highways, roads and streets that are Federal-aid eligible (public roads that are not functionally classified as rural minor collectors or local roads). This includes not only the Interstate System and the NHS but also many other roads and streets, bridges on any public road, some transit projects, pedestrian and bicycle facilities, and projects that meet the eligibilities of the Recreational Trails Program and the Transportation Alternatives set-aside.

The Transportation Alternatives set-aside is frequently used by States, MPOs and local governments for smaller scale but critically important multimodal transportation projects at both the State and local level, including pedestrian and bicycling infrastructure. In the IIJA, Congress increased the size of the Transportation Alternatives set-aside from \$850 million annually in the last years of the FAST Act to 10 percent of STBG per fiscal year, which amounted to \$1.38 billion in FY 2022 and increases to nearly \$1.5 billion in FY 2025. This set-aside initiative helps States, local governments, and communities pursue transportation improvements that meet their priorities for safety, access, mobility, recreation, development, or economic objectives. Transportation Alternatives funds are used to create safe, accessible, and environmentally sensitive communities through projects that provide access to jobs, services, housing, and recreation, and enhance and preserve the human and natural environment.

A long-term commitment to funding the STBG program has resulted in the following benefits:

- The share of vehicle miles travelled on Federal-aid highway pavements with good ride quality rose from 43 percent in 2000 to 53 percent in 2019.
- The percentage of the deck area of bridges classified as in “Poor” condition dropped from 7.8 percent in 2012 to 5.1 percent in 2021 even as the total number of bridges in the

Nation's inventory increased from 607,380 to 619,622. The percentage of the deck area on bridges classified as in "Good" condition dropped from 44.7 percent in 2012 to 43.4 percent in 2021.².

- More short trips are being accomplished by walking and biking. Approximately 12 percent of all trips were made by bicycling or walking in 2017, compared with 8 percent in 1994. In 2017, walking comprised 11 percent and bicycling 1 percent of all trips.

Funds are apportioned by formula and are subject to the overall Federal-aid obligation limitation. The following amounts are set aside from each State's STBG apportionment:

- An estimated \$282 million in FY 2023 for State Planning and Research (SP&R).
- An estimated \$1.4 billion in FY 2023 for Transportation Alternatives.

After the SP&R and Transportation Alternatives set-asides for FY 2023 have been calculated, 55 percent of a State's annual STBG apportionment will be available for obligation in the following areas in proportion to the relative share of State population:

- Urbanized areas with population greater than 200,000.
- Urbanized areas with population 50,000 to 200,000.
- Areas with population 5,000 to 49,999.
- Areas with population of less than 5,000.

The remaining 45 percent of FY 2023 funding may be used in any area of the State.

- The Governor of a land border State may designate up to 5 percent of STBG program funds available for use in any area of the State for border infrastructure projects eligible under the SAFETEA-LU border program.
- STBG program funds available for use in any area of the State are subject to transfer penalties under section 154 (Open Container Requirements) and 164 (Minimum Penalties for Repeat DWI or DUI Offenders) of title 23, U.S.C., which, then, at the election of the State, are released as HSIP funds and/or transferred to the National Highway Traffic Safety Administration.

What benefits will be provided to the American public through this request and why is this program necessary?

The STBG program supports the Secretary's priorities by: funding projects which reduce transportation related fatalities and serious injuries of all roadway users, including pedestrians and bicyclists; improving quality of life and access to vital resources for all communities through targeted urban and rural funding; providing accessible transportation choices and connections through flexible funding and the Transportation Alternatives set-aside; and supporting the

² Beginning in 2018, FHWA transitioned from the bridge classification of structurally deficient to various measures to assess the condition of NHS bridges established in 23 CFR 490 Subpart D.

development of a skilled and diverse transportation workforce through the use of funds to supplement and expand upon FHWA's existing On-the-Job Training and workforce development programs. Furthermore, the STBG Program supports communities of all sizes by targeting a majority of funds to areas in proportion to the relative share of State population. Both urbanized areas and rural areas nationwide receive targeted funding through the STBG Program.

In 2019, 53 percent of vehicle miles travelled on Federal-aid highways occurred on pavements with good ride quality. The proposed investment level is projected to increase this share to over 54 percent in 2023. This forecast is based on analyses developed for the biennial *Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance* (C&P) report and takes into account increased funding requested for the STBG and NHPP programs. Given that Federal-aid highways carry five-sixths of all vehicular traffic, each 1 percentage point change translates into 28 billion more vehicle miles travelled occurring on pavements with good ride quality.

Each biennial C&P report identifies a backlog of needed bridge rehabilitation investments, consisting of all potential improvements to bridges that appear to be cost-effective, based solely on their current conditions. The 24th Edition of the C&P report estimated this backlog to be \$131.84 billion. The proposed funding levels, including funding requested for the STBG and NHPP programs, is projected to help reduce this backlog for bridges by 21 percent by 2023.

The Transportation Alternatives set-aside provides funding to communities across America to expand travel choice, improve quality of life, and protect the environment. Transportation Alternatives encompasses a variety of smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity. STBG funding, through a combination of suballocation and competitive grants, flows directly to local governments, State and Federal resource agencies, and nonprofit organizations partnered with governments, for these vital projects.

Through its flexibility, wide range of eligible projects, and targeted nature, the STBG Program improves safety, mobility, accessibility, transportation choices, and quality of life for all communities.

Executive Summary

Congestion Mitigation & Air Quality Improvement Program

What is the request and what funds are currently spent on the program?

The FY 2023 includes \$2.59 billion for the Congestion Mitigation and Air Quality Improvement (CMAQ) program to help States and local governments reduce harmful emissions and highway congestion, and also assist many areas in reaching attainment of the National Ambient Air Quality Standards (NAAQS). The FY 2021 enacted funding level is \$2.49 billion. The IIJA provided \$2.54 billion for CMAQ in FY 2022. This program is funded through the Highway Trust Fund.

What is this program and what does this funding level support?

The CMAQ program supports the Secretary's priority of reducing environmental harms, addressing environmental justice concerns and addressing climate change by providing a funding source for transportation projects and programs that help meet the requirements of the Clean Air Act. CMAQ investments support transportation projects that reduce the mobile source emissions for which an area has been designated nonattainment or maintenance for ozone, carbon monoxide, and particulate matter by the Environmental Protection Agency (EPA). Many CMAQ funded projects, in addition to improving the Nation's air quality, can also address environmental justice concerns and reduce greenhouse gas emissions.

The CMAQ program supports the Secretary's priority of safety by funding projects that reduce congestion thereby improving traffic flow and system efficiency resulting in lower vehicle crash and injury risk.

Projects funded through CMAQ enhance transportation equity and economic inclusion by improving air quality in communities near major roadways that are disproportionately affected by harmful emissions.

The CMAQ program supports the Secretary's priorities of improving core assets and transforming our Nation's transportation infrastructure by providing funding to: improve transit; support Amtrak; support the installation of electronic vehicle charging stations and other alternative fuel projects; promote the use of advanced vehicle technologies and alternatively fueled vehicles; and improve multi-modal access via bicycle and pedestrian improvements.

What benefits will be provided to the American public through this request and why is this program necessary?

The CMAQ program provides funding for projects that improve air quality in areas with air quality challenges. Through its statutory focus on transportation projects and programs that reduce harmful emissions, the CMAQ program enhances quality of life and improves health nationwide by contributing to the attainment and maintenance of the NAAQS that act as a public health benchmark for many of the densely populated areas of the country.

Detailed Justification

Congestion Mitigation & Air Quality Improvement Program

What is the request and what funds are currently spent on the program?

FY 2023 – Congestion Mitigation & Air Quality Improvement Program (\$2.59 billion) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Congestion Mitigation & Air Quality Improvement Program	2,493,589	2,536,491	2,587,221
Total	2,493,589	2,536,491	2,587,221

What is this program and what does this funding level support?

The CMAQ Program serves a crossover function between transportation capital investments and environmental stewardship. Projects supported with CMAQ funds will help States improve air quality and reduce regional traffic congestion.

The CMAQ program supports the Secretary's safety, economic strength, climate change, and infrastructure transportation priorities:

- CMAQ projects can improve economic strength by providing additional transportation funding investments to densely populated areas with poor air quality. The investments may improve access to jobs and other growth opportunities via multi-modal improvements and transit enhancements.
- CMAQ projects that decrease emissions of criteria pollutants can also decrease greenhouse gas emissions, as well as decrease fuel consumption/energy use through the use of advanced vehicle technologies.
- CMAQ funds can be used for projects that contribute to the transformation of our Nation's infrastructure such as the installation of electric vehicle charging stations to support an expanding fleet of electric vehicles, support for Amtrak, improved public transit, new bicycle and pedestrian facilities, and the use of private-public partnerships (PPP) to support projects that modernize freight terminals.
- CMAQ provide funds for infrastructure projects that target congestion relief and can improve traffic flow and system efficiency, resulting in lower vehicle crash and injury risk.

Projects supported with CMAQ funds must meet the three primary eligibility requirements:

- Reduce emissions
- Be located in or benefit an EPA-designated nonattainment or maintenance area
- Be identified as a transportation project

Project selection and implementation are made at the State and local levels. FHWA provides program eligibility criteria and broad policy guidance, as well as final project approvals.

CMAQ funds are available to support a wide range of government and non-profit organizations, as well as private entities contributing to PPP, but are planned and administered by the State DOTs and Metropolitan Planning Organizations (MPOs). These organizations often plan or implement air quality programs and projects as well as provide CMAQ funding to others to implement projects. Sharing of total project costs, both capital and operating, is a critical element of a successful public-private venture, particularly if the private entity is expected to realize profits as part of the joint venture. State and local officials are urged to consider a full range of cost-sharing options when developing a PPP, including a larger State or local match.

In addition, States provide annual reports on all CMAQ investments each fiscal year. These reports include: obligations of program funds; descriptions of individual projects; and potential impacts on air quality, congestion, and multimodal choice. The data provided in the annual reports and the CMAQ Public Access System allows for transparency; showing that the program continues to provide incremental benefits through enhanced regional and local air quality improvement, and through contributions to congestion relief. Both of these factors—air pollution and highway congestion—are considered to be negative externalities that reduce the quality of life in many metropolitan areas of the country.

In 2019, approximately 82 million Americans lived in places where the levels of one or more air pollutants exceed national air quality standards, threatening public health. The program will continue to help provide continuity with State and local programming and provide adequate resources to maintain the air quality progress in many areas as they strive towards attainment of the NAAQS.

What benefits will be provided to the American public through this request and why is this program necessary?

The CMAQ program provides funding for projects that improve air quality in areas with air quality challenges and reduce traffic congestion. Through its statutory focus on transportation projects and programs that reduce harmful emissions, the program enhances quality of life and improves health nationwide through its contributions to attainment and maintenance of the NAAQS that act as a public health benchmark for many of the densely populated areas of the country.

Growing highway congestion continues to rise at a faster rate than transportation investments. The costs of congestion can be an obstacle to economic activity. In addition, congestion can hamper quality of life through diminished air quality, lost personal time, and other negative factors. Since some congestion relief projects also reduce idling, the negative emissions impacts of "stop-and-go" driving, and the number of vehicles on the road, they have a corollary benefit of improving air quality. Based on their emissions reductions, these types of projects are eligible for CMAQ funding. For example, CMAQ funded high-occupancy vehicle and high-occupancy toll lanes can help reduce congestion and improve traffic flow.

The CMAQ program offers States and MPOs significant flexibility in selecting projects that would provide air quality improvements and congestion relief benefits. Recent CMAQ-funded projects include converting high-occupancy vehicle lanes to high-occupancy toll lanes, installing alternative fuel charging and refueling infrastructure, supporting advanced intelligent transportation systems and vehicle-to-infrastructure communication technologies, retrofitting diesel engines in ferry boats, and applying advanced diesel engine technologies for trucks and locomotives.

For example, in Boston, Massachusetts, CMAQ funds supported the Massachusetts Bay Transportation Authority Green Line Extension. The project reduced emissions, improved travel times in the corridor, and reduced traffic congestion with an estimated decrease of over 25,000 in regional daily vehicle miles traveled. This project was especially notable in that it operates in existing railroad rights-of-way, reducing the need to purchase local property and minimizing construction impacts. In Seattle, Washington, CMAQ funds supported the conversion of ferries from diesel to hybrid electric. In addition to emissions benefits, the conversion reduces an estimated \$14 million in annual operating costs and reduces engine noise and vibration resulting in less impact on marine life.

Since its inception through FY 2020, approximately \$41.9 billion in CMAQ funds have supported over 42,000 projects that reduced emissions of particulate matter, carbon monoxide, nitrogen oxides, and/or volatile organic compounds. CMAQ-funded projects, such as public transit and bicycle and pedestrian facilities that promote air quality improvements, multimodal transportation options, and active living can lead to congestion reduction and positive health benefits.

Many CMAQ projects also provide additional benefits. For example, CMAQ projects that promote the use of alternative fuel vehicles can also reduce CO₂, a greenhouse gas that contributes to climate change. These reductions also support Executive Order 14008: Tackling the Climate Crisis at Home and Abroad. Also, in addition to congestion relief, projects that focus on improved traffic flow and system efficiency can provide safety and public health benefits via lower vehicle crash and injury risk while also reducing traveler stress levels. Safety-related CMAQ-eligible projects are specifically permitted to receive 100 percent Federal funding.

Executive Summary

Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) Formula Program

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$1.43 billion for formula grants to States for activities to assess and address infrastructure vulnerabilities to current and future weather events, including natural disasters and climate change. The IIJA provided \$1.40 billion for this program in FY 2022. This program is funded through the Highway Trust Fund.

What is this program and what does this funding level support?

The PROTECT Formula Program, a new program created by the IIJA, will apportion funding to States for resilience improvements, including projects that use materials, structural techniques, or non-structural techniques to prepare more of the Nation's infrastructure for the impacts of climate change and extreme weather events. Eligible projects will include highways and bridges, public transportation facilities, intercity rail, and port facilities.

What benefits will be provided to the American public through this request and why is this program necessary?

PROTECT Formula Program activities will protect surface transportation assets by making them more resilient to current and future weather events and natural disasters. Community resilience improvements and strategies will allow for the continued operation or rapid recovery of surface transportation systems. Coastal infrastructure will be better protected from the long-term risk of sea level rise and infrastructure nationwide will be better protected from precipitation, flooding events, heat, and other consequences of a changing climate. Natural infrastructure will be utilized that protects and enhances surface transportation assets while improving ecosystem conditions.

The PROTECT Formula Program directly addresses the Secretary's key priority of Resilience and Addressing Climate Change and will support the U.S. Department of Transportation Climate Action Plan: Revitalizing Efforts to Bolster Adaptation & Increase Resilience. In addition, this program will advance Executive Order 14008, Tackling the Climate Crisis at Home and Abroad, and will allow the United States to move quickly to improve infrastructure resilience against the impacts of climate change that are already manifested and will continue to intensify according to current trajectories.

Detailed Justification PROTECT Formula Program

What is the request and what funds are currently spent on the program?

FY 2023 – PROTECT Formula Program (\$1.43 billion) (S000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
PROTECT Formula Program	----	1,402,756	1,430,811
Total	----	1,402,756	1,430,811

What is this program and what does this funding level support?

The PROTECT Formula Program, which originated in the IIJA, will apportion funding to States for activities that enable communities to assess and address vulnerabilities to current and future weather events and other natural disasters and changing conditions due to climate change, including sea level rise. Eligible projects will include highways and bridges, public transportation facilities, intercity rail, and port facilities including intermodal connectors.

PROTECT formula funds can be used for four types of projects:

- Planning, including projects to develop a resilience improvement plan; resilience planning, predesign, design, or the development of data tools; technical capacity building; and evacuation planning and preparation.
- Resilience Improvements, including projects to improve resilience of existing surface transportation infrastructure to weather events, climate change, wildfires, and other natural disasters; natural or nature-based infrastructure; and flood protection measures, raising or lengthening bridges, or slope stabilization work.
- Community Resilience and Evacuation Routes, including improving evacuation routes to meet future needs and access critical destinations, and support for emergency and recovery activities.
- At-Risk Coastal Infrastructure, including work to make coastal highways and culverts more resilient to flooding, wave action, or sea level rise, to protect public safety and minimize life cycle costs.

Eligible project activities include project development, design, property acquisition, construction/reconstruction and rehabilitation, and environmental mitigation. PROTECT Formula Program funds also support planning activities, including systems level assessments of vulnerability to future climate and other natural hazards, and current and long-term planning activities and investments to promote resilience.

What benefits will be provided to the American public through this request and why is this program necessary?

The PROTECT Formula Program focuses work and resources on making the highway system and surface transportation more resilient to natural hazards, including climate change. Dedicated funding for resilience projects is needed to ensure that projects are built to withstand current weather impacts and future changes in climate.

Projects funded by the PROTECT Formula Program will be more resilient to future threats and provide a range of benefits to the public. While coastal highways are exposed to storm surge, sea level rise and high tide flooding, inland areas are also vulnerable to future changes in climate. Reductions in flooding, landslides and storm surge impacts on highway infrastructure and improved routes to support evacuations and relief efforts after events, for example, will improve the safety of the traveling public and our communities, support freight movements, and facilitate economic growth. This program also supports improved regional planning, programming, and project level analysis that address future risks--not just historic risks--to ensure that communities can minimize life cycle costs and maximize benefits resulting from building, operating and maintaining transportation systems.

Climate change presents a significant and growing risk to the safety, effectiveness, equity and sustainability of our transportation infrastructure and the communities it serves. We have a ‘once-in-a-generation’ opportunity to mitigate this risk by investing in the resilience of our transportation networks.

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Executive Summary

National Highway Freight Program

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$1.40 billion for the National Highway Freight Program (NHFP). The FY 2021 enacted level was \$1.49 billion. The IIJA provided \$1.37 billion for NHFP in FY 2022. This program is funded through the Highway Trust Fund.

What is this program and what does this funding level support?

The NHFP provides funds to the States on a formula basis to improve the efficient movement of freight on the National Highway Freight Network (NHFN). States have programmed funding in their State Freight Plans to invest in infrastructure and operational improvements that reduce congestion, improve safety and productivity, and enhance economic competitiveness.

Investment in the Nation's freight infrastructure is needed to support safety and maintain a global competitive edge through projected population and economic growth. Nationwide, truck Vehicle Miles Traveled increased nearly 1.9 percent per year on the Interstate from 2015-2020.³ Between 2017 and 2050, the U.S. will see freight activity grow by 46 percent in tonnage.⁴ This growth will have an impact on the infrastructure and operations of the Nation's highways.

Funding the NHFP at the level of \$1.40 billion in FY 2023 will support projects to address growth and the need for more and better-directed investment in freight infrastructure, consistent with the analyses developed by FHWA for the *Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance*, 24th Edition.

What benefits will be provided to the American public through this request and why is this program necessary?

This program addresses a longstanding need to improve the country's supply chains by reducing the existing backlog in freight infrastructure investment. The program eligibilities directly support the Secretary's priorities including safety, economic strength and improving core assets, resiliency and climate change, and transformation of our Nation's transportation infrastructure. The NHFP offers States and their private-sector partners guaranteed funding to plan and deliver improvements in freight infrastructure and operations that yield a high return on Federal investment for the economy and provide wide-ranging public benefits.

³ Source: Highway Statistics Series 2016 and 2020 <https://www.fhwa.dot.gov/policyinformation/statistic>

⁴ Source: U.S. Department of Transportation, Federal Highway Administration (FHWA), Bureau of Transportation Statistics (BTS), Freight Analysis Framework Version 5 (FAF5.2). BTS and FHWA provide estimates for freight flows for base year 2017 and forecasted data through year 2050.

Detailed Justification National Highway Freight Program

What is the request and what funds are currently spent on the program?

FY 2023 – National Highway Freight Program (\$1.40 billion) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
National Highway Freight Program ^{1/}	1,487,305	1,373,933	1,401,411
Total	1,487,305	1,373,933	1,401,411

What is this program and what does this funding level support?

The NHFP provides funds to the States, by formula, to improve supply chains and the efficient movement of freight on the NHFN. With the FY 2023 request of \$1.40 billion, States will be able to add projects to their State Freight Plans to further develop infrastructure and operational improvements that reduce congestion, improve safety and productivity, and strengthen the contribution of the National Highway Freight Network (NHFN) to the economic competitiveness of the United States.

The NHFP advances the Secretary's priorities of safety, economic strength and improving core assets, resiliency and climate change, and transformation of our Nation's transportation infrastructure. As part of the administration of the program in recent years, FHWA has:

- Provided training to State DOTs on the use of freight performance measures and the identification of bottlenecks to support a data-driven approach to prioritizing the investment of NHFP funds. This can help States target projects that address issues of safety and economic strength.
- Assisted States and Metropolitan Planning Organizations in technical matters related to the designation of critical rural and critical urban freight corridors. These designations allow investment to support economic strength and investment in core assets. The expansion of critical rural and critical urban freight corridors that serve as last-mile freight connections provides access to supplies and goods to local communities; this aligns with the Executive Order 13985 Advancing Racial Equity and Support for Underserved Communities through the Federal Government.
- Developed a compilation of noteworthy practices in using NHFP funding to advance eligible freight intermodal (including waterway/port) and freight rail projects. This information can aid States seeking to diversify the application of NHFP funding to other modes in addressing climate change and resiliency. Furthermore, provided technical assistance to States on eligible projects to reduce emissions and support the environmental goals of the program; this aligns with Executive Order #14008, Tackling the Climate Crisis at Home and Abroad.

- Developed a State Freight Plan Toolkit to assist State DOTs in updating their State Freight Plans. The toolkit provides a repository of resources, data, and best practices to help align freight investment decisions with transformational transportation priorities. In addition, encouraged States to innovate using advanced technology and practices.

The NHFP yields a high return on Federal investment for the economy and provides wide-ranging public benefits such as safety, mobility, health, and the environment. Freight projects are often multimodal, multi-jurisdictional, complex, or involve partnership with the private sector, making them difficult to administer under other Federal and State funding programs. The Department supports the provision of predictable Federal funds for implementing freight solutions to address the widespread need and a significant backlog of projects. The program is contributing to reducing this backlog, helping the U.S. freight industry meet the growth in demand in a responsible, effective, and sustainable way.

As of September 30, 2021, States had obligated 86 percent of all funds apportioned between FY 2017 and FY 2021. In addition, some States have further leveraged the NHFP funding by offering it to other non-Federal partners through State-run competitive grant programs, expanding the range of funding partners beyond the typical Federal-State cost-share arrangement. At least four States (California, Illinois, Iowa, and Minnesota) sub-allocated their NHFP funding to projects selected through a competitive grant program run by the State or a designated entity. This innovative approach to investment increases the non-Federal investment and expands public and private sector participation.

The program supports improvements across the multi-modal U.S. transportation system. From FY 2017-2021, nine States authorized freight intermodal and freight rail projects. Examples include California and Minnesota, which authorized their NHFP funding for multi-modal projects including the construction of double-track freight railway at the Port of Long Beach and operational improvements at the Duluth Seaway Port Authority, respectively. In addition, Iowa has recently been authorized NHFP funding for designing a rail-to-truck/truck-to-rail transloading facility to be operated by the Burlington Junction Railway. States continue to program their funding for future freight intermodal or freight rail projects, including rail projects at ports, highway-rail grade separation projects, and inland waterway improvements. The IIJA will continue to support multi-modal transportation by increasing the amount of funding dedicated towards freight intermodal and freight rail projects and expanding eligibility to include locks and dams and marine highway system projects.

NHFP projects are consistent with the planning requirements of sections 134 and 135 of title 23, U.S.C. Projects must be identified in the Statewide Transportation Improvement Program (STIP) and the Transportation Improvement Program (TIP) and should be consistent with the Long-Range Statewide Transportation Plan and the Metropolitan Transportation Plan(s).

What benefits will be provided to the American public through this request and why is this program necessary?

Investments in Freight Improve the Economy — An efficient, reliable transportation system supports economic competitiveness, which is vital to maintaining stability and supporting

employment for the Nation, States, and localities. The U.S. population growth, coupled with consumer demand for goods, will continue to drive freight growth. In 2020, the transportation system handled an estimated 52.52 million tons of freight worth approximately \$51.1 billion.⁵ Although freight moves on all modes of transportation, trucking carries the predominant portion of freight by tonnage and value of goods moved. Investing in freight infrastructure is needed to enhance capacity, connectivity, and reliability of the freight transportation system. These investments in the freight transportation system will strengthen U.S. competitiveness support economic development for years to come.

Disruptions to speed and reliability add to business costs, export costs, the cost of consumer goods, and the ability of industry to support jobs. These disruptions continue to be exasperated by global supply chain challenges of the pandemic, which has intensified the challenges in global supply chains, including growing consumer demand, workforce needs, complex international goods movement, and increased disruption caused by climate change. On February 24, 2021 the President issued Executive Order 14017—America's Supply Chains that called for a review of the transportation and logistics industrial base. The intent of this effort was to build resilient supply chains that can respond to the current crisis and future disruptions. Continued investment in freight infrastructure will be important for the Nation to meet its national Truck Travel Time Reliability target under the strain of increased demand on the supply chain.

Freight Projects Support Growth and can Advance Safety and Innovation — Nationwide, truck travel increased nearly 1.9 percent per year on the Interstate from 2015-2020.⁶ Freight movements across all modes are expected to grow by approximately 46 percent between 2017 and 2050. Investment in the Nation's freight transportation infrastructure is needed to support safety and maintain a global competitive edge through projected population and economic growth. Based on a recent review of State Freight Plans, approximately half of the State Freight Plans identified planned improvements for projects other than highway construction. These included freight planning studies, truck parking facilities, and Intelligent Transportation Systems (ITS) improvements. NHFP funding is being used for truck parking facilities in the Midwest, real-time transportation information systems in the West, and electronic vehicle screening and credentialing systems in the South.

⁵ Source: U.S. Department of Transportation, Federal Highway Administration (FHWA), Bureau of Transportation Statics (BTS), Freight Analysis Framework Version 5 (FAF5.2). BTS and FHWA provide estimates for freight flows for base year 2017 and forecasted data though year 2050.

⁶ Source: Highway Statistics Series 2016 and 2020 <https://www.fhwa.dot.gov/policyinformation/statistic>

Executive Summary

Carbon Reduction Program

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$1.26 billion for formula grants to States to reduce transportation emissions. The IIJA provided \$1.23 billion for the Carbon Reduction Program in FY 2022. This program is funded through the Highway Trust Fund.

What is this program and what does this funding level support?

The Carbon Reduction Program is a new program created by the IIJA that will provide formula grants to States to reduce transportation greenhouse gas (GHG) emissions. The projects and programs funded by the Carbon Reduction Program will support the Administration's efforts to make progress towards addressing the climate crisis while improving mobility and accessibility, reducing local environmental impacts, and supporting alternative fuel vehicles.

Carbon Reduction Program funds can be used for projects and programs that contribute to the clean modernization and transformation of our Nation's infrastructure such as vehicle to infrastructure communications equipment, public electric vehicle charging infrastructure, energy efficient alternatives to existing street lighting and traffic control devices, advanced congestion management projects, transit projects, on- and off-road pedestrian and bicycle trail facilities, and port electrification and other projects to reduce the environmental and community impacts of freight movement.

Approximately two-thirds of the funding under this program will be suballocated by population. The program will also require States to develop a carbon reduction strategy that supports efforts to reduce transportation emissions within two years of enactment.

What benefits will be provided to the American public through this request and why is this program necessary?

Transportation has become the largest source of U.S. GHG emissions. Projects funded under this program will help reduce carbon dioxide (CO₂) emissions from the transportation sector, which both contributes to and is increasingly vulnerable to the effects of climate change. These projects will also benefit communities through reduced environmental impacts, support of alternative fuel vehicles, congestion relief, and multimodal transportation options.

This program incentivizes States to implement a mix of strategies appropriate to each State that address the transportation carbon footprint while also providing for increased safety, equity, and mobility performance. The American public will benefit from a clean, efficient, multimodal and smart transportation system that works for all users and enables the sustainable, safe, efficient, and environmentally conscious movement of goods.

Detailed Justification Carbon Reduction Program

What is the request and what funds are currently spent on the program?

FY 2023– Carbon Reduction Program (\$1.26 billion) ((\$000))

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Carbon Reduction Program	-----	1,233,657	1,258,330
Total	-----	1,233,657	1,258,330

What is this program and what does this funding level support?

The Carbon Reduction Program is a new Federal-aid highway program enacted under the IIJA that will provide formula grants to States to reduce CO₂ emissions from transportation sources. The program supports Executive Order 14008 to combat the profound climate crisis through a Government-wide approach to reducing climate pollution in every economic sector. The program directly supports the Secretary’s climate change and transformation priorities by providing funding for States to implement projects and programs that make progress towards a clean, efficient, multimodal, and smart transportation system that supports and efficient movement of goods and works for all users.

The Carbon Reduction Program provides a flexible funding source for transportation projects and programs to help reduce emissions of CO₂ and improve the way that the transportation system interacts with people and the environment. Carbon Reduction Program funds can be used for projects and programs that contribute to the clean modernization and transformation of our Nation’s infrastructure such as vehicle to infrastructure communications equipment, public electric vehicle charging infrastructure, energy efficient alternatives to existing street lighting and traffic control devices, advanced congestion management projects, transit projects, on- and off-road pedestrian and bicycle trail facilities, and port electrification and other projects to reduce the environmental and community impacts of freight movement.

The FY 2023 budget requests \$1.26 billion for the Carbon Reduction Program. Of the total funding under this program, 65 percent will be suballocated by population. For eligible projects located outside of a Transportation Management Area, States are required to first coordinate with any MPO or regional transportation planning organization where the project is located before obligating funding for the projects.

The Carbon Reduction Program also requires that two years after the date of the IIJA enactment, each State develop a carbon reduction strategy which supports efforts to reduce on-road CO₂ emissions. The strategy must identify projects and strategies to reduce transportation GHG emissions and support the reduction of transportation emissions in the State. The strategies must be developed in consultation with any MPO designated within the State, submitted to the Secretary for certification, and updated every four years.

What benefits will be provided to the American public through this request and why is this program necessary?

The Carbon Reduction Program will help respond to an increasingly urgent climate crisis by funding projects that reduce CO₂ emissions. These projects will also reduce environmental impacts in American communities, expand multimodal transportation options, and increase access to public charging and fueling facilities for alternative fuel vehicles.

The Sixth Assessment Report by the Intergovernmental Panel on Climate Change (IPCC), released on August 7, 2021, confirms that human activities are increasing GHG concentrations that have warmed the atmosphere, ocean, and land at a rate that is unprecedented in at least the last 2000 years.⁷ Each additional ton of CO₂ produced by the combustion of fossil fuels and other activities contributes to future warming and other climate impacts.

Transportation has become the largest source of U.S. GHG emissions. The U.S. transportation sector both contributes to and is vulnerable to the effects of climate change. Between 2010 and 2019, transportation sector GHG emissions increased by 4.1 percent, while GHG emissions from all other sectors have declined by 7.7 percent. The increase in transportation sector GHG emissions has occurred despite increasingly stringent fuel economy standards starting with model year 2012 light-duty vehicles, and model year 2014 medium- and heavy-duty vehicles.

The Carbon Reduction Program will reduce GHG emissions from transportation, consistent with Executive Orders and other commitments prioritizing actions throughout the Government to address climate change. These include Executive Order 13990, which articulates national policy objectives including reducing GHG emissions, and Executive Order 14008, which recommits the U.S. to the Paris Agreement and calls for the U.S. to begin the process of developing its nationally determined contribution to global GHG reductions. Under that nationally determined contribution the U.S. will target reducing GHG emissions by 50-52 percent below 2005 levels by 2030. Executive Order 14008 also calls for a Government-wide approach to the climate crisis, acknowledging opportunities to create jobs to build a modern, sustainable infrastructure, to provide an equitable, clean energy future, and to put the United States on a path to achieve net-zero emissions, economywide, no later than 2050.

The Carbon Reduction Program offers States and MPOs significant flexibility in selecting projects that meet local needs. Benefits of the program include:

- Reduced environmental and community impacts through efforts focused on freight movement, ports, and diesel engines.
- Expanded multimodal options including transit, bicycle, and pedestrian facilities.
- The support of alternative fuel vehicles, including the installation of publicly accessible infrastructure to support electric vehicle charging and the fueling of hydrogen, natural gas, or propane vehicles.

⁷ See IPCC, 2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, *available at* <https://www.ipcc.ch/report/ar6/wg1/#SPM>.

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Executive Summary

Metropolitan Transportation Planning

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$447 million for metropolitan transportation planning funding. The FY 2021 enacted level is \$358 million. The IIJA provided \$438 million for this program in FY 2022. This program is funded through the Highway Trust Fund.

What is this program and what does this funding level support?

Metropolitan areas are comprised of multiple governmental agencies and jurisdictions, which have an interest in and have needs for transportation investment. Through a coordinated, regional approach to planning, an MPO engages the local jurisdictions as well as the State DOT and transit operators in a regional process that identifies the needs and investment priorities for the region. The results are a performance-based long range (20-year) Metropolitan Transportation Plan and a shorter term (4-year) program of transportation projects (Transportation Improvement Program). The MPOs are required to establish system performance goals and outcomes as part of the metropolitan transportation planning process and direct their investments toward meeting those outcomes.

The \$447 million request will provide MPOs with adequate resources to conduct the metropolitan planning process. Furthermore, this program supports the Secretary's safety and infrastructure goals by helping MPOs follow a coordinated transportation planning process that meets system performance goals, objectives, and indicators.

What benefits will be provided to the American public through this request and why is this program necessary?

This request will help MPOs make investments that improve the Nation's transportation system in a safe, transparent, and accountable manner while engaging the public, elected officials, and other stakeholders in the process. MPOs will then use Federal transportation funds more efficiently and effectively to focus on national performance goal areas.

Through this program, FHWA promotes equity in transportation planning by working with States and MPOs to identify transportation improvement options, including improved access to all modes (including bicycle, pedestrian, and transit); increased transportation network connectivity; the consideration of accessible land use development; and improved telecommunications and delivery services, while engaging the public in the planning process.

Detailed Justification Metropolitan Transportation Planning

What is the request and what funds are currently spent on the program?

FY 2023 – Metropolitan Transportation Planning (\$447 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Metropolitan Transportation Planning	357,875	438,121	446,884
Total	357,875	438,121	446,884

What is this program and what does this funding level support?

MPOs use metropolitan planning funds for multimodal, performance based, transportation planning and programming in metropolitan areas. Metropolitan planning activities include the collection and analysis of data on demographics, trends, and system performance; travel demand and system performance forecasting; identification and prioritization of transportation system improvement needs; performance management, and coordination of the planning process and decision-making with the public, elected officials, and stakeholder groups.

Metropolitan areas are comprised of multiple governmental agencies and jurisdictions, which have an interest in and have needs for transportation investment. Through a coordinated, regional approach to planning, an MPO engages the local jurisdictions as well as the State DOT and transit operators in a regional process that identifies the needs and investment priorities for the region. The results are a long range (20-year) Metropolitan Transportation Plan (MTP) and a shorter term (4-year) program of transportation projects (Transportation Improvement Program (TIP)). The IIJA added housing coordination and planning for Complete Streets to the metropolitan and statewide transportation planning processes. MPOs must establish system performance goals and outcomes as part of the metropolitan transportation planning process and direct their investments toward meeting those system performance outcomes. This program supports the Secretary's goals of transportation equity, and safety, as well as renewed emphasis on Complete Streets, climate change and planning for a resilient transportation network, by helping MPOs follow a coordinated transportation planning process that meets system performance goals, objectives, and indicators.

The IIJA requires each MPO to use not less than 2.5 percent of its metropolitan planning funds on specified planning activities to increase safe and accessible options for multiple travel modes for people of all ages and abilities (similarly, a State must use not less than 2.5 percent of its state planning and research funds.) However, a State or MPO, with the approval of the Secretary, may opt out of the requirement if the State or MPO has Complete Streets standards and policies in place, and has developed an up-to-date Complete Streets prioritization plan that identifies a specific list of Complete Streets projects to improve the safety, mobility, or accessibility of a street.

The \$447 million FY 2023 budget request will provide the metropolitan transportation planning program with adequate resources for MPOs to conduct the metropolitan planning processes and direct investments toward improving transportation system outcomes while engaging the public, elected officials, and other stakeholders.

These funds allow each MPO to carry out a coordinated transportation planning process and develop long range MTPs and TIPs that make effective use of limited transportation funding. These fiscally-constrained, prioritized plans and programs account for transportation system performance needs, future population and employment, future land use, economic development, public involvement, multimodal considerations and connectivity (including bicycle, pedestrian, highway, and transit), freight movement, environmental mitigation, transportation systems operation, safety, and congestion mitigation. Furthermore, in support of a performance-driven, outcome-based planning process, the IJA continued the requirement that MPOs have a performance-based process for developing their TIPs.

Additionally, Metropolitan Planning funds are used by MPOs to conduct corridor studies that lead to project development; demonstrate explicit consideration and response to public input; update demographic information to use in travel demand modeling; increase the accessibility and mobility of people and freight; develop policies and standards for complete streets; and improve the resiliency and reliability of the transportation system.

What benefits will be provided to the American public through this request and why is this program necessary?

This request will help MPOs direct investments toward improving transportation system outcomes in a safe, transparent, equitable, and accountable manner while engaging the public, elected officials, and other stakeholders in the process. MPOs will then use Federal transportation funds to focus on the national goal areas more efficiently and effectively through a continuing, cooperative, and comprehensive planning process. MPOs' use of performance measures and targets in the decision-making process will provide transparency, and their reporting of progress toward achieving performance targets will lead to improved accountability.

Through this program, FHWA promotes equity in transportation planning by working with States and MPOs to identify transportation improvement options, including improved access to all modes (including bicycle, pedestrian, and transit); increased transportation network connectivity; the consideration of accessible land use development; and improved telecommunications and delivery services, while engaging the public in the planning process.

For example, in March 2021, FHWA authorized California to use the highway right-of-way to build temporary homeless shelter sites to address the State's homelessness crisis. The FHWA has also sent programmatic guidance to all States that would allow the safe use of highway right-of-way land for temporary homeless shelters, and outlines the process FHWA will follow to approve alternate uses of the right-of-way as well as alternate uses of Park and Ride lots.

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Executive Summary

Appalachian Development Highway System

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$250 million in advance supplemental appropriations to support the completion of the Appalachian Development Highway System (ADHS). Funds will be distributed by formula to States with one or more counties (including any political subdivision within the area) in the Appalachian Region. The FY 2021 enacted funding level was \$100 million. The total amount that will be available for the ADHS Program in FY 2022 is \$250 million. This program is funded through the General Fund.

What is this program and what does this funding level support?

The funds under this program will be apportioned to the Appalachian States according to the percentages derived from the 2021 Appalachian Development Highway System Cost-to-Complete Estimate, dated March 2021, and confirmed as each Appalachian State's relative share of the estimated remaining need to complete the ADHS. This apportionment will be adjusted to exclude those corridors that such States have no current plans to complete, as reported in the 2013 Appalachian Development Highway System Completion Report, unless those States have modified and assigned a higher priority for completion of an ADHS corridor, as reported in the 2020 Appalachian Development Highway System Future Outlook.

The formula for this program contains the following considerations:

- No Appalachian State will be apportioned an amount more than 30 percent of the amount made available for construction of the Appalachian Development Highway System under this program.
- Each State will be apportioned an amount not less than \$10 million for each of fiscal years 2022 through 2026.
- A State will not receive an apportionment that exceeds the remaining funds needed to complete the Appalachian development highway corridor or corridors in the State, as identified in the latest available cost to complete estimate for the system prepared by the Appalachian Regional Commission.

What benefits will be provided to the American public through this request and why is this program necessary?

The ADHS Program supports the Secretary's priorities by providing for critical infrastructure, spurring economic growth in this historically isolated region, and ensuring rural regions are connected to cities and towns. The ADHS Program provides residents with safe and reliable access to jobs, education, health care, and social services. It also plays a vital role in giving the Appalachian region access to economic opportunities. Having a modern system of highways is essential for economic growth and for enabling Appalachia to become a net contributor to the national economy.

Detailed Justification Appalachian Development Highway System

What is the request and what funds are currently spent on the program?

FY 2023 – Appalachian Development Highway System (\$250 million) ((\$000))

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Appalachian Development Highway System	100,000	250,000	250,000
Total	100,000	250,000	250,000

What is this program and what does this funding level support?

The ADHS was initiated in 1965 because Appalachia was underserved by the interstate highway system, which sometimes bypassed the rural region's rugged terrain. The system is a network of 33 distinct corridors (about 3,000 miles) linking the region to interstates and providing access to regional and national markets. The ADHS provides reliable transportation access in 13 States: Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia.

Today, more than 91 percent of the ADHS is under construction or open to traffic. By 2040, close to 100 percent of the network is expected to be complete and open to traffic. The funding provided by this Program will help finalize the network.

The ADHS Program will distribute funds by formula to States with one or more counties (including any political subdivision within the area) in the Appalachian Region for construction of the ADHS.

The funds under this program will be apportioned to the Appalachian States according to the percentages derived from the 2021 Appalachian Development Highway System Cost-to-Complete Estimate, dated March 2021, and confirmed as each Appalachian State's relative share of the estimated remaining need to complete the ADHS. This apportionment will be adjusted to exclude those corridors that such States have no current plans to complete, as reported in the 2013 Appalachian Development Highway System Completion Report, unless those States have modified and assigned a higher priority for completion of an Appalachian Development Highway System corridor, as reported in the 2020 Appalachian Development Highway System Future Outlook.

In implementing the ADHS program, FHWA works closely with the Appalachian Regional Commission (ARC) – an economic development agency of the Federal government that partners with State governments and counties in the region. The ARC's mission is to promote innovation, partnership and investment to build communities, strengthen the economy and improve socioeconomic conditions in Appalachia.

What benefits will be provided to the American public through this request and why is this program necessary?

The IIJA will provide more than \$1.2 billion for the ADHS from FY 2022 through FY 2026. Annual funding for the ADHS will increase approximately 150 percent compared to FY 2021, providing dedicated funding to the ADHS to spur economic growth in the Appalachian region.

Ensuring rural regions are connected to the rest of America's cities and towns is key to our Nation's economic success. In January 2022, FHWA launched the IIJA's investment in the ADHS by making available \$246 million to the Appalachian States for FY 2022.

The construction of the ADHS has increased economic activity across the region – including job creation and business expansion. According to a 2017 analysis titled “Economic Analysis of Completing the Appalachian Development Highway System”, funded by and completed for the ARC, more than 168,000 jobs were created or maintained due to increased economic activity associated with the ADHS while \$9 billion was added to the gross regional product. The ADHS also saves 231 million hours of travel time annually. Completion of the ADHS is estimated to create 47,000 more jobs and add \$8.7 billion in goods and services annually across the Appalachian States.

The ADHS also has improved travel time for commuters and truckers. Much of the freight transported through the region travels long distance to destinations outside of Appalachia. The region's corridors serve as important national transportation links. According to the above-cited study, in 2015, use of the ADHS resulted in approximately \$10.7 billion in transportation cost savings and productivity gains. These benefits extend beyond the Appalachian States. Twenty percent of car vehicle hours saved and 31 percent of freight truck vehicle hours saved are for trips with the beginning, end, or both located outside the Appalachian States. This shows that the ADHS plays a vital role for regional and national freight movement.

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Executive Summary

Bridge Replacement, Rehabilitation, Preservation, Protection, and Construction (Bridge Formula Program)

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$5.5 billion in advance supplemental appropriations for a formula program that will provide funds to States for highway bridge replacement, rehabilitation, preservation, protection, or construction projects on public roads. The FY 2021 enacted funding level was \$1.08 billion. The total amount that will be available in FY 2022 is \$5.5 billion. This program is funded through the General Fund.

What is this program and what does this funding level support?

The Bridge Replacement, Rehabilitation, Preservation, Protection, and Construction Program (hereafter, Bridge Formula Program (BFP)) supports the Secretary's key priorities of safety, transportation equity, addressing climate change and resilience, improving core assets, and transforming our Nation's transportation infrastructure by providing funds to the States to invest in highway bridge replacement, rehabilitation, preservation, protection, or construction projects on any bridge listed in the National Bridge Inventory (NBI).

What benefits will be provided to the American public through this request and why is this program necessary?

The BFP represents the single largest dedicated bridge investment since the construction of the interstate highway system – providing over \$26.5 billion to states, the District of Columbia and Puerto Rico over five years and \$825 million for Tribal transportation facilities. Nationwide, the BFP is expected to help repair approximately 15,000 highway bridges.

The BFP supports the Secretary's priorities by keeping our Nation's bridges safe, addressing equity, barriers to opportunity, and challenges faced by individuals and underserved communities in rural areas, as well as restoring community connectivity – benefiting both urban and rural areas nationwide. Additionally, the BFP is vitally important in creating employment opportunities to support the development of a skilled and diverse transportation workforce, strengthening the economy through the efficient movement of freight, providing equitable access to services, and improving our Nation's transportation infrastructure.

Detailed Justification Bridge Formula Program

What is the request and what funds are currently spent on the program?

FY 2023 – Bridge Formula Program (\$5.5 billion) ((\$000))

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Bridge Formula Program	1,080,000	5,500,000	5,500,000
Total	1,080,000	5,500,000	5,500,000

What is this program and what does this funding level support?

The BFP supports the Secretary’s key priorities of safety, transportation equity, addressing climate change and resilience, improving core assets, and transforming our Nation’s transportation infrastructure by providing funds to the States to invest in highway bridge replacement, rehabilitation, preservation, protection, or construction projects on any bridge listed in the NBI. In January 2022, FHWA released the first tranche of BFP funding to States for FY 2022 and published initial guidance for the program.

This program includes two set-asides:

- 15 percent will be set-aside for use on off-system bridges, an estimated \$796 million for FY 2023. For funds used on an off-system bridge that is owned by a county, town, township, city, municipality or other local agency, or federally recognized Tribe, the Federal share will be 100 percent.
- 3 percent will be set-aside for use on Tribal Transportation Facility bridges, an estimated \$165 million for FY 2023. The Federal share for these projects will be 100 percent.

After these set-asides, funds for this program will be distributed by the following statutory formula:

- 75 percent by the proportion that the total cost of replacing all bridges classified in poor condition in such State compared to the sum of the total cost to replace all bridges classified in poor condition in all States.
- 25 percent by the proportion that the total cost of rehabilitating all bridges classified in fair condition in such State compared to the sum of the total cost to rehabilitate all bridges classified in fair condition in all States.

The program also requires that the apportionments be adjusted so that each State receives no less than \$45 million each fiscal year.

The BFP has a broad range of eligibilities to address the Nation’s bridge needs. Funds can be used on any highway bridge that is listed in the NBI, which in 2021 included 619,622 bridges. It can also be used on any new highway bridge that upon the completion of construction would meet the established definition of a highway bridge and would be required to be reported to the NBI, irrespective of what public agency owns the bridge.

As this is a new program that was established by the enactment of the IIJA, data is not available to show its impact on the transportation infrastructure. However, this program will supplement the other FHWA Programs in which highway bridge projects are eligible, such as the Bridge Investment Program, the Surface Transportation Block Grant Program and National Highway Performance Program. Long-term commitments to funding these two programs have resulted in the percentage of the deck area of highway bridges classified as in “Poor” condition dropping from 7.8 percent in 2012 to 5.1 percent in 2021 even as the total number of bridges in the Nation's inventory increased from 607,380 to 619,622. With the BFP, additional benefits are expected as program funds are encouraged to be first used for projects that improve the condition of in-service highway bridges classified in poor condition and that preserve or improve the condition of in-service highway bridges classified in fair condition.

Additionally, States are required to set aside 15 percent of their BFP funding to address off-system bridge needs. This set-aside will supplement the existing STBG off-system bridge set-aside, and the expectation is that additional benefits will be achieved in addressing the needs and improving the condition of off-system highway bridges. To maximize the benefits of this program with respect to off-system bridges, an increased Federal share is provided for off-system bridge projects. The Federal share for costs reimbursed with BFP funds under this program for an off-system bridge owned by a county, town, township, city, municipality or other local agency, or federally recognized Tribe is 100 percent.

What benefits will be provided to the American public through this request and why is this program necessary?

The BFP supports the Secretary’s priorities by keeping our Nation’s highways and bridges safe, addressing equity, barriers to opportunity, and challenges faced by individuals and underserved communities in rural areas, as well as restoring community connectivity – benefiting both urban and rural areas nationwide. Additionally, the BFP is vitally important in creating employment opportunities to support the development of a skilled and diverse transportation workforce, strengthening the economy through the efficient movement of freight and providing equitable access to services, and improving our Nation’s transportation infrastructure.

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Executive Summary

National Electric Vehicle Infrastructure Formula Program

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$1.0 billion in advance supplemental appropriations to support deployment of electric vehicle (EV) charging infrastructure. The IIJA provided \$1 billion for this program in FY 2022. This program is funded through the General Fund.

What is this program and what does this funding level support?

The National Electric Vehicle Infrastructure (NEVI) Formula Program, a new program created by the IIJA, will provide funding to States to build out a national electric vehicle charging network, an important step towards making electric vehicle charging accessible to all Americans. Funds from this program will be used for:

- The acquisition and installation of EV charging infrastructure to serve as a catalyst for the deployment of such infrastructure and to connect it to a network to facilitate data collection, access, and reliability.
- Proper operation and maintenance of EV charging infrastructure.
- Data sharing about EV charging infrastructure to ensure the long-term success of investments.

States will be required to submit a plan describing how each State plans to use funds distributed under this program. FHWA will review the plans and determine if they are approved. No State may obligate its apportioned NEVI Formula Funds for EV charging infrastructure projects until that State's Plan has been submitted and approved by FHWA.

From the funds for this program, ten percent will be set-aside for grants to States or localities that require additional assistance to strategically deploy EV charging infrastructure.

In FY 2022 only, \$300 million was set-aside to establish a Joint Office of Energy and Transportation. No additional funds are requested in FY 2023 for the Joint Office.

What benefits will be provided to the American public through this request and why is this program necessary?

The program represents the first-ever major Federal investment program specifically dedicated to EV charging infrastructure and reflects the Administration's commitment to combating climate change by helping to facilitate increased adoption of zero-emission vehicles.

The IIJA established the NEVI Formula Program to strategically deploy an interconnected network of EV charging stations along highway corridors, by providing States with formula funding. It creates the building blocks to facilitate a national network in a way that provides drivers across America with the confidence that they can drive long distances and have reliable charging when needed.

Detailed Justification

National Electric Vehicle Infrastructure Formula Program

What is the request and what funds are currently spent on the program?

FY 2023 – National Electric Vehicle Infrastructure Formula Program (\$1.0 billion) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
National Electric Vehicle Infrastructure Formula Program	-----	1,000,000	1,000,000
Total	-----	1,000,000	1,000,000

What is this program and what does this funding level support?

The NEVI Formula Program will provide funding to deploy a historic nationwide charging network that will make EV charging accessible for more Americans. In addition to providing formula funding for States, ten percent of the NEVI Formula Program will be set-aside each fiscal year for the Secretary of Transportation to provide discretionary grants to help fill gaps in the national network.

In order to implement this program, each State is required to submit an EV Infrastructure Deployment Plan that describes how the State intends to use its apportioned NEVI Formula Program funds. FHWA will review the plans and determine if they are approved. No State may obligate its NEVI Formula Funds for EV charging infrastructure projects until that State's Plan has been submitted and approved by FHWA. Initially, funding under this program is directed to designated Alternative Fuel Corridors for electric vehicles to build out this national network, particularly along the Interstate Highway System. When the national network is fully built out, funding may be used on any public road or in other publicly accessible locations. States will be able to use NEVI Formula Program funding for a wide range of investment types that directly support the installation of EV charging infrastructure in eligible locations to include planning, acquisition and installation; operating assistance; traffic control and signage; data sharing; and mapping/analysis activities.

This program directly addresses several of the Secretary's key priorities, including climate and sustainability and the transformation of our existing transportation network into one that meets the future needs of travel and transportation. The transportation sector has become the largest source of U.S. greenhouse gas (GHG) emissions. Reducing emissions from transportation through increased adoption of zero-emission vehicles is consistent with Executive Order 13990⁸, which includes a national policy objective to reduce GHG emissions, and Executive Order 14008⁹, which recommits the U.S. to the Paris Agreement. EVs have been identified as cleaner,

⁸ [Federal Register :: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government](#)

⁹ Section 219 of Executive Order 14008, Tackling the Climate Crisis at Home and Abroad and OMB, "Interim Implementation Guidance for the Justice40 Initiative," M-21-28 (July 20, 2021) available at <https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf>

more equitable, more affordable, and as representing an opportunity to support good-paying, union jobs¹⁰.

Other key priorities addressed by this program include economic strength, global competitiveness, and equity. State EV Infrastructure Deployment Plans must specifically include sections that detail how States will address labor and workforce considerations and equity considerations in a manner that meets the Administration's Policy to empower workers through rebuilding our infrastructure for a sustainable economy and the Justice40 Initiative as described in Executive Order 14008.

The Departments of Transportation and Energy signed a Memorandum of Understanding on December 14, 2021 establishing the Joint Office of Energy and Transportation to provide an interagency approach to support the deployment of zero-emission, convenient, accessible, and equitable transportation infrastructure. An initial spending plan has been developed, and the Joint Office has initiated work to provide technical assistance, including support for the development of State Electric Vehicle Infrastructure Deployment Plans under the NEVI Formula Program.

What benefits will be provided to the American public through this request and why is this program necessary?

The Administration has set an ambitious target of 50 percent EV sale shares in the U.S. by 2030¹¹. Currently, just over 2 million battery electric vehicles have been sold in the U.S. since 2010¹², which represents approximately 4% of all new vehicle sales in the United States¹³. In order for EV adoption and market share to continue to grow, a robust national charging network is needed to address range anxiety¹⁴. In March 2021, the U.S. passed the milestone of 100,000 public chargers¹⁵. The NEVI Formula Program will help put the U.S. on a path to establish an equitable network of 500,000 chargers to make EVs accessible to all Americans.

This program addresses the specific needs of standardizing the traveler's experience along the Nation's burgeoning long-distance EV charging network by both facilitating the identification of locations where EV charging infrastructure is needed in regular intervals along corridors that facilitate long-distance travel, and by outlining minimum standards and requirements for EV charging infrastructure deployment to provide a convenient and reliable charging experience along these corridors. The NEVI Formula Program helps to create an expectation for consistent, convenient EV charging experiences and thus facilitates large-scale adoption of EVs.

¹⁰ [FACT SHEET: The Biden-Harris Electric Vehicle Charging Action Plan | The White House](#)

¹¹ [FACT SHEET: The Biden-Harris Electric Vehicle Charging Action Plan | The White House](#)

¹² [Light Duty Electric Drive Vehicles Monthly Sales Updates | Argonne National Laboratory \(anl.gov\)](#)

¹³ [The U.S. to Electric Vehicles: "Eww, Not so Fast!" | Greener Ideal](#)

¹⁴ [afe_summary_report.pdf \(dot.gov\)](#)

¹⁵ [FACT SHEET: Biden Administration Advances Electric Vehicle Charging Infrastructure | The White House](#)

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Executive Summary

Federal Lands & Tribal Transportation Programs

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$1.37 billion for the Federal Lands and Tribal Transportation Programs (FLTTP). The FY 2021 enacted level is \$1.25 billion. The IIJA provided \$1.34 billion for these programs in FY 2022. These programs are funded through the Highway Trust Fund.

What is this program and what does this funding level support?

- **Federal Lands Transportation Program (FLTP)** –\$430 million for projects that improve multimodal transportation on roads, bridges, trails, transit systems, electric vehicle infrastructure, and other transportation facilities *within* the Federal estate (e.g. national forests, parks, wildlife refuges, and recreation areas and other Federal public lands) on infrastructure primarily *owned (or maintained) by the Federal Government*.
- **Federal Lands Access Program (FLAP)** –\$292 million for projects that improve multimodal transportation on roads, bridges, trails, transit systems, and other transportation facilities that *access* the Federal estate on infrastructure *owned (or maintained) by States, local governments, or Tribes*, with an emphasis on high-use Federal recreation sites or Federal economic generators.
- **Tribal Transportation Program (TTP)** –\$590 million for projects to provide safe and adequate multimodal transportation and public road access to and within Indian reservations, Tribal lands, and Alaska Native Village communities. The TTP contributes to the economic development, self-determination, and employment of federally recognized Tribes and Native Americans.
- **Nationally Significant Federal Lands and Tribal Projects Program (NSFLTTP)** –\$55 million for the construction, reconstruction, and rehabilitation of nationally significant projects within, adjacent to, or accessing Federal and Tribal lands.

What benefits will be provided to the American public through this request and why is this program necessary?

These programs support safe, seamless, and multimodal transportation access to and within Federal and Tribal lands which represent nearly 32 percent of the Nation's land area. Rural areas benefit greatly from these programs as many rural townships' local economies, adjacent to national parks, forests, and other Federal and Tribal lands, are fueled by recreational opportunities within the Federal estate. In addition to recreational uses, these lands support the economy and communities in energy generation, resource extraction, agriculture, and tourism, among other uses. A reliable and safe surface transportation infrastructure that provides access to these areas is critically important to sustaining and growing jobs in these areas.

These programs support the Secretary's priorities by improving transportation infrastructure, safety, climate change initiatives and access to all communities on Federal and Tribal lands. In the absence of these programs, it is highly likely, based on historical experiences, that the roads, bridges, trails, transit systems, and other transportation facilities providing vital access to Federal lands and resources, and community services supporting Tribal governments, will fall into severe disrepair, jeopardizing the public's and Tribal members' ability to access these areas and vital services.

Detailed Justification Federal Lands Transportation Program

What is the request and what funds are currently spent on the program?

FY 2023 – Federal Lands Transportation Program (\$430 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Federal Lands and Tribal Transportation Programs			
Federal Lands Transportation Program	375,000	421,965	429,965
Federal Lands Access Program	270,000	285,975	291,975
Tribal Transportation Program	505,000	578,460	589,960
Nationally Significant Federal Lands and Tribal Projects	100,000	55,000	55,000
Total	1,250,000	1,341,400	1,366,900

What is this program and what does this funding level support?

The Federal Government owns approximately 30 percent of the land in the United States. This land is primarily rural in nature, though there are many Federal lands in urban settings, such as the Golden Gate National Recreation Area in San Francisco, CA. The Federal Lands Transportation Program (FLTP) invests in the Nation's infrastructure and supports critical transportation needs within the country's transportation network by providing access *within* the national parks, forests, wildlife refuges, recreation areas, and other Federal public lands. These Federal public lands are found across the Nation's rural and urban areas.

Of these funds:

- The FLTP partners (National Park Service (NPS), Fish and Wildlife Service (FWS), and Forest Service (FS)) are provided approximately \$400 million. Of the authorized amount,
 - \$339 million is authorized for the National Park Service.
 - \$36 million is authorized for the Fish and Wildlife Service.
 - \$25 million is authorized for the Forest Service.
- FHWA will allocate \$30 million equally among four other eligible recipients including the Bureau of Land Management (BLM), Bureau of Reclamation (BOR), U.S. Army Corps of Engineers (USACE), and the Presidio Trust Corporation.
- FHWA will reserve a percentage of the funding, not to exceed twenty percent, for integrated transportation planning between FLMTAs and State Departments of Transportation (SDOTs) which includes the following activities: long range transportation planning, bridge inspections, collection of road and bridge inventory and condition data and management, and cooperative research and technology deployment. The set-aside supports comprehensive multi-agency planning efforts and positions the

program more effectively to support economic growth, safety, connectivity to underserved communities, and addressing climate change.

The FLTP funding provides an effective mechanism to leverage resources from other Federal and non-Federal funding sources. The Federal funding is sometimes pooled with other State and/or county funds to deliver a single project consisting of multiple owners. This saves taxpayers' dollars and expedites project delivery through a single acquisition.

Each agency submits a single investment plan which describes how it intends to use the funds. Each proposed investment plan is required to demonstrate how it supports authorizing legislation, including the Secretary of Transportation's goals and principles and how it supports the resource and asset management goals of the Secretary of the respective FLMA, among other goals. These goals and principles include those that:

- improve the condition, resilience and safety of road and bridge assets consistent with asset management plans (including investing in preservation of those assets).
- promote and improve safety for all road users, particularly vulnerable users.
- make streets and other transportation facilities accessible to all users and compliant with the Americans with Disabilities Act.
- address environmental impacts ranging from stormwater runoff to greenhouse gas emissions.
- prioritize investment in infrastructure that is less vulnerable and more resilient to a changing climate.
- future-proof our transportation infrastructure by accommodating new and emerging technologies like electric vehicle charging stations, renewable energy generation, and broadband deployment in transportation rights-of-way.
- reconnect communities and reflect the inclusion of disadvantaged and under-represented groups in the planning, project selection and design process.
- direct Federal funds to their most efficient and effective use, consistent with these objectives.

Based on data reported from these seven FLMAs, this program can support the combined transportation infrastructure across the Federal estate:

- Over \$14.5 billion in deferred maintenance needs.
- Over 380,000 miles of roads open to the public.
- Over 11,000 vehicle bridges and over 8,500 trail bridges.
- Over 190,000 miles of trails.
- Over 1400 transit systems.
- Jurisdiction of over 1 billion acres.
- Over 865 million annual visitors across all 50 States.

The FLTP supports and improves safety. FLMAs are required to report on the condition of their roads and bridges in their official National Federal Lands Transportation Inventory. Safety features are promoted according to their crash reduction factor in order to maximize safety.

The FLTP fosters innovation in transportation and transportation technologies. Projects are evaluated for compatibility with FHWA's Every Day Counts initiative, as well as other innovation deployment priorities that will improve infrastructure performance and investment. These innovation efforts identify and rapidly deploy proven, yet underutilized, innovations to shorten the project delivery process, enhance roadway safety, reduce traffic congestion, enhance the life of infrastructure, and integrate automation.

What benefits will be provided to the American public through this request and why is this program necessary?

The FLTP supports the Secretary's priorities by ensuring that roads and bridges on Federal lands are safe, well-maintained, and accessible to all. FLTP outcomes include: completed infrastructure projects that provide safe, seamless, multimodal access on Federal lands thereby supporting increased visitation, improved transportation infrastructure safety, condition, and reduced congestion; development of transportation inventories and plans that support informed decision-making and policy-making; and research and innovation development and deployment. These outcomes help expand economic development and create new jobs in and around rural and urban Federal lands that contribute to the local, regional, and national economies.

FLTP projects are implemented by FHWA and FLMAAs. Based on funding made directly available in FY 2021 for construction contract awards, FHWA anticipates the following project accomplishments. Additional construction contract awards and project accomplishments achieved directly by the FLMAAs would be reported by the FLMAAs.

- Improve over 550 lane miles of roadways on Federal lands.
- Enhance safety through innovation deployments on projects.
- Repair and replace over 55 bridges to improve safety and mobility.
- Invest in at least 12 transit systems.
- Advance 3 National Transportation Plans: (USACE, BLM, and FS).

Detailed Justification Federal Lands Access Program

What is the request and what funds are currently spent on the program?

FY 2023 – Federal Lands Access Program (\$292 million)

(\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Federal Lands and Tribal Transportation Programs			
Federal Lands Transportation Program	375,000	421,965	429,965
Federal Lands Access Program	270,000	285,975	291,975
Tribal Transportation Program	505,000	578,460	589,960
Nationally Significant Federal Lands and Tribal Projects	100,000	55,000	55,000
Total	1,250,000	1,341,400	1,366,900

What is this program and what does this funding level support?

The Federal Lands Access Program (FLAP) invests in the Nation's infrastructure by funding and supporting transportation facilities owned (or maintained) by State, county, local, and Tribal governments, which provide access to lands owned and operated by the Federal Government, e.g., national parks, forests, refuges, national recreation areas, which are primarily rural in nature. FLAP (23 U.S.C. 204) and the FLTP (23 U.S.C. 203) are separate yet complementary programs that support seamless transportation access to and through Federal lands open to the public.

To promote efficient and effective access to destination points within the Federal estate, it is vitally important that the local, State, and non-Federally-owned roads that connect with Federal Lands Transportation facilities, just outside a park or forest boundary, for example, are in safe and good condition so the traveling public can seamlessly access these Federal properties and enjoy the recreational and other opportunities therein.

Frequently, the local, State, and non-Federally owned roads for accessing Federal lands are lower classification roads that generally have lower State and local priority as well as have limited eligibility under the Federal-aid highway program. Prior to the authorization of FLAP, many of these important local, State, and non-Federally owned roads fell into a state of disrepair due to constrained transportation resources. FLAP addresses this gap and is intended to complement the FLTP.

Critical funding resources will be available to those local, State, and non-Federally owned transportation facilities that provide access to the high-use Federal recreational areas or Federal economic generators within the Federal estate, with the opportunity to produce the greatest return on investment to land owners, communities adjacent to Federal lands, and the American people, who are looking for seamless transportation to these popular recreational destinations.

The structure and allocation of the \$292 million FLAP is a formula distribution by State. Since all States have Federal lands of some type, each State benefits from some portion of this funding.

The formula criteria include visitation to Federal lands, Federal public road miles, number of Federal bridges, and the amount of Federal public lands within each State. Further, 80 percent of the funds are directed towards the 12 western States with at least 1.5 percent of total Federal lands: Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. The remaining 38 States, Washington D.C., and Puerto Rico receive the remaining 20 percent of the funds.

The selection of projects in each State is made locally by a Programming Decisions Committee comprised of representatives from the State DOT, FHWA, and a local public agency. These decisions are made in coordination with FLMAs with an emphasis on improving safety and investing in the Nation's infrastructure. Funds are available for transportation infrastructure, owned (or maintained) by States, Tribes, or local public agencies, on improvement projects which supports the Secretary of Transportation's goals and principles and provide critical access to Federal lands. These goals and principles include those that:

- improve the condition, resilience and safety of road and bridge assets consistent with asset management plans (including investing in preservation of those assets).
- promote and improve safety for all road users, particularly vulnerable users.
- make streets and other transportation facilities accessible to all users and compliant with the Americans with Disabilities Act.
- address environmental impacts ranging from stormwater runoff to greenhouse gas emissions.
- prioritize investment in infrastructure that is less vulnerable and more resilient to a changing climate.
- future-proof our transportation infrastructure by accommodating new and emerging technologies like electric vehicle charging stations, renewable energy generation, and broadband deployment in transportation rights-of-way.
- reconnect communities and reflect the inclusion of disadvantaged and under-represented groups in the planning, project selection and design process.
- direct Federal funds to their most efficient and effective use, consistent with these objectives.

FLAP funds are commonly pooled with other Federal and non-Federal funding sources and serve as an effective mechanism for leveraging taxpayers' dollars in rural America. Through funding flexibilities in current law, and when coupled with integrated transportation planning between FLMAs and States, projects that otherwise may have been constructed separately can be combined into a single project and be delivered in a cost-effective and time-efficient manner.

A recent example of a FLAP project in Idaho is the Teton Centennial Trail project. The Old Jackson Highway (ID-33) was 100 years old in the summer of 2013. This project helps mark the centennial celebration of the historic connection of Idaho and Wyoming over Teton Pass by creating enhanced bicycle and pedestrian access for the next century aligned with Complete Street Principles. The FLAP project was sponsored by the City of Victor, Idaho and Teton County, Wyoming and supported by a broad partnership of business and government, including the National Forest Service. The challenging terrain and iconic views will draw visitors to experience public lands as well as enhance the quality of life in the City of Victor and

surrounding communities. ID-33 connects directly with Wyoming Highway 22 providing access to Jackson Hole and Grand Teton National Park on the east side of Teton Pass, which already has an extensive pathway system. Construction on this important project started in the summer of 2021 and will be completed in the summer of 2022.

FLAP will reserve a percentage of the funding, not to exceed twenty percent, for integrated transportation planning between FLMAs and SDOTs which includes the following activities: long-range transportation planning, bridge inspections, collection of road and bridge inventory and condition data management, and cooperative research and technology deployment. The set-aside supports comprehensive, multi-agency planning efforts and positions that support the Administration's priorities of economic growth, safety, connectivity to under-served communities, and climate change.

What benefits will be provided to the American public through this request and why is this program necessary?

The FLAP supports the Secretary's priorities by ensuring that roads and bridges providing access to Federal lands are safe, well-maintained, and accessible to all. FLAP projects provide safe, seamless, and multimodal access to and through Federal lands which expands economic development and creates new jobs in and around Federal lands. Collectively, they improve the quality of life for all Americans by improving the condition, resilience and safety of road and bridge assets, promoting and improving safety for all road users, connecting communities, addressing environmental impacts, and prioritizing infrastructure that is more resilient to climate change in and around our national treasures.

The FLAP funding projects are implemented by FHWA, SDOTs, and local governments, among others. Based on previous funding made directly available for construction contract awards in FY 2021, FHWA anticipates the following project accomplishments with these funds. Additional construction contract awards and project accomplishments are achieved directly by the SDOTs, local governments, and other recipients.

- Improve over 70 lane miles of roadways accessing Federal lands.
- Improve safety through use of innovations and design.
- Repair and replace over 6 bridges to improve safety and mobility.
- Improve over 17 miles of trails.

Transportation investments stemming from FLAP allow visitors from the United States and numerous countries to experience America's treasures in a safe and seamless manner.

Detailed Justification Tribal Transportation Program

What is the request and what funds are currently spent on the program?

FY 2023 – Tribal Transportation Program (\$590 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Federal Lands and Tribal Transportation Programs			
Federal Lands Transportation Program	375,000	421,965	429,965
Federal Lands Access Program	270,000	285,975	291,975
Tribal Transportation Program	505,000	578,460	589,960
Nationally Significant Federal Lands and Tribal Projects	100,000	55,000	55,000
Total	1,250,000	1,341,400	1,366,900

What is this program and what does this funding level support?

The Tribal Transportation Program (TTP) promotes a coordinated approach to multimodal transportation in Indian country on roads owned by the Bureau of Indian Affairs (BIA), sovereign federally-recognized Tribal governments, and other roads owned by States, counties, or local governments which provide access to, or are located within, Tribal communities. TTP funds are eligible for transportation planning, research, maintenance, engineering, rehabilitation, and construction of roads, bridges, trails, transit systems, and other transportation facilities on the National Tribal Transportation Facility Inventory (NTTFI).

The requested \$590 million for FY 2023 will support a comprehensive, coordinated, and goal-oriented approach to Tribal transportation infrastructure management. As of June 2021, Tribes recorded more than 167,071 miles of roads on the NTTFI. Approximately 31,386 miles are identified as BIA routes and another 28,606 miles as Tribal routes. The remaining mileage is owned by others including States, counties, townships, boroughs, or other Federal agencies. Funding the TTP at the requested amount is necessary to invest in the Nation’s infrastructure, support and improve safety, and provide mobility and access for these communities.

Motor vehicle crashes leave an indelible mark on virtually every community. Traveling our national roadways network by car, truck, motorcycle, bicycle, or as a pedestrian, is a daily requirement for a large segment of the population, from infants to grandparents. This is especially true for the Native American and Alaska Native populations of our country who experience higher rates of fatal injuries associated with transportation than does the general population.

The structure and allocation of the \$590 million to the 574 federally recognized Tribes is based on a statutory formula that was established in the Moving Ahead for Progress in the 21st Century Act (MAP-21) and carried forward in the Fixing America’s Surface Transportation (FAST) Act and the Infrastructure Investment and Jobs Act (IIJA). The statutory funding formula has various factors and takedowns, including four set-asides described below, that determine a “tribal share percentage” for each federally recognized Tribe. This percentage is applied to the year’s

available program funding to calculate each Tribe's share of TTP funding for that year. Below are descriptions of the four set-asides in the TTP:

The TTP Safety Fund (TTPSF) is a four percent set-aside that supports the Secretary's data driven safety priorities. The intent of the TTPSF is to prevent and reduce deaths or serious injuries in transportation-related crashes on Tribal lands. The TTPSF emphasizes the development of strategic transportation safety plans using a data-driven approach to target transportation safety needs in Tribal communities. TTPSF places an emphasis on crash data collection and analysis. Ultimately, planning and data analysis leads to the implementation of infrastructure and non-infrastructure projects that improve transportation safety using both TTP funds and funding leveraged from other sources.

Since TTPSF was created under MAP-21, FHWA has awarded \$70 million to federally recognized Tribes for 707 projects to address transportation safety issues in Tribal areas over 7 rounds of competitive grants for projects supporting the development of safety plans, data assessment, improvement, and analysis activities, and infrastructure improvements. The FY 2021 Notice of Funding Opportunity (NOFO) introduced a new criterion encouraging Tribes to provide evidence that the project will reduce crash severity and/or frequency. This could be accomplished through a reference to the Crash Modifications Clearinghouse, Proven Safety Countermeasures, Highway Safety Manual, or other resource. The FY 2021 NOFO also established a new funding category to simplify the application process for projects that address roadway departures which contribute to 63 percent of fatal motor vehicle crashes in Tribal areas.

The Tribal Transportation Program High Priority Projects (TTPHPP) is a new, \$9 million set-aside that directly supports underserved communities and racial equity as envisioned in Executive Order 13985. TTPHPP provides funds for an Indian Tribe to complete their highest priority project when their annual allocation of TTP funding is insufficient, or for any Indian Tribe that has an emergency or disaster affecting a transportation facility in the National Tribal Transportation Facility Inventory.

A similar set-aside from the Indian Reservations Roads Program was established through negotiated rulemaking under the Transportation Equity Act for the 21st Century. The resulting regulations at 25 CFR 170 directed the administration of the program from 2005 to 2012. In 2012, \$28,533,502 was awarded to Tribes for delivery of 37 high priority projects. The program was authorized but not funded under MAP-21, and it was not authorized under the FAST Act.

Transportation Planning is a two percent set-aside for each Tribe to carry out transportation planning activities through a cooperative process that fosters involvement by all users of the transportation system. The purpose of transportation planning is to evaluate a wide range of alternatives to address a Tribe's multi-modal transportation needs, to develop short, mid-, and long-term strategies to meet transportation needs, and to support these strategies by defining future policies, goals, and investments. These strategies are developed through a comprehensive approach to analyzing how current and future land use, economic development, traffic demand, public safety, health, and social needs impact the Tribes' transportation system. The Transportation Planning set-aside provided \$58.6 million in funds to Tribes during FY 2016-2021.

Program Management and Oversight (PM&O) is a five percent set-aside for administration of the program. The PM&O set-aside funds payroll, office space, office supplies, travel, and for carrying out the stewardship and oversight and the inherent Federal functions/responsibilities of the TTP. These inherent Federal functions include fund distribution, environmental documentation review and approval, project construction inspection, financial management, and program reviews. PM&O funding also supports IT support and equipment, maintenance of the National Tribal Transportation Facility Inventory (NTTFI), and other special TTP-specific and required studies, and technical assistance. Technical assistance activities include funding the Tribal Technical Assistance Program (TTAP), outreach on Tribal government recreation travel and tourism activities, and bridge inspections on the Tribal and BIA bridges across the country. The FHWA retains approximately 18 percent of the overall PM&O budget to fund program administration for 23 full time employees with the balance of funds going to the BIA.

What benefits will be provided to the American public through this request and why is this program necessary?

The TTP supports the Secretary's priorities by improving transportation safety, access, and mobility in Tribal communities. This program provides better and more equitable access to housing, emergency services, schools, stores, jobs, and medical services, among others, and improves the quality of life on Tribal lands for all the 574 federally recognized sovereign Tribal governments. More than 8 billion vehicle miles are traveled annually on the NTTFI system, despite more than 60 percent of the system being unpaved.

These roads, trails, bridges, transit systems, and other transportation facilities provide safe and adequate transportation for public access to, within, and through Indian reservations and native communities for Native Americans, visitors, recreational users, resource users, and others, while contributing to the health, safety, and economic development of Native American communities.

The TTP is focused on improving transportation infrastructure in Indian Country, but many TTP projects also address community health, livability, sustainability, transportation alternatives, and mitigating climate change. The anticipated FY 2023 accomplishments will include significant improvements in safety, infrastructure, planning, and transportation capacity building and will continue to support more equitable access to resources that address transportation infrastructure needs in Indian Country.

The design and construction of Tribal transportation infrastructure consistent with strategic long-range transportation plans and goals of the Tribes and DOT, will considerably benefit facilities included in the NTTFI. Further, the development of data-driven transportation safety plans that will lead to investment decision-making that prevents and/or significantly reduces fatalities and serious injuries. Technical assistance and training will be provided to Tribes by FHWA and BIA to support Tribal transportation capacity building, foster innovation in transportation and transportation technologies, while providing stewardship and oversight of programs and priorities.

Detailed Justification

Nationally Significant Federal Lands and Tribal Projects (NSFLTP) Program

What is the request and what funds are currently spent on the program?

FY 2023 – NSFLTP (\$55 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Federal Lands and Tribal Transportation Programs			
Federal Lands Transportation Program	375,000	421,965	429,965
Federal Lands Access Program	270,000	285,975	291,975
Tribal Transportation Program	505,000	578,460	589,960
Nationally Significant Federal Lands and Tribal Projects	100,000	55,000	55,000
Total	1,250,000	1,341,400	1,366,900

What is this program and what does this funding level support?

The NSFLTP provides funding for the construction, reconstruction, and rehabilitation of nationally significant projects within, adjacent to, or accessing Federal and tribal lands. This Program provides an opportunity to address significant challenges across the Nation for transportation facilities that serve Federal and tribal lands. Federal land management agencies, federally recognized Indian Tribes, States, and local agencies are eligible applicants.

The NSFLTP Program provides discretionary grants for projects that have an estimated construction cost of at least \$12.5 million. Half of the funding provided must be awarded to projects on Tribal lands and half must be awarded to projects on Federal lands. FHWA will consider criteria established under section 1123 of the FAST Act, in addition to the Secretary's safety, equity and other policy objectives, in rating all applications for funding under the Program.

What benefits will be provided to the American public through this request and why is this program necessary?

The NSFLTP provides a reliable source of funding for major, high cost projects that typically cannot be funded with other funding sources due to the scope and expense of the project. This program complements both the Federal Lands Transportation and Access programs along with the Tribal Transportation Program by funding a small number of critical projects annually that require significant investments. Prior to the authorization of this program, these large, nationally significant projects were rarely funded.

This program provides the American people with safe, multi-modal access to Federal and Tribal lands and addresses this former funding gap. Through effective transportation access to Federal lands, visitors can enjoy the recreational opportunities within these Federal estates. In doing so, they are contributing significantly to economic generation in rural America, particularly the small businesses that operate just outside Federal lands within gateway communities across the country.

These significant transportation facilities also support access to clean energy sources, such as wind and solar farms on Federal lands, and frequently benefit transportation access in addition to conservation initiatives. One example is the award for Florida's Tamiami Trail project. This project raised the grade of Tamiami Trail above the flood plain while restoring the free flow of water into the northern end of the Everglades National Park. A second example was an award to Zion National Park that resulted in the replacement of an aged, fossil fuel burning bus fleet with clean energy buses including electric vehicle charging stations. This award addressed local park congestion while also yielding a significant environmental, clean air benefit for visitors and surrounding communities.

As noted, half the authorized program is directed toward Tribal transportation facilities that provide access to critical community services within and to Indian country including schools, hospitals, and other vital community services. A recent example includes a project award to the Navajo Nation that improved two roads used by both school buses and tourists traveling to Bears Ears, Four Corners, and Hovenweep National Monuments.

Executive Summary

Bridge Investment Program

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$2.49 billion for a discretionary grant program to assist eligible entities in replacing, rehabilitating, preserving, or protecting highway bridges, including replacing or rehabilitating culverts. The IIJA provided \$2.45 billion for the Bridge Investment Program in FY 2022. This program receives \$1.85 billion from the General Fund in each of FY 2022 and FY 2023 through advance supplemental appropriations. Additionally, this program receives \$600 million and \$640 million from the Highway Trust Fund in FY 2022 and FY 2023, respectively.

What is this program and what does this funding level support?

The Bridge Investment Program complements the Bridge Formula Program, also created by IIJA, to increase investment in bridges that carry public roads and supports the Secretary's priorities of safety, transportation equity, addressing climate change and resilience, improving core assets, and transforming our Nation's transportation infrastructure. This program allows States, metropolitan planning organizations, local governments, Federal land management agencies, Tribal governments, and other eligible entities to apply for funding to complete projects that improve the safety, efficiency, and reliability of the movement of people and freight over bridges and improve the condition of bridges. Additionally, the financial assistance provided by the program leverages and encourages non-Federal contributions from sponsors and stakeholders.

What benefits will be provided to the American public through this request and why is this program necessary?

This program creates opportunities for all levels of government to fund highway bridge projects while leveraging Federal funding. It offers States, metropolitan planning organizations, local governments, Federal land management agencies, Tribal governments, and other eligible entities an ability to advance both large and smaller bridge projects. Projects funded by this program will fix our aging highway bridges, thereby enhancing the safety, capacity, and connectivity of our Nation's transportation infrastructure.

Detailed Justification Bridge Investment Program

What is the request and what funds are currently spent on the program?

FY 2023 – Bridge Investment Program (\$2.49 billion) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Bridge Investment Program	-----	2,447,000	2,487,000
Total	-----	2,447,000	2,487,000

What is this program and what does this funding level support?

The Bridge Investment Program is a discretionary grant program that provides financial assistance to States, metropolitan planning organizations, local governments, political subdivisions of a State or local government, special purpose districts or public authorities with transportation function, Federal land management agencies, and Tribal governments to complete highway bridge projects that align with the program’s statutory goals to:

- Improve the safety, efficiency, and reliability of the movement of people and freight over bridges.
- Improve the condition of bridges by reducing:
 - The number of bridges in poor condition or in fair condition and at risk of falling into poor condition within the next 3 years;
 - The total person miles traveled over bridges in poor condition or in fair condition and at risk of falling into poor condition within the next 3 years;
 - The number of bridges that do not meet current geometric design standards or cannot meet the load and traffic requirements typical of the regional transportation network; and
 - The total person miles traveled over bridges that do not meet current geometric design standards or cannot meet the load and traffic requirements typical of the regional transportation network.
- Provide financial assistance that leverages and encourages non-Federal contributions from sponsors and stakeholders.

The FY 2023 budget request of \$2.49 billion for this program will provide competitive grants for planning, feasibility analysis, and revenue forecasting associated with an application for Bridge Investment Program funding as well as construction grants for two types of projects: large projects (eligible project with total costs greater than \$100 million); and smaller projects. At least 50 percent of program funds made available out of the Highway Trust Fund will be used for large projects, and a portion of funds will be set-aside for Tribal Transportation Facility Bridge projects. For large projects, the Secretary will submit an annual report to Congress on funding

recommendations, based on project evaluations. For smaller projects, evaluations will also be used prior to providing a grant. Considerations for project evaluations will be based on statutory requirements and include whether the project:

- Addresses a need to improve the condition of the bridge;
- Generates safety, environmental, or economic benefits, improved movement of freight and people, or cost savings including reduced maintenance costs and costs avoided by the prevention of closure or reduced use of a bridge;
- Is cost effective based on an analysis of whether the benefits and avoided costs are expected to outweigh the project costs;
- Is supported by other Federal or non-Federal financial commitments or revenues adequate to fund ongoing maintenance and preservation; and
- Is consistent with the objectives of an applicable asset management plan.

What benefits will be provided to the American public through this request and why is this program necessary?

Nationally and regionally significant highway bridge projects are often complex, making them difficult to efficiently implement under other Federal and State funding programs. This program creates opportunities for all levels of government to fund highway bridge projects while leveraging Federal funding. It offers States, metropolitan planning organizations, local governments, Federal land management agencies, Tribal governments, and other eligible entities an ability to advance large and smaller highway bridge projects.

This program will supplement the other FHWA programs in which highway bridge projects are eligible, such as the Bridge Formula Program, the Surface Transportation Block Grant Program and National Highway Performance Program. Long-term commitments to funding these two programs have resulted in the percentage of the deck area of highway bridges classified as in “Poor” condition dropping from 7.8 percent in 2012 to 5.1 percent in 2021 even as the total number of bridges in the Nation's inventory increased from 607,380 to 619,622. With the Bridge Investment Program, additional benefits and improvements to highway bridge conditions are expected. This program is anticipated to have a significant effect on the Nation’s aging highway system. as it provides an opportunity to eligible entities an ability to advance both large and smaller highway bridge projects. These improvements will contribute to enhancing the safety, capacity, and connectivity of our Nation’s transportation infrastructure.

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Executive Summary

Charging and Fueling Infrastructure Grants

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$400 million to fund grants for Alternative Fuel Corridors, including a 50 percent set-aside for Community grants. The IIJA provided \$300 million for this program in FY 2022. This program is funded through the Highway Trust Fund.

What is this program and what does this funding level support?

The Charging and Fueling Infrastructure Grants Program, a new program created by the IIJA, provides grants to support strategic deployment of publicly accessible electric vehicle (EV) charging infrastructure as well as hydrogen, propane and natural gas fueling infrastructure. This grant program complements the National Electric Vehicle Infrastructure (NEVI) formula program, also created by IIJA, which initially focuses on EV charging infrastructure along Interstates and Alternative Fuel Corridors.

Program funds will be divided between grants for charging and fueling along travel corridors and grants for infrastructure in community locations. Fifty percent of total program funds will be made available for charging and fueling infrastructure along designated Alternative Fuel Corridors.

The other fifty percent of the total program funds will be made available each fiscal year for Community Grants to install EV charging and alternative fuel in locations on public roads or other publicly accessible locations, such as schools, parks, and in publicly accessible parking facilities owned or managed by a private entity. These Community Grants will be prioritized for rural areas, low-and moderate-income neighborhoods, and communities with low ratios of private parking, or high ratios of multiunit dwellings.

What benefits will be provided to the American public through this request and why is this program necessary?

The discretionary Charging and Fueling Infrastructure Grants Program provides a mechanism to increase access to necessary infrastructure by accelerating EV charging and alternative fuel infrastructure deployments both along travel corridors and in community locations. It reflects the Administration's commitment to combatting climate change by facilitating increased adoption of lower emission vehicles.

The projects funded by this program will support lower-emission charging and fueling infrastructure deployment to meet Administration priorities such as supporting rural communities, building resilient infrastructure, and increasing access in underserved and overburdened communities both along designated Alternative Fuel Corridors and in strategic publicly accessible locations within communities.

Detailed Justification

Charging and Fueling Infrastructure Grants

What is the request and what funds are currently spent on the program?

FY 2023 – Charging and Fueling Infrastructure Grants (\$400 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Charging and Fueling Infrastructure Grants	-----	300,000	400,000
Total	-----	300,000	400,000

What is this program and what does this funding level support?

The Charging and Fueling Infrastructure Grants Program provides grants to support strategic deployment of publicly accessible electric vehicle (EV) charging infrastructure as well as hydrogen, propane and natural gas fueling infrastructure.

Program funds will be divided between grants for charging and fueling along travel corridors and grants for infrastructure in community locations. Fifty percent of total program funds will be made available for charging and fueling infrastructure along designated Alternative Fuel Corridors. The other fifty percent of the total program funds will be made available each fiscal year for Community Grants to install EV charging and alternative fuel in locations on public roads or other publicly accessible locations, such as schools, parks, and in publicly accessible parking facilities owned or managed by a private entity. These Community Grants will be prioritized for rural areas, low-and moderate-income neighborhoods, and communities with low ratios of private parking, or high ratios of multiunit dwellings.

Program funding will support grantees through a wide range of project eligibilities to include development phase activities, acquisition/installation, operations support, traffic control devices, and education/community engagement activities. Grantees are also permitted to enter into revenue-sharing agreements with contracted private entities if the revenue is used for purposes otherwise eligible through the program.

The Federal cost-share for a project may not exceed 80 percent. Further, as a condition of contracting with an eligible entity, a private entity must agree to pay the non-Federal share of project costs.

This program directly addresses several of the Secretary’s key priorities. Criteria to assess the Corridor-based charging grant applications will specifically address economic strength and global competitiveness. Corridor-based charging grant applications will be assessed based on how they meet current/anticipated market demands while supporting a long-term competitive market for charging and fueling infrastructure providers. The Community grant portion of the program addresses equity by specifically prioritizing projects that expand access to lower

emission charging and fueling infrastructure within rural areas, low- and moderate-income neighborhoods, and communities with more difficult access to parking.

What benefits will be provided to the American public through this request and why is this program necessary?

By expanding infrastructure which improves access to/adoption of lower and zero emission vehicles, this program addresses needs that are represented by two of the Secretary's key priorities: climate and sustainability; and the transformation of our existing transportation network into one that meets the future needs of travel and transportation. The transportation sector has become the largest source of U.S. greenhouse gas emissions (GHG). Reducing emissions from transportation through increased adoption of low-emission vehicles is consistent with Executive Order 13990¹⁶, which includes a national policy objective to reduce GHG emissions, and Executive Order 14008¹⁷, which recommits the U.S. to the Paris Agreement. EVs and alternative fuel vehicles have been identified as cleaner, more equitable, more affordable, and represent an opportunity to support good-paying, union jobs¹⁸.

The Charging and Fueling Infrastructure Grants Program will increase the amount of available low and zero emission charging and fueling infrastructure in key locations, thus overcoming a challenge for the American public in accessing charging/fueling infrastructure. The Corridor charging components of the program will strategically deploy publicly accessible EV charging infrastructure and hydrogen, propane, and natural gas fueling infrastructure along designated Alternative Fuel Corridors and in certain other locations that will be accessible to all drivers of electric vehicles, hydrogen vehicles, propane vehicles, and natural gas vehicles.. The Community grants will strategically deploy publicly accessible EV charging infrastructure and hydrogen, propane, and natural gas fueling infrastructure within communities where people live and work, with a particular focus on community locations where charging and fueling investments would otherwise be unlikely or delayed.

¹⁶ [Federal Register: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government](#)

¹⁷ Section 219 of Executive Order 14008, Tackling the Climate Crisis at Home and Abroad and OMB, "Interim Implementation Guidance for the Justice40 Initiative," M-21-28 (July 20, 2021) available at <https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf>

¹⁸ [FACT SHEET: The Biden-Harris Electric Vehicle Charging Action Plan | The White House](#)

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Executive Summary

Congestion Relief Program

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$50 million to provide competitive grants to States, local governments, and metropolitan planning organizations (MPOs), for projects in large urbanized areas to advance innovative, integrated, and multimodal solutions to mitigate congestion in the most densely-populated metropolitan areas of the United States. The IIJA provided \$50 million in FY 2022 for the Congestion Relief Program. This program is funded through the Highway Trust Fund.

What is this program and what does this funding level support?

The Congestion Relief Program will provide competitive grants to States, local governments, and MPOs, for projects in large urbanized areas to advance innovative, integrated, and multimodal solutions to mitigate congestion in the most densely populated metropolitan areas of the United States.

States and MPOs will compete for grants for eligible projects within urbanized areas containing populations of more than 1,000,000 individuals. Priority will be given to eligible projects located in urbanized areas that are experiencing high degrees of recurring congestion.

Eligible projects will include: the deployment and operation of mobility services; integrated congestion management systems; systems that implement or enforce high occupancy vehicle toll lanes, cordon pricing, parking pricing, or congestion pricing; and incentive programs that encourage travelers to carpool or use non-highway travel modes.

In addition, the Congestion Relief Program permits the Secretary to allow the use of tolls on the Interstate System as part of a project carried out with a program grant, subject to certain requirements. The Secretary may approve the use of tolls on the Interstate System under the program in up to 10 urbanized areas.

What benefits will be provided to the American public through this request and why is this program necessary?

The goals of the program are to reduce congestion in the most densely-populated metropolitan areas of the United States along with the economic, social and environmental costs associated with that congestion, and to optimize use of existing highway and roadway capacity by encouraging travelers to use transit and mobility systems that provide alternatives to driving in congested conditions.

Detailed Justification Congestion Relief Program

What is the request and what funds are currently spent on the program?

FY 2023 – Congestion Relief Program (\$50 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Congestion Relief Program	-----	50,000	50,000
Total	-----	50,000	50,000

What is this program and what does this funding level support?

The Congestion Relief Program will provide competitive grants to States, local governments, and MPOs, for projects in large urbanized areas to advance innovative, integrated, and multimodal solutions to mitigate congestion in the most densely populated metropolitan areas of the United States. Priority will be given to eligible projects located in urbanized areas containing populations of more than 1,000,000 individuals that are experiencing high degrees of recurrent congestion. The Federal cost-share will not exceed 80 percent of the total cost of a project.

In addition, the Congestion Relief Program permits the Secretary to allow the use of tolls on the Interstate System as part of a project carried out with a program grant, subject to certain requirements. The Secretary may approve the use of tolls on the Interstate System under the program for up to 10 urbanized areas.

Eligible projects will include: the deployment and operation of mobility services; integrated congestion management systems; systems that implement or enforce high occupancy vehicle toll lanes, cordon pricing, parking pricing, or congestion pricing; and incentive programs that encourage travelers to carpool or use non-highway travel modes.

The “integrated congestion management systems” supported by the program are a system for the integration of management and operations of a regional transportation system that includes, at a minimum, traffic incident management, work zone management, traffic signal timing, managed lanes, real-time traveler information, and active traffic management, in order to maximize the capacity of all facilities and modes across the applicable region.

What benefits will be provided to the American public through this request and why is this program necessary?

The goals of the program are to reduce congestion in the most densely-populated metropolitan areas of the United States along with the economic, social and environmental costs associated with that congestion, and to optimize use of existing highway and roadway capacity by encouraging travelers to use transit and mobility systems that provide alternatives to driving in congested conditions.

The program aims to improve intermodal integration with highways, highway operations, and highway performance; and reduce or shift highway users to off-peak travel times or to non-highway travel modes during peak travel times.

In addition, projects under the program shall include, if appropriate, an analysis of the potential effects of the project on low-income drivers and may include mitigation measures to deal with any potential adverse financial effects.

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Executive Summary

Infrastructure for Rebuilding America

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$1.64 billion for a discretionary grant program to support highway and freight projects of national or regional significance. The FY 2021 enacted level is \$1.0 billion. The IIJA provided \$1.64 billion in FY 2022 for this program. In both FY 2022 and FY 2023, this program is comprised of \$1.0 billion and \$640 million from the Highway Trust Fund and the General Fund through advance supplemental appropriations, respectively.

What is this program and what does this funding level support?

The Infrastructure for Rebuilding America discretionary grant program (INFRA) supports the Secretary's priorities by advancing nationally significant multimodal freight and highway projects to improve the safety, efficiency, and reliability of the movement of freight and people. Beginning in 2021, the Department introduced two new key objectives to align with the Administration's priorities: Addressing Climate Change and Environmental Justice Impacts and Advancing Racial Equity and Reducing Barriers to Opportunity.

This 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 FY 2023 budget request of \$1.64 billion for this program will advance critical highway and bridge projects on the National Highway Freight Network (NHFN) and the National Highway System (NHS) that improve the safe, secure, and efficient movement of people and goods throughout the U.S., and improve the national economy. The program also supports freight and highway projects that are multimodal, multi-jurisdictional, complex, or involve partnership with the private sector – projects which are difficult to develop and implement using other Federal and State funding programs.

What benefits will be provided to the American public through this request and why is this program necessary?

This program, which advances nationally significant multimodal freight and highway projects, offers public-sector agencies and their private-sector partners a path forward to make real improvements in highway and freight infrastructure and operations that will leverage Federal investment. Projects supported by this program provide public benefits including improved national and regional economic vitality, innovation, and safety in both rural and urban areas.

The Department's approach for implementing INFRA addresses critical issues facing the Nation's highways, bridges, rail, and port infrastructure. Projects already funded by this program are fixing aging infrastructure and providing enhanced safety, capacity, and connectivity for highways and the freight system. This program creates opportunities for all levels of government and the private sector to partner in efforts to fund infrastructure, increasing accountability across a broader range of system providers and operators and leveraging Federal funding. The program also encourages innovative approaches to improve the necessary processes for building significant projects.

Detailed Justification Infrastructure for Rebuilding America

What is the request and what funds are currently spent on the program?

FY 2023 – Infrastructure for Rebuilding America (\$1.64 billion) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Infrastructure for Rebuilding America	1,000,000	1,640,000	1,640,000
Total	1,000,000	1,640,000	1,640,000

What is this program and what does this funding level support?

INFRA is a discretionary grant program that provides financial assistance to States, metropolitan planning organizations, Tribal governments, special-purpose districts, multistate corridor organizations and port authorities with a transportation function, and local governments to complete projects that align with the program’s statutory goals to:

- Improve safety, efficiency, and reliability of the movement of freight and people;
- Generate national or regional economic benefits and increase the global economic competitiveness of the U.S.;
- Reduce highway congestion and bottlenecks;
- Improve connectivity between modes of freight transportation;
- Enhance the resiliency of critical highway infrastructure and help protect the environment;
- Improve roadways vital to national energy security; and
- Address the impact of population growth on the movement of people and freight.

FY 2023 funds will be used to make awards that increase the impact of projects by leveraging capital and allowing innovation in the project delivery and permitting processes, including public-private partnerships. INFRA promotes innovative safety solutions that will improve the transportation system. Additionally, INFRA also targets performance and accountability in project delivery and operations.

The program is anticipated to have a significant effect on the ability of our Nation to meet the growth in freight and passenger demand in a responsible, effective, and safer way. Nationally and regionally significant highway and freight projects are often multimodal, multi-jurisdictional, complex, or involve partnership with the private sector, making them difficult to efficiently implement under other Federal and State funding programs.

What benefits will be provided to the American public through this request and why is this program necessary?

To maximize the value of INFRA funds, the Department is focusing this competitive grant program on transportation infrastructure projects that align with the Secretary's priorities. The six key objectives of the INFRA program are as follows:

- *Supporting Economic Vitality* – A strong transportation network is critical to the functioning and growth of the American economy. The Nation's industry depends on the transportation network to move the goods that it produces and facilitate the movements of the workers who are responsible for that production. When the Nation's highways, railways, and ports function well, that infrastructure connects people to jobs, increases the efficiency of delivering goods and thereby cuts the costs of doing business, reduces the burden of commuting, and improves overall well-being. Infrastructure investment also provides opportunities for workers to find good-paying jobs with the choice to join a union and supports American industry through the application of domestic preference requirements. Projects that use project labor agreements and deploy local hiring provisions also contribute to economic vitality. This objective aligns with the Department's strategic goals of (1) investing in infrastructure to ensure mobility accessibility and to stimulate economic growth, productivity, and competitiveness for American workers and businesses and (2) reducing transportation-related fatalities and serious injuries across the transportation system.
- *Climate Change and Environmental Justice* – The Department seeks to select projects that have considered climate change and environmental justice in the planning stage and were designed with specific elements to address climate change impacts. Projects should directly support Climate Action Plans or apply environmental justice screening tools in the planning stage. Projects should include components that reduce emissions, promote energy efficiency, incorporate electrification or zero emission vehicle infrastructure, increase resiliency, and recycle or redevelop existing infrastructure.
- *Racial Equity and Barriers to Opportunity* – The Department seeks to use the INFRA program to encourage racial equity in two areas: (1) Planning and policies related to racial equity and barriers to opportunity; and (2) project investments that either proactively address racial equity and barriers to opportunity, including automobile dependence as a form of barrier, or redress prior inequities and barriers to opportunity.
- *Leveraging of Federal Funding* – The Department is committed to supporting increased investment in infrastructure from all levels of government. The Department continues to seek to maximize all available Federal and non-Federal funding for investment in infrastructure as a critical contribution to the economy.
- *Innovation* – The Department seeks to use the INFRA program to encourage innovation in three areas, to build transformative projects: (1) the deployment of innovative technology and expanded access to broadband; (2) use of innovative permitting,

contracting, and other project delivery practices; and (3) innovative financing. This objective supports the Department's strategic goal of innovation, with the potential for significantly enhancing the safety, efficiency, and performance of the transportation network.

- *Performance and Accountability* – The Department seeks to increase project sponsor accountability and performance by evaluating each INFRA applicant's plans to address the full lifecycle costs of their project and willingness to condition award funding on achieving specific Departmental goals.

INFRA grants advance projects that support strong economic growth and make use of project delivery and financing innovations. For example, the SR 57/60 Confluence Chokepoint Relief Program will construct a series of improvements aimed at improving traffic flow in the confluence area (1.3 miles) between the SR-57 and SR-60 freeways in Los Angeles County. The project supports economic vitality from travel time savings and improved safety by improving traffic flow in a congested confluence area between two major freeways by constructing bypass off-ramps, connectors, and overcrossings. The project provides innovative financing for approximately half of the total funding, including a Regional Transportation Mitigation Fund.

Another example of an FY 2021 INFRA project is the West Seattle Corridor Bridges Rehabilitation and Strengthening project. The City of Seattle was awarded \$11,250,600 to make significant bridge repairs on the West Seattle High-Rise bridge that is currently closed due to structural deficiencies, as well as the Spokane Street Swing Bridge (“low bridge”) running adjacent to the High-Rise bridge. The project supports economic vitality by restoring a bridge on an essential route for freight and passenger vehicles that had closed to all traffic in early 2020 due to growing cracks in its concrete structure. Currently, passenger vehicle traffic requires an average five-mile detour, while trucks and buses use the low bridge that runs parallel with the High-Rise bridge, causing wear and structural damage on the low bridge that this project would also address. Planning was informed by community outreach and task force, the Seattle Race and Social Justice Initiative, and applying a Racial Equity Toolkit. Further, the project proposes using Seattle’s Priority Hire Program, an innovative project delivery strategy, that prioritizes the hiring of local workers living in economically distressed communities.

The necessity of this program is evidenced by the large number and value of applications received during the solicitations from FY 2016 to FY 2021. In the latest round of the INFRA program for FY 2021, the Department received approximately 158 eligible grant applications requesting more than \$6.8 billion in grant funding, more than seven times the awarded amount of \$905 million.

Executive Summary

Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) Discretionary Program

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$250 million for competitive grants to eligible entities for activities to assess and address infrastructure vulnerabilities to current and future weather events, including natural disasters and climate change. The IIJA provided \$250 million for this program in FY 2022. This program is funded through the Highway Trust Fund.

What is this program and what does this funding level support?

The Promoting Resilient Operations for Transformative, Efficient, and Cost-savings Transportation (PROTECT) Discretionary Program, a new program created by the IIJA, complements the PROTECT formula program which is similarly focused on protecting surface transportation assets by making them more resilient to current and future weather events and natural disasters. The program will award competitive grants to States, metropolitan planning organizations, local governments, Tribes, and other recipients for projects in four areas: Planning Grants, Resilience Improvement Grants, Community Resilience and Evacuation Route Grants, and At-Risk Coastal Infrastructure Grants. Eligible PROTECT Discretionary program projects include highways, public transportation facilities, intercity rail passenger transportation, and ports.

What benefits will be provided to the American public through this request and why is this program necessary?

PROTECT Discretionary Program activities will protect surface transportation assets by making them more resilient to current and future weather events and natural disasters. For example, resilience improvements and strategies will allow for the continued operation or rapid recovery of surface transportation systems. Coastal infrastructure will be better protected from the long-term risk of sea level rise. Natural infrastructure can be utilized to protect and enhance surface transportation assets while improving ecosystem conditions.

The PROTECT Discretionary Program directly addresses the Secretary's key priority of Resilience and Addressing Climate Change and will support the U.S. Department of Transportation Climate Action Plan: Revitalizing Efforts to Bolster Adaptation & Increase Resilience. In addition, the PROTECT Discretionary Program advances Executive Order 14008, Tackling the Climate Crisis at Home and Abroad, and will allow the United States to move quickly to improve infrastructure resilience against the impacts of climate change that are already manifested and will continue to intensify according to current trajectories.

Detailed Justification PROTECT Discretionary Program

What is the request and what funds are currently spent on the program?

FY 2023 –PROTECT Discretionary Program (\$250 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
PROTECT Discretionary Grants	-----	250,000	250,000
Total	-----	250,000	250,000

What is this program and what does this funding level support?

The PROTECT Discretionary Program will award competitive grants to eligible entities for activities that enable communities to assess and address transportation system vulnerabilities to current and future weather events and other natural disasters and changing conditions due to climate change, including sea level rise. Eligible projects will include highway and bridges, public transportation facilities, intercity rail, and port facilities including intermodal connectors.

PROTECT Discretionary Program funds can be used for four types of projects:

- Planning Grants, including projects to develop a resilience improvement plan; resilience planning, predesign, design, or the development of data tools; technical capacity building; and evacuation planning and preparation.
- Resilience Improvement Grants, including projects to improve resilience of existing surface transportation infrastructure to weather events, climate change, wildfires, and other natural disasters; natural or nature-based infrastructure; and flood protection measures, raising or lengthening bridges, or slope stabilization work.
- Community Resilience and Evacuation Routes Grants, including improving evacuation routes to meet future needs and access critical destinations, and support for emergency and recovery activities.
- At-Risk Coastal Infrastructure Grants, including work to make coastal highways and culverts more resilient to flooding, wave action, or sea level rise, to protect public safety and minimize life cycle costs. (For these grants, eligible entities are expanded to include the United States Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.)

Eligible project activities include project development, design, property acquisition, construction/reconstruction and rehabilitation, and environmental mitigation. PROTECT Discretionary Program funds also support planning activities, including systems level

assessments of vulnerability to future climate and other natural hazards, and current and long-term planning activities and investments to promote resilience.

What benefits will be provided to the American public through this request and why is this program necessary?

The PROTECT Discretionary Program is the first Federal-aid highways discretionary grant program that focuses work and resources on making the highway system and surface transportation more resilient to natural hazards, including climate change. Dedicated grant funding for resilience projects is needed to ensure that projects are built to withstand current weather impacts and especially future changes in climate.

The PROTECT Discretionary Program directly addresses the Secretary's key priority of Resilience and Addressing Climate Change and will support the U.S. Department of Transportation Climate Action Plan: Revitalizing Efforts to Bolster Adaptation & Increase Resilience. In addition, the PROTECT Discretionary Program will advance Executive Order 14008, Tackling the Climate Crisis at Home and Abroad, and will allow the United States to move quickly to build resilience against the impacts of climate change that are already manifested and will continue to intensify according to current trajectories.

Projects funded by the PROTECT Discretionary Program will be more resilient to future threats and provide a range of benefits to the public. While coastal highways are exposed to storm surge, sea level rise and high tide flooding, inland areas are also vulnerable to future changes in climate. Reductions in flooding, landslides and storm surge impacts on highway infrastructure and improved routes to support evacuations and relief efforts after events, for example, will improve the safety of the traveling public and our communities, support freight movements, and facilitate economic growth. The PROTECT Discretionary Programs also supports improved regional planning, programming, and project level analysis that address future risks--not just historic risks--to ensure that communities can minimize life cycle costs and maximize benefits resulting from building, operating and maintaining transportation systems.

Climate change presents a significant and growing risk to the safety, effectiveness, equity and sustainability of our transportation infrastructure and the communities it serves. The Protect Discretionary Program will support projects to address the climate change crisis, thereby making our transportation more resilient to climate change impacts.

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Executive Summary

Reduction of Truck Emissions at Port Facilities

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$80 million for discretionary grants that reduce port-related emissions from idling trucks. The IIJA provided \$80 million for this program in FY 2022. In both FY 2022 and FY 2023, \$50 million and \$30 million are provided from the Highway Trust Fund and the General Fund through advance supplemental appropriations, respectively.

What is this program and what does this funding level support?

The Reduction of Truck Emissions at Port Facilities Program will fund projects through competitive grants to reduce truck-related emissions at port facilities. Grantees will test, evaluate, and deploy innovative solutions such as port electrification and other emerging technologies and strategies.

What benefits will be provided to the American public through this request and why is this program necessary?

Port operations generate a significant amount of truck traffic. Commercial motor vehicles serve the port, picking up and dropping off freight shipments, and operating in service on port property. Trucks queue at port gates prior to port openings for credential checks and back-ups form due to heavy demand. There may also be trucks that need to stay at ports, or intermodal port facilities, to meet Federal hours of service requirements, for refueling, and for other driver or vehicle service needs.

This program can demonstrate strategies, designs, operational improvements, and technologies to reduce greenhouse gas emissions linked to commercial trucking activities at ports and intermodal port facilities. It offers an opportunity to explore innovative and alternative port infrastructure projects and streamline operations for improved public and environmental health. These solutions will leverage Federal investment in emissions reduction.

The program will also yield best practices that can be shared and implemented at ports and other areas of concentrated commercial motor vehicle activity nationwide. Projects supported by this program will provide public benefits to the port workforce and surrounding port community including reduced air pollution and a possible reduction in traffic congestion or noise. Truck parking solutions related to the provision of auxiliary services or vehicle charging may also reduce the incidence of trucks parking in unsafe locations or unofficial areas such as port neighborhoods.

Detailed Justification

Reduction of Truck Emissions at Port Facilities

What is the request and what funds are currently spent on the program?

FY 2023 – Reduction of Truck Emissions at Port Facilities (\$80 million) ((\$000))

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Reduction of Truck Emissions at Port Facilities	-----	80,000	80,000
Total	-----	80,000	80,000

What is this program and what does this funding level support?

The Reduction of Truck Emissions at Port Facilities Program will fund projects through competitive grants that reduce truck-related emissions at port facilities. Grantees will test, evaluate, and deploy innovative solutions such as port electrification and other emerging technologies and strategies. The program also supports studies and provides for a Report to Congress after all the projects are completed. Grants awarded will not exceed an 80 percent Federal share.

What benefits will be provided to the American public through this request and why is this program necessary?

Community health and environmental justice consequences of air pollution resulting from heavy-duty diesel trucks concentrated near ports can be substantial. A study of impacts from growth at the ports of Los Angeles and Long Beach, California¹⁹ found that vehicle-related air pollutants and their related health impacts, including the frequency of respiratory ailments and mortality, is highly localized within approximately 100 to 400 meters downwind. Emissions from total shipping (i.e., produced by international, domestic, and fishing) has risen 9.6 percent from 2012 to 2018, and carbon dioxide (CO₂) emissions grew 9.3 percent.²⁰ Port traffic emissions will increase by 90 to 130 percent before 2050 against 2008 values.

This program will address emissions related to trucking operations and provide a framework for environmentally sound port expansion and growth. The Department will encourage projects that improve workforce conditions, the public and environmental health of nearby communities, and support growth and resiliency. Projects could be used to implement critical infrastructure and operations programs. This program offers an opportunity to explore innovative port infrastructure projects and streamlined operations for improved public and environmental health, such as charging facilities, staging/parking improvements, and port electrification. These solutions will leverage Federal investment in emissions reduction and yield best practices for other ports and areas of concentrated truck activity nationwide.

¹⁹ *Transportation Research Record: Journal of the Transportation Research Board*, No. 2067, Transportation Research Board of the National Academies, Washington, D.C., 2008, pp. 38–46

²⁰ Fourth International Maritime Organization Green House Gases Study of 2020

Projects supported by this program will provide benefits to the port workforce and surrounding port community, including reduced air pollution and a possible reduction in traffic congestion or noise. Truck parking solutions related to the provision of auxiliary services or vehicle charging may also reduce the incidence of trucks parking in unsafe or unofficial areas.

To maximize the scope and value of this competitive grant program, consideration will be given to projects that align with the following departmental priorities:

Addressing Climate Change and Environmental Justice Impacts – In accordance with the Justice40 Initiative (Executive Order 14008, “Tackling the Climate Crisis at Home and Abroad”), this program seeks projects that integrate climate change and environmental justice concerns in the planning stage and are designed with specific elements to address climate change impacts. Such elements may include improvements to the flow of heavy-duty diesel truck traffic through adjacent communities, the incorporation of Climate Action Plans or applying environmental justice screening tools in the planning stage. Projects that reduce emissions, promote energy efficiency, incorporate electrification or zero emission vehicle infrastructure, increase resiliency, and recycle or redevelop existing infrastructure are examples that may address this initiative.

Support for National or Regional Economic Vitality – Investments in infrastructure have a positive effect on the national economy. Macroeconomic and microeconomic modeling indicates that more and better roads reduce the cost of production in most industries at a given level of output by making it faster and cheaper to obtain parts and raw materials and to get finished products to market. Moreover, lower costs lead to lower prices and greater demand, which translate to a growth in output.²¹ An efficient, reliable transportation system enables economic competitiveness vital to maintaining economic health and supporting employment for the Nation, States, and localities.

Potential for Innovation – The Department seeks to use the Port Emissions program to build transformative projects and encourage innovation in three areas: the deployment of innovative technology and expanded access to broadband; the use of innovative permitting, contracting, and other project delivery practices; and innovative financing.

²¹ Freight Transportation Movements and the Economy, FHWA

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Executive Summary

Rural Surface Transportation Grant Program

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$350 million for competitive grants to eligible entities to improve and expand the surface transportation infrastructure in rural areas. The IIJA provided \$300 million for this program in FY 2022. This program is funded through the Highway Trust Fund.

What is this program and what does this funding level support?

The Rural Surface Transportation Grant Program will provide competitive grants to eligible entities to improve and expand the surface transportation infrastructure in rural areas. The goals of the program are to increase connectivity, improve safety and reliability of the movement of people and freight, generate regional economic growth, and improve quality of life.

The Federal share will be at least 80 percent, and up to 100 percent for projects on the Appalachian Development Highway System (ADHS), or for projects that address a surface transportation infrastructure need identified for the Denali access system program. At least 25 percent of the funds will be reserved for projects that further the completion of designated routes of the ADHS. The program will also set aside 15 percent of the funding for eligible projects in States with higher than average rural roadway lane departure fatalities. At least 90 percent of rural grant amounts must be for projects of at least \$25 million.

What benefits will be provided to the American public through this request and why is this program necessary?

Rural transportation networks are critically important for domestic production and export of agriculture, mining, and energy commodities, as well as the quality of life for all Americans. Two-thirds of rail freight originates in rural areas, and nearly half of all truck vehicle-miles-traveled (VMT) occur on rural roads.

This program provides grants for rural areas to address transportation gaps and challenges. Addressing these challenges will facilitate supply chains and getting goods to market, providing economic benefits both to these regions and to the entire U.S. economy. It will also help to address safety challenges disproportionately faced by rural communities and travelers.

Detailed Justification Rural Surface Transportation Grant Program

What is the request and what funds are currently spent on the program?

FY 2023 – Rural Surface Transportation Grant Program (\$350 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Rural Surface Transportation Grant Program	-----	300,000	350,000
Total	-----	300,000	350,000

What is this program and what does this funding level support?

The Rural Surface Transportation Grant Program will provide competitive grants to eligible entities to improve and expand the surface transportation infrastructure in rural areas. The goals of the program are to increase connectivity, improve safety and reliability of the movement of people and freight, generate regional economic growth, and improve quality of life.

The Federal share will be at least 80 percent, and up to 100 percent for projects on the ADHS or that address a surface transportation infrastructure need identified for the Denali access system program. At least 25 percent of the funds will be reserved for projects that further the completion of designated routes of the ADHS. The program will also set aside 15 percent of the funding for eligible projects in States with higher than average rural roadway lane departure fatalities. At least 90 percent of rural grant amounts must be for projects of at least \$25 million.

This program provides grants for rural areas to address transportation gaps and challenges. Addressing these challenges will facilitate supply chains and getting goods to market, providing economic benefits both to these regions and to the entire U.S. economy. It will also help to address safety challenges disproportionately faced by rural communities and travelers. Eligible entities are States, regional transportation planning organizations, local governments, Tribal governments or consortia of Tribal governments, and multijurisdictional groups comprising the previously listed entities.

Eligible projects include:

- A highway, bridge, or tunnel project eligible under the National Highway Performance Program, the Surface Transportation Block Grant, and the Tribal Transportation Program; or a highway freight project eligible under the National Highway Freight Program.
- A highway safety improvement project, including a project to improve a high-risk rural road as defined by the Highway Safety Improvement Program.

- A project on a publicly owned highway or bridge that provides or increases access to an agricultural, commercial, energy, or intermodal facility that supports the economy of a rural area.
- A project to develop, establish, or maintain an integrated mobility management system, a transportation demand management system, or on-demand mobility services.

Rural Surface Transportation Grant Program funding will focus on supporting projects that improve safety, economic strength and global competitiveness, equity, and climate and sustainability consistent with the Department's strategic goals. It will also be executed consistently with the priorities in Executive Order 14052, *Implementation of the Infrastructure Investments and Jobs Act* (86 FR 64355), which are to invest efficiently and equitably, promote the competitiveness of the U.S. economy, improve job opportunities by focusing on high labor standards, strengthen infrastructure resilience to all hazards including climate change, and to effectively coordinate with State, local, Tribal, and territorial government partners.

What benefits will be provided to the American public through this request and why is this program necessary?

This program provides grants for rural areas to address transportation gaps and challenges. Addressing these challenges will facilitate supply chains and getting goods to market, providing economic benefits both to these regions and to the entire U.S. economy. It will also help to address safety challenges disproportionately faced by rural communities and travelers. Rural roads account for 68 percent of total lane miles in the United States and play a significant role in our Nation's transportation system, safely moving people and goods to their destinations. However, rural areas face several transportation challenges relating to safety, usage, and infrastructure condition.

While only **19 percent of the U.S. population lives in rural areas**, 45 percent of all roadway fatalities and 34 percent of all public highway-rail grade crossing fatalities occur on rural roads, and the **fatality rate on rural roads is 2 times higher** than on urban roads²². This program will help address this safety issue.

Rural transportation networks are critically important for domestic production and export of agriculture, mining, and energy commodities, as well as the quality of life for all Americans. Two-thirds of rail freight originates in rural areas, and nearly half of all truck VMT occur on rural roads. Ninety percent of posted (limited weight) bridges are in rural areas and heavy trucks cannot cross posted bridges – to find a safe bridge, heavy trucks hauling in rural areas must traverse three-times the distance as in metro areas.²³

²² U.S. Department of Transportation, Federal Highway Administration, Annual Vehicle Distance Traveled in Miles and Related Data, 2017-2018; National Highway Traffic Safety Administration, Fatality Analysis Reporting System, 2018.

²³ U.S. Department of Transportation, Federal Highway Administration, Office of Highway Information Management, Highway Statistics, table HM-60, available at <http://www.fhwa.dot.gov/policyinformation/statistics.cfm>

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Executive Summary

Federal Allocation Programs

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$528 million for the Federal Allocation Programs. The IJA provided \$521 million for these programs in FY 2022. These programs are funded through the Highway Trust Fund, with the exception of \$68 million from the General Fund through advance supplemental appropriations in both FY 2022 and FY 2023 for the Construction of Ferry Boats and Ferry Terminal Facilities.

What is this program and what does this funding level support?

This program category contains six separate programs that have had a long-standing, positive impact on our Nation's highway infrastructure.

What benefits will be provided to the American public through this request and why is this program necessary?

- The **Construction of Ferry Boats and Ferry Terminal Facilities** program provides funding for ferry services which are important links in the network of Federal-aid highways, and in many cases, are the only reasonable form of transportation.
- The **Disadvantaged Business Enterprise** program benefits the American public by assisting small and disadvantaged firms with building capacity and improving their ability to compete for Federal-aid highway contracts. Moreover, a healthy small business sector creates jobs, stimulates innovation, and provides employment opportunities for many people, including women and minorities.
- **Emergency Relief** program funds are critical to maintaining mobility and safety for the American public following a disaster. The ER program provides funding to States, Federal Land Management Agencies, and Tribal governments for the repair and reconstruction of Federal-aid highways and roads on Federal lands following a disaster.
- The **Highway Use Tax Evasion Projects** program provides funding to the Internal Revenue Service and the States to carry out intergovernmental enforcement efforts, along with training and research, to reduce evasion of payment of motor fuel and other highway use taxes, which are the principal sources for Federal and State highway funding.
- The **On-the-Job Training** program helps develop the capacity of the Nation's current and future highway construction industry workforce by providing the development and diversity of skilled labor. A skilled workforce is vital to constructing and maintaining a safe and efficient transportation system.
- The **Territorial and Puerto Rico Highway Program** has provided for the construction of critical infrastructure in Puerto Rico and the four territories. The program stimulates local economic growth, which generates a positive impact on a national level. It also provides critical infrastructure that serves key facilities with a strategic role for national defense.

Detailed Justification

Construction of Ferry Boats and Ferry Terminal Facilities

What is the request and what funds are currently spent on the program?

FY 2023 – Construction of Ferry Boats and Ferry Terminal Facilities (\$180 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Federal Allocation Programs			
Construction of Ferry Boats and Ferry Terminal Facilities	80,000	178,400	180,400
Disadvantaged Business Enterprise ^{1/}	10,000	10,000	10,000
Emergency Relief (exempt from obligation limitation) ^{2/}	100,000	100,000	100,000
Highway Use Tax Evasion Projects ^{1/}	4,000	4,000	4,000
On-the-Job Training ^{1/}	10,000	10,000	10,000
Territorial and Puerto Rico Highway Program	200,000	219,000	224,000
Total	404,000	521,400	528,400

1/ Programs funded as set-asides from Administrative Expenses.

2/ In FY 2021, FY 2022, and FY 2023, \$5.7 million is sequestered from Emergency Relief each year (table does not reflect sequestration).

What is this program and what does this funding level support?

The FY 2023 budget request of \$180 million is required to maintain and improve important transportation connections on the Federal-aid highway system, as well as provide access to remote areas where other modes of transportation may not be available for passengers and vehicles.

The Construction of Ferry Boats and Ferry Terminal Facilities (FBP) program provides funding to construct ferry boats and ferry terminal facilities. Funds are proportionally distributed to eligible ferry operations, based on the number of ferry passengers, the number of vehicles carried, and the total route miles serviced.

Ferry services are important links in the network of Federal-aid highways. Often ferries carry significant numbers of passengers and vehicles. In many cases, they are the only reasonable form of transportation, particularly on coastal islands which have year-round residents.

What benefits will be provided to the American public through this request and why is this program necessary?

The Construction of Ferry Boats and Ferry Terminal Facilities program addresses mobility and access in urban and rural areas by providing valuable assistance to help States and other entities replace or acquire new ferry boats; replace propulsion systems with newer cleaner and more energy-efficient power plants; update navigational control systems; construct new terminals; improve access for the disabled; and replace and construct new docking facilities. Through these activities, the program supports the Secretary's priorities by providing vital connections on the network of Federal-aid highways, increasing mobility and safety particularly for citizens for

which ferry services are the only reasonable transportation option. To date, this program has made available funding for 119 ferry operations in 37 States and 2 U.S. territories.

Detailed Justification

Disadvantaged Business Enterprise Supportive Services Program

What is the request and what funds are currently spent on the program?

FY 2023 – Disadvantaged Business Enterprise Supportive Services (\$10 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Federal Allocation Programs			
Construction of Ferry Boats and Ferry Terminal Facilities	80,000	178,400	180,400
Disadvantaged Business Enterprise ^{1/}	10,000	10,000	10,000
Emergency Relief (exempt from obligation limitation) ^{2/}	100,000	100,000	100,000
Highway Use Tax Evasion Projects ^{1/}	4,000	4,000	4,000
On-the-Job Training ^{1/}	10,000	10,000	10,000
Territorial and Puerto Rico Highway Program	200,000	219,000	224,000
Total	404,000	521,400	528,400

1/ Programs funded as set-asides from Administrative Expenses.

2/ In FY 2021, FY 2022, and FY 2023, \$5.7 million is sequestered from Emergency Relief each year (table does not reflect sequestration).

What is this program and what does this funding level support?

The FY 2023 budget requests \$10 million for the Disadvantaged Business Enterprise Supportive Services (DBE/SS) Program. The FY 2023 request supports the ability of States to enhance vital DBE/SS programs and supports three of the Secretary's key priorities for the FY 2023 budget: Economic Strength and Improving Core Assets; Ensuring Investments Meet Racial Equity and Economic Inclusion Goals; and Transformation of our Nation's Transportation Infrastructure. Further, the program directly supports the President's Executive Order on Advancing Racial Equity and is an essential element for wealth creation.

State Departments of Transportation (State DOTs), as recipients of Federal-aid highway funds are required to administer a Disadvantage Business Enterprise (DBE) program. The DBE/SS program supports the ability of State DOTs to achieve the objectives of the DBE program, which are to ensure nondiscrimination and allow small businesses owned primarily by minorities and women to compete fairly for DOT-assisted contracts in the transportation industry (49 CFR Part 26).

The DBE/SS Program under section 140(c) of title 23 United State Code, authorizes FHWA to fund \$10 million annually to participating State DOTs to administer programs that develop and provide training and technical assistance to DBE firms to improve their business practices, overcome barriers to success, and develop and diversify to improve their ability to participate on Federally-assisted contracts. This program seeks to redress current discrimination and the effects of past discrimination that historically excluded firms owned by minorities and women from participation in contracts funded by the Federal government. A more diverse make-up of firms

participating on improving America's infrastructure helps ensure competition, job creation, supports the creation and transfer of wealth, and strengthens the economic base of our country.

The DBE/SS funds made available each fiscal year are allocated by the FHWA Office of Civil Rights to State DOTs by formula and are eligible for a 100 percent Federal share, with no State match required. The primary purpose of the DBE/SS program is to provide training, capacity building assistance, and services to firms certified in the DBE program. This training and support is intended to increase their activity within the program, and to facilitate the firms' development into viable, self-sufficient organizations capable of competing for, and performing on, federally assisted highway projects.

Since FY 2015, FHWA has required State DOTs accepting DBE/SS funds to create and administer Business Development Programs (BDPs). These BDPs must provide DBEs the opportunity to be evaluated and must provide a structured process for the DBEs to receive firm-specific training and guidance to be competitive within the heavy highway marketplace. Program activities include seminars that highlight DBE program regulation and/or policy changes, workshops geared to help small firms grow their business capacity, and training in bonding and financial assistance, marketing, and accounting.

What benefits will be provided to the American public through this request and why is this program necessary?

This program supports three of the Secretary's key priorities for the FY 2023 budget: Economic Strength and Improving Core Assets; Ensuring Investments Meet Racial Equity and Economic Inclusion Goals; and Transformation of our Nation's Transportation Infrastructure. Further, the program directly supports the Administration's Executive Order on Advancing Racial Equity. The program directly supports small business development, specifically small businesses owned by minorities and women. Small businesses are vital to the health of the Nation's economy and can significantly contribute to infrastructure redevelopment initiatives. Small businesses generate new employment opportunities within their local communities and thereby contribute to the economic strength and stability of these communities.

The program is necessary to assist a sector of the small business community to build their capacity and ability to compete for contracts. Additionally, this program assists with creating a more diverse make-up of firms participating on improving America's infrastructure that, in turn, contributes toward ensuring competition, job creation, and strengthens the economic base of our country.

With respect to the Executive Order on Advancing Racial Equity, this program serves to address ongoing discrimination and the effects of past discrimination that historically excluded firms owned by minorities and women from participation in transportation projects funded by the Federal government. FHWA is collecting national data to support the linkage DBE/SS programs have to increased subcontracting on Federally assisted projects, as well as achieving other program metrics such as increased employment and the ability to compete as prime contractors.

Detailed Justification Emergency Relief Program

What is the request and what funds are currently spent on the program?

FY 2023 – Emergency Relief Program (\$100 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Federal Allocation Programs			
Construction of Ferry Boats and Ferry Terminal Facilities	80,000	178,400	180,400
Disadvantaged Business Enterprise ^{1/}	10,000	10,000	10,000
Emergency Relief (exempt from obligation limitation) ^{2/}	100,000	100,000	100,000
Highway Use Tax Evasion Projects ^{1/}	4,000	4,000	4,000
On-the-Job Training ^{1/}	10,000	10,000	10,000
Territorial and Puerto Rico Highway Program	200,000	219,000	224,000
Total	404,000	521,400	528,400

1/ Programs funded as set-asides from Administrative Expenses.

2/ In FY 2021, FY 2022, and FY 2023, \$5.7 million is sequestered from Emergency Relief each year (table does not reflect sequestration).

What is this program and what does this funding level support?

Congress authorized the Emergency Relief (ER) program from the Highway Trust Fund in section 125 of title 23, United States Code, providing for the repair or reconstruction of Federal-aid highways and roads on Federal lands that have suffered serious damage as a result of: (1) natural disasters; or (2) catastrophic failures from an external cause. This program supports the Secretary's key priorities of infrastructure and safety by supplementing the commitment of resources from States, their political subdivisions, or other Federal agencies, to help pay for unusually heavy expenses resulting from extraordinary conditions that damage existing infrastructure and allow such infrastructure to return to a safe condition.

Examples of natural disasters include floods, hurricanes, earthquakes, tornadoes, tidal waves, severe storms, and landslides. A catastrophic failure from an external cause is defined as the sudden and complete failure of a major element or segment of the highway system that causes a disastrous impact on transportation services. The cause of the catastrophic failure must be determined to be external to the facility. A bridge suddenly collapsing after being struck by a barge is an example of a catastrophic failure from an external cause. Failures due to an inherent flaw in the facility itself do not qualify for ER assistance.

When a natural disaster or catastrophe strikes, the ER program is available to provide assistance to get damaged highways open to essential traffic. Longer term permanent repairs to restore damaged highways are also funded through the ER program. When economically justified, betterments to damaged highways, aimed at improving the resiliency of those facilities, would be eligible for funding through the ER program. Additionally, the law makes eligible the cost of a

comparable facility that is designed to current geometric and construction standards required for the types and volume of traffic the facility will carry over its design life.

The ER program has been funded through a recurring annual authorization of \$100 million since 1972. When the ER program has demonstrated needs exceeding available funding, Congress has provided supplemental appropriations, typically from the General Fund.

Over the past 10 years, the costs of nationwide ER events, including large scale disasters (e.g., Hurricanes Irma and Maria, Hurricane Sandy) have averaged about \$915 million annually. Since 2005, over \$18 billion has been provided through supplemental appropriations to the ER program, in addition to the annual \$100 million authorization. This includes recent appropriations of \$1.5 billion in FY 2017, \$1.4 billion in FY 2018, \$1.7 billion in FY 2019, and \$2.6 billion in FY 2021 for nationwide disasters. These appropriations are not part of the Federal-aid Highway Account and are funded by the General Fund.

In December 2021, FHWA announced \$1.4 billion to help 42 States, Puerto Rico, and the Virgin Islands make repairs to roads and bridges damaged by storms, floods, and other unexpected events, including wildfires and earthquakes. In addition, approximately \$20 million in "Quick release" ER funds were provided to five States in calendar year 2021 to assist with immediate emergency repair needs following earthquake, wildfire, and flooding events.

Examples of ER funding assistance in the December 2021 allocation for repairs and reconstruction include: \$58 million for Hurricanes Irma and Maria in Puerto Rico and the Virgin Islands; \$72 million for multiple flooding events in Kentucky; \$25 million for flooding in Iowa; \$11 million for flooding in Missouri; \$108 million for multiple fires in California; \$5 million for fires in Colorado; and \$22 million for fires in Oregon.

The estimate of unmet ER needs as of February 2022 was \$2.5 billion across 230 events.

What benefits will be provided to the American public through this request and why is this program necessary?

ER program funds are critical to maintaining mobility and safety for the American public following a disaster. Natural disasters and catastrophes that destroy highways and bridges are unpredictable events and can occur anywhere in the country. The ER program provides funding to States, Federal Land Management Agencies, and Tribal governments for the repair and reconstruction of Federal-aid highways and roads on Federal lands following a disaster. The ER Program supports the Secretary's priorities by returning damaged roads and bridges to safe operating conditions, improving damaged roads and bridges by upgrading to current design standards, and, when eligible, improving resiliency.

For example, FHWA has provided immediate relief to Puerto Rico, in the form of personnel and funding following natural disasters. In the aftermath of hurricanes Irma and Maria, FHWA provided approximately \$500 million in emergency relief funding. As a result of this assistance, over 250 miles of roadway are open to traffic, 24 bridges that had collapsed were open with temporary bridges, with permanent design underway. Additionally, over 14 miles of damaged

guardrail along principal roads have been repaired, more than 2,500 square feet of traffic signs were replaced, and most of the traffic signals are in service.

In addition, FHWA staff on the ground have been helpful partners in working with Puerto Rico's governor and Highway and Transportation Authority. This includes helping assess the condition of infrastructure and providing other technical support and assistance throughout the recovery process. FHWA engineers continue to work alongside the staff of the Puerto Rico Department of Transportation and Public Works on emergency repair projects.

Detailed Justification Highway Use Tax Evasion Projects

What is the request and what funds are currently spent on the program?

FY 2023 – Highway Use Tax Evasion Projects (\$4 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ ILJA Oblim)	FY 2023 Request
Federal Allocation Programs			
Construction of Ferry Boats and Ferry Terminal Facilities	80,000	178,400	180,400
Disadvantaged Business Enterprise ^{1/}	10,000	10,000	10,000
Emergency Relief (exempt from obligation limitation) ^{2/}	100,000	100,000	100,000
Highway Use Tax Evasion Projects ^{1/}	4,000	4,000	4,000
On-the-Job Training ^{1/}	10,000	10,000	10,000
Territorial and Puerto Rico Highway Program	200,000	219,000	224,000
Total	404,000	521,400	528,400

1/ Programs funded as set-asides from Administrative Expenses.

2/ In FY 2021, FY 2022, and FY 2023, \$5.7 million is sequestered from Emergency Relief each year (table does not reflect sequestration).

What is this program and what does this funding level support?

The Highway Use Tax Evasion Projects (HUTE) program provides funding to the Internal Revenue Service (IRS) and the States to carry out intergovernmental enforcement efforts, along with training and research, to reduce evasion of payment of motor fuel and other highway use taxes, which are the principal sources for Federal and State highway funding. The budget requests \$4 million to fund this program in FY 2023. Of this amount:

- \$2 million is available to make grants for intergovernmental enforcement efforts, including research and training. The intergovernmental enforcement efforts grants are awarded to State agencies through a competitive application process from which FHWA and the IRS make selections based on the most innovative, intergovernmental proposals. The States then perform various tasks, including increased enforcement, enhancement of data systems, and coordination with other State agencies.
- The remaining funding may, at the discretion of the Secretary of Transportation, either be awarded for intergovernmental enforcement efforts grants, or allocated to the IRS for their enforcement efforts.
- While the statute allows for the IRS to determine the use of their allocations, they must be used in some fashion related to the identification and elimination of highway use tax evasion. IRS initiatives may include, but are not limited to, office examinations, refinery and terminal examinations, and on-road enforcement in areas such as the illegal use of dyed diesel fuel by motor vehicles.

The FY 2023 request will continue to fund IRS initiatives, including the expansion of the Joint Operations Center for National Fuel Tax Compliance (JOC), a joint FHWA/IRS/State initiative and new, innovative, and intergovernmental enforcement efforts at the State level.

Through the efforts of this program, the IRS has launched a number of initiatives over the past ten years, including: Diesel Examinations, Tire Tax Examinations, the review of Heavy Highway Vehicle Use Tax (HVUT) returns, mislabeled imported fuel examinations, examinations of mislabeled products at refineries and terminals, and examinations of questionable credit claims. These are just some of the efforts supported in part by the annual allocation to the IRS.

Over the past five years, \$10 million in funding was provided to the IRS, which resulted in \$480 million in assessments through various activities, including internal audits, refinery and terminal inspections, and retail truck inspections. The IRS initiatives are not solely funded from Highway Use Tax Evasion funds, but they provide a significant portion of the funding.

The following table shows examples of initiatives at the State level, comparing amounts provided by this program and the results from FY 2018 through FY 2021.

Year	Agency	Expenditures	Results	Description
2021	Arizona Department of Transportation	\$ 108,444	\$ 14,649,522	Results are from State assessments on 565 leads from 45 taxpayers. Amount includes taxes, penalties, and interest. Information mainly from comparisons of State data and ExStars (IRS reporting) data.
2019	Alabama Department of Transportation	\$ 202,388	\$ 2,870,000+	Results include: Over 200 International Fuel Tax Agreement (IFTA) citations for license issues; identified 130 unreported fuel diversions; \$ 2 million increase in IFTA revenue; over \$870,000 in fuel taxes assessed on suspected fuel tax evasion cases.
2019	Kentucky State Police	\$21,026	\$25,027	Results of vehicle screenings State fiscal year-to-date.
2018	Kentucky State Police	\$32,763	\$57,556	Vehicle screenings at weigh stations.

As the data indicates, there are significant findings at the IRS and State levels; however, highway use tax evasion persists with new methods of evasion regularly employed. The continued funding of this program would strengthen not only the successful efforts already in place, but also the enhanced practices resulting from training and vital equipment, such as enhanced motor fuel tracking computer software that is critical for sharing information between the IRS and States.

The HUTE program funding can also be used for training in the assessment of highway tax evasion. Many States have opted for this training, which provides great value by preparing practitioners to complete the assessments noted in the above table.

What benefits will be provided to the American public through this request and why is this program necessary?

The collection of highway use taxes is a critical part of the Federal-aid highway program. The HUTE program will increase transportation revenues at the Federal and State levels ensuring that these valuable tax dollars can be properly used to increase the safety and mobility of the Nation's roads and bridges.

The HUTE program aligns with the following Secretary's key priorities:

- Safety – Due to the unique nature of this program, there is a heavy emphasis on identifying and preventing evasion of highway use taxes. In addition to the fact that motor fuels are hazardous materials, and evasion often accompanies theft, the unaccounted-for movement, and handling of the product can cause safety issues. Furthermore, the adulteration of fuel can create unstable mixtures, damaging engines and creating a potential for fires and other hazards. Often it is found that those who are evading the taxes have a willingness to avoid all safety protocols.
- Economic Strength and Improving Core Assets and Transformation of our Nation's Transportation Infrastructure – The evasion of highway use taxes directly affects the Highway Trust Fund and thus reduces the revenue available for all highway-related programs.

Detailed Justification On-the-Job Training

What is the request and what funds are currently spent on the program?

FY2023 – On-the-Job Training (\$10 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Federal Allocation Programs			
Construction of Ferry Boats and Ferry Terminal Facilities	80,000	178,400	180,400
Disadvantaged Business Enterprise ^{1/}	10,000	10,000	10,000
Emergency Relief (exempt from obligation limitation) ^{2/}	100,000	100,000	100,000
Highway Use Tax Evasion Projects ^{1/}	4,000	4,000	4,000
On-the-Job Training ^{1/}	10,000	10,000	10,000
Territorial and Puerto Rico Highway Program	200,000	219,000	224,000
Total	404,000	521,400	528,400

1/ Programs funded as set-asides from Administrative Expenses.

2/ In FY 2021, FY 2022, and FY 2023, \$5.7 million is sequestered from Emergency Relief each year (table does not reflect sequestration).

What is this program and what does this funding level support?

The On-the-Job Training Supportive Services (OJT/SS) Program under section 140(b) of title 23, United States Code (U.S.C.), supports the State Departments of Transportation (DOTs) On-the-Job Training (OJT) programs. As recipients of Federal transportation funds, State DOTs must establish an OJT program.

The OJT program requires prime contractors participating on federally assisted contracts to establish apprenticeship and training programs targeted to move minorities, women, and disadvantaged individuals into journey-level positions. The OJT/SS Program directly supports this requirement and provides funds for State DOTs to implement skills training programs to prepare individuals, focusing on underrepresented groups, to participate in the highway construction workforce as trainees and apprentices on federally assisted construction contracts.

Additionally, 23 U.S.C. 140(b) provides authority to support efforts within the academic community to engage students in transportation-related career opportunities. Funding is provided to States to partner with accredited academic institutions for the National Summer Transportation Institute program focused on science, technology, engineering, and math opportunities for high school and junior high/middle school students to learn about, and become familiar with, transportation-related career options. Funding also supports the Summer Transportation Internship Program for Diverse Groups, which provides internship opportunities for college students to engage with DOT modes to work in a transportation-related career field.

What benefits will be provided to the American public through this request and why is this program necessary?

This program supports four of the Secretary's key priorities for the FY 2023 budget: Economic Strength and Improving Core Assets; Ensuring Investments Meet Racial Equity and Economic Inclusion Goals; Resilience and Addressing Climate Change; and Transformation of our Nation's Transportation Infrastructure. Further the program directly supports the Administration's Executive Order 13985 - Advancing Racial Equity and Support for Underserved Communities.

The program supports the highway construction industry establishing and maintaining apprenticeship and training programs targeted to move minorities, women, and disadvantaged individuals into journey-level positions. It is necessary to support the capacity of the Nation's current and future highway construction industry workforce to expand the diversity of skilled labor. It familiarizes individuals with transportation-related training opportunities and encourages them to pursue a career in transportation. It prepares students to be competitive in transportation careers. The program is an opportunity for individuals to retool their skills due to changes in industries related to climate change, such as fossil fuels like coal. For the American public, a skilled workforce is vital to designing, constructing, operating, and maintaining a safe and efficient transportation system that underpins the national economy.

With approximately 89 percent of highway contractors reporting difficulty finding skilled labor, the program is necessary to assist the highway construction industry with identifying, training, and placing individuals on highway construction projects. Additionally, the program assists with creating a more diverse make-up of the highway construction workforce and provides individuals with careers which moves America more towards economic justice.

With respect to the Executive Order on Advancing Racial Equity and Support for Underserved Communities, this program serves to address ongoing discrimination and the effects of past discrimination that historically excluded minorities, women, and disadvantaged individuals from employment in the highway construction industry especially on transportation projects funded by the Federal government. FHWA is collecting national data to better understand the impact of the OJT/SS programs on increasing the employment of minorities, women, and disadvantaged individuals on highway construction projects.

Detailed Justification Territorial and Puerto Rico Highway Program

What is the request and what funds are currently spent on the program?

FY 2023 – Territorial and Puerto Rico Highway Program (\$224 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Federal Allocation Programs			
Construction of Ferry Boats and Ferry Terminal Facilities	80,000	178,400	180,400
Disadvantaged Business Enterprise ^{1/}	10,000	10,000	10,000
Emergency Relief (exempt from obligation limitation) ^{2/}	100,000	100,000	100,000
Highway Use Tax Evasion Projects ^{1/}	4,000	4,000	4,000
On-the-Job Training ^{1/}	10,000	10,000	10,000
Territorial and Puerto Rico Highway Program	200,000	219,000	224,000
Total	404,000	521,400	528,400

1/ Programs funded as set-asides from Administrative Expenses.

2/ In FY 2021, FY 2022, and FY 2023, \$5.7 million is sequestered from Emergency Relief each year (table does not reflect sequestration).

What is this program and what does this funding level support?

This program provides funding to Puerto Rico and the four territories of American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and the United States Virgin Islands. Of the FY 2023 budget request of \$224 million, \$177 million would be provided to Puerto Rico, and the remaining \$47 million is divided among the four territories via an administrative formula.

The Transportation Equity Act for the 21st Century of 1998 established the Puerto Rico Highway Program. The Federal-Aid Highway Act of 1970 created the Territorial Highway Program, and subsequent legislation continued the program. The Bipartisan Infrastructure Law continues to provide dedicated funding to assist each territory in the construction and improvement of a system of arterial and collector highways, and necessary inter-island connectors.

In direct support of the Secretary's key priorities of infrastructure and safety, 50 percent of the funds provided to Puerto Rico must be spent on projects eligible under the National Highway Performance Program (NHPP), 25 percent must be spent on projects eligible under the Highway Safety Improvement Program (HSIP), and the remaining 25 percent can be spent for any purpose under chapter 1 of title 23, United States Code. The location and eligibility requirements are similar to those that apply to the States.

Funds provided to the four territories may be used for projects eligible under the Surface Transportation Block Grant Program (STBG); preventive maintenance; ferry boats, terminals, and approach roadways; engineering, economic and planning studies; regulation and equitable taxation of highways; and research and development. Territorial funds are generally subject to the location requirements of the STBG, except that rural minor collector routes are eligible. The

four territorial programs are administered under individual agreements between the Secretary and the chief executive officer of each of the territories.

Territorial and Puerto Rico Highway Program funding is critical to providing transportation infrastructure to Puerto Rico and the four territories. Puerto Rico and the four territories have military facilities or serve a strategic role important to national defense. They also contribute to the national economy through tourism, agriculture, and access to foreign trade.

What benefits will be provided to the American public through this request and why is this program necessary?

The Territorial and Puerto Rico Highway Program will improve life for residents in Puerto Rico and the territories and create good-paying jobs and economic growth. Specifically, it will help repair and rebuild roads and bridges, allowing for funds to be applied to climate change mitigation, resilience, equity, and safety for all users, including cyclists and pedestrians. In addition to increasing safety, mobility, transportation equity, and accessibility, the Territorial and Puerto Rico Highway Program also provides critical infrastructure that serves key facilities, which have a strategic role for national defense.

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Executive Summary

Research, Technology & Education (RT&E) Program

What is the request and what funds are currently spent on the program?

The FY 2023 request for the RT&E Program is \$518 million. The FY 2021 enacted level is \$420 million. The IIJA provided \$517 million for this program in FY 2022. This program is funded through the Highway Trust Fund, with the exception of \$19 million from the General Fund in advance supplemental appropriations in both FY 2022 and FY 2023 for University Transportation Centers.

What is this program and what does this funding level support?

The RT&E program delivers research, development, and training to address critical knowledge gaps that are not effectively addressed by other research sponsors and to foster the implementation of technologies to meet current and future highway transportation needs across all communities. Research products are transferred to the end users and/or made available in the marketplace through various technology transfer mechanisms supported by the RT&E Program.

The RT&E Program is comprised of the following subprograms:

- Highway Research & Development: \$147 million for research and development to produce transformative solutions to improve safety, foster innovation, accelerate projects, and better meet operations, policy, and infrastructure needs.
- Technology & Innovation Deployment: \$110 million to turn research products into proven technologies that address emerging needs, invest in the Nation's infrastructure, and promote rapid adoption of proven, market-ready technologies and innovations.
- Intelligent Transportation Systems Program (ITS): \$110 million for innovative research and rapid deployment of applications and tools that facilitate a safe, connected, integrated, and automated transportation system that is information-intensive to better serve the interests of users and be responsive to the needs of travelers and system operators.
- Training & Education Program (T&E): \$25.3 million to train the current and future transportation workforce, transferring knowledge quickly for effective deployment.
- State Planning and Research program (SP&R – Planning Portion: \$752 million; Research portion: \$251 million -- Non-add): The States must set aside \$251 million of their formula program funds to conduct research and deploy technologies and innovations of local, regional, and national interest. This program is a set-aside from the NHPP, STBG, HSIP, CMAQ, and NHFP programs.
- University Transportation Centers (\$99.5 million), and Bureau of Transportation Statistics (\$26.3 million): These programs are administered by the Office of the Assistant Secretary for Research and Technology.

What benefits will be provided to the American public through this request and why is this program necessary?

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. Innovations developed and/or advanced through the RT&E program support and improve safety and enable a more reliable transportation system that is cost-effective and sustainable, thus improving overall economic competitiveness and quality of life.

Detailed Justification Highway Research and Development Program

What is the request and what funds are currently spent on the program?

FY 2023 – Highway Research and Development Program (\$147 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Research, Technology & Education Program ^{1/}			
Highway Research and Development Program	125,000	147,000	147,000
Technology and Innovation Deployment Program	67,500	110,000	110,000
Intelligent Transportation Systems Program	100,000	110,000	110,000
Training and Education	24,000	25,000	25,250
University Transportation Centers ^{2/}	77,500	99,000	99,500
Bureau of Transportation Statistics ^{2/}	26,000	26,000	26,250
State Planning & Research (SP&R planning portion) [Non-Add]	[641,504]	[737,475]	[752,300]
State Planning & Research (SP&R research portion) [Non-Add]	[213,835]	[245,825]	[250,767]
Total	420,000	517,000	518,000

1/ This program is funded through the Highway Trust Fund, with the exception of \$19 million from the General Fund in advance supplemental appropriations in both FY 2022 and FY 2023 for University Transportation Centers.

2/ Administered by the Office of the Assistant Secretary for Research and Technology.

What is this program and what does this funding level support?

This request enables the Department to conduct, sponsor, sustain, and guide highway research and development activities that address current and emerging highway challenges across all communities and provides data and information to support policy decisions. This request aligns with the Secretary's priorities and provides the funding required to support a comprehensive and coordinated research and development program that will advance the safety of the Nation's surface transportation system, ensure economic strength and improve core assets, ensure investments meet racial equity and economic inclusion goals, improve resilience and address climate change, and enable transformation of our Nation's transportation infrastructure to provide accessibility and prepare for the transportation system of the future.

The FHWA fosters innovation development as a continuous cycle by working with stakeholders and private partners to identify and invest in emerging needs. The agency has a long history of strong partnerships with the States, Federal agencies, academia, and private industry to coordinate efforts and leverage the unique capabilities of each to advance shared goals. In addition, FHWA develops joint strategies to address Departmental goals with modal stakeholders. Leveraging the outputs of this process, the Agency sets goals to address the national gaps and opportunities through research and technology deployment.

FHWA's Office of Research, Development, and Technology (RD&T) is located at the Turner-Fairbank Highway Research Center (TFHRC), a federally owned and operated national research facility in McLean, Virginia. The TFHRC houses 15 laboratories and support facilities and

conducts exploratory and applied research. The TFHRC staff administers the majority of FHWA's research and development activities in the areas of infrastructure, operations, and safety. Research in areas of Intelligent Transportation Systems, policy, innovative finance, planning, operations, and the environment is primarily conducted or administered by FHWA offices located at DOT Headquarters.

The Highway Research and Development Program is administered in conjunction with the Technology and Innovation Deployment Program and supports the Training and Education Program, the Intelligent Transportation System Program, and the State Planning and Research Program.

What benefits will be provided to the American public through this request and why is this program necessary?

The programs under FHWA's R&D portfolio cover exploratory advanced research, applied research and development, and initial testing of technological solutions that address emerging needs and support the infrastructure of the future. FHWA's research programs seek to improve safety, reduce congestion, enhance infrastructure design and construction, and provide data and analyses to decision-makers throughout the transportation community. The FHWA research programs fill a critical gap in the development of transformative innovations. While the private sector and university research programs are critical to the advancement of highway safety, operations, and infrastructure, the FHWA research program is not constrained by the same barriers to innovation such as risk aversion and long-term investments. This allows FHWA, in coordination with these other research entities, to lead the way and accelerate innovation in critical areas that will serve as a direct benefit to taxpayers across the Nation and will support continued economic competitiveness.

- **The Safety R&D Program** addresses the contributing factors to deaths and injuries related to roadway design, construction and maintenance, and develops robust data analysis tools that enable transportation professionals to match those contributing factors with cost-effective countermeasures. The FHWA Safety R&D Program works extensively through pooled fund studies such as the Evaluation of Low-Cost Safety Improvements to assess the safety effectiveness and cost-benefit of roadway and roadside safety improvements by applying advanced statistical analysis. The FHWA Safety R&D Program invests in topics such as data-driven safety plans to reduce rural roadway departures, as well as analysis of human behavior in response to automated vehicle technologies. The FHWA Safety R&D Program will also apply the principles of the Safe Systems Approach that considers human error and focuses on countermeasure development that improves the protection of vehicle occupants, pedestrians, bicyclists, and other vulnerable road users.

Pedestrian and bicycle safety continue to be focus areas of the broader safety program because annual pedestrian and bicyclist fatalities have been at their highest levels in decades. From 2014-2019, pedestrian/bicyclist-related deaths reached 7,051, an increase of 25.7 percent. In 2021, FHWA's Pedestrian and Bicycle Safety Program Plan was completed. This outlines important research for the next 10 years, including research that aligns with the priorities of safety, racial equity, economic strength, and climate change.

Continued partnership with the Transportation Research Board's National Cooperative Highway Research Program will include testing new designs for roadside safety hardware and testing of innovative barrier materials.

In 2023, the Human Factors program will expand the capability of the Virtual/Augmented Reality Laboratory supporting and evaluating various pedestrian, bicyclist testing. Further Human Factors activities will assess automated vehicle Operations and Safety applications and use cases to understand human behavior effects. New analytics are under development that provide greater focus on alleviating social and demographic communities that suffer disproportionately from preventable death and fatal injury from crashes. In 2023, several projects will investigate safety issues related to vulnerable road users (VRUs).

- **The Infrastructure R&D Program** engages in forward-looking research that promotes investment in the Nation's infrastructure through improved safety, accessibility, durability, resilience, environmental sustainability, and asset management. Safety is advanced through improvements in infrastructure characteristics such as friction and drainage and through advancement of effective inspection, evaluation and management to allow timely identification and correction of infrastructure at risk of becoming unsafe. Additionally, investments in innovations that improve infrastructure durability and resiliency, and accelerate onsite construction improve safety by reducing exposure to the hazards of highway work zones. The FHWA Infrastructure Program will conduct R&D aimed at improving bridges and roads through the advancement of test methods and specifications, including the promotion of best practices in highway construction and inspection, as well as the development of solutions for steel and concrete bridges that result in improved infrastructure durability. The Infrastructure Program will also provide technical assistance and resources to State and local partners through activities that include developing analytical tools that are needed by States and Metropolitan Planning Organizations (MPOs) for Transportation Performance Management.

New areas of exploration planned for FY 2023 include: development of real-time 3-dimensional automated scour simulation and prediction tools to monitor bridge scour during storm events; evaluation of the use of nondestructive testing technologies to assess the condition of in-service pavement foundations; investigation of the durability and strength-deformation characteristics of virgin and recycled backfills for retaining walls and pavement base courses; evaluation of methods for incorporating up to 100 percent reclaimed asphalt pavement (RAP) and recycled plastic in asphalt pavements; development of bridge performance models; assessing pavement structural capacity; development of training and inspection techniques for tunnel functional systems; and assessment of additive construction applications to 3-D print steel bridge components.

- **The Operations R&D Program** develops innovative technologies and processes that lead to system-wide improvements in how FHWA and its State and local partners manage and improve the efficiency and reliability of the National Highway System (NHS). The FHWA Operations Program will invest in topics such as operations strategies to improve equitable mobility and address climate change, active management techniques

to increase operational resiliency and safety, advance integration of emerging technologies as well as freight mobility to enhance the movement of goods supporting economic competitiveness.

In FY 2023, FHWA will incorporate new data, algorithms, artificial intelligence (AI), and machine learning (ML) tools and techniques being developed in other Federal and University laboratories into research on advanced analysis, modeling, and simulation (AMS) tools. Advanced AMS tools will allow for a more detailed and comprehensive assessment of how transformative technologies, such as ADS and Cooperative Driving Automation (CDA) will impact the NHS. AMS tools will also enable assessment of operations strategies that leverage CDA to smooth traffic flow and reduce climate change impacts. Advanced technologies, including AI/ML, will also be evaluated as a means to develop decision support systems for the next generation of Traffic Management Systems. FHWA will continue to advance CDA as an open source research program to collaboratively develop the concept of shared maneuvers to address key transportation issues.

In FY 2023, FHWA will complete the Freight Mobility Trends (FMT) tool that utilizes the National Performance Management Research Data Set and the Highway Performance Monitoring System to analyze data and interpret transportation issues. The FMT will allow FHWA to analyze freight movement trends in different areas of the country, along specific corridors, at bottleneck locations, and at intermodal facilities to understand transportation issues for freight mobility, reliability, traffic congestion, and bottlenecks. This information will assist with policy decisions that respond to needs of the transportation system and support our State DOT and MPO partners.

- **The Policy R&D Program** offers comprehensive quality data; evaluates the impacts of a broad range of policy options; and analyzes current and emerging issues that will impact the way transportation projects are regulated and permitted, and how transportation systems are constructed, operated, and maintained. The Highway Data and Information activities under the Policy R&D program provide a strong data and information foundation for carrying out the Department's priorities. The focus will be the continuation of improving a variety of data collection and processing methods and taking advantage of “big data” for integrated and linked data systems. The Policy Program provides empirical analysis of potential regulatory economic impacts, policy options, and strategic planning and performance measures. Specifically, it uniquely integrates economics, public policy, geography, and statistics disciplines, to: 1) model travel behavior within the context of changing transportation technologies, costs, benefits, and markets; 2) improve FHWA and DOT forecasting and policy analysis capabilities; 3) expand the types of policy alternatives modeled to improve ability to identify cost-effective strategies; 4) provide ‘what if’ empirical and risk-based sensitivity analyses of future transportation needs, policy, and strategic options; and 5) facilitate transportation policy and strategy dialogue.

In FY 2023, FHWA will continue work to develop and adapt tools to support implementation of the IIJA including the development of a Highway Cost Allocation

Study and the expansion of the scope of the biennial Conditions and Performance report to Congress.

- **The Office of International Programs** has three main international program elements, Global Benchmarking, Binational, and Multinational Relations. Through collaboration with international and domestic partners, these programs work to address the Secretary's and FHWA's priorities. For example, a one-time visit to a country for Global Benchmarking may lead to a long-term exchange as part of a bilateral relationship. A successful bilateral exchange may lead to a multilateral research project. Information or developments gleaned during a multilateral meeting may attract the interest of FHWA subject matter experts and lead to a Global Benchmarking study. In this way, the programs work in complementary ways to address different aspects of FHWA's international efforts, all while focusing on U.S. priorities and initiatives.
- **The Planning, Environment, and Realty R&D Program** provides tools and processes to integrate consideration of resiliency, safety, the economy, and accelerating project delivery into planning, project development, design, and real estate acquisition for multimodal transportation projects. The data-driven approach to improve environmental processes will promote transportation decision-making and help agencies efficiently manage their resources while delivering better decisions and outcomes for their investments.

FHWA will develop resources to advance Complete Streets and provide strategies to implement safe multimodal networks and increase access for all users. FHWA will also develop tools and resources to ensure environmental justice, traditionally underserved populations, and equity considerations are addressed during the transportation planning and project development process. These tools will provide guidance on public participation, data collection, and analysis for achieving equitable outcomes.

The program will develop the next generation of transportation models and scenario planning tools and look at the impact emerging technologies can have on system performance. Additionally, FHWA develops innovative tools for natural resources and human environment analyses and activities, including programmatic approaches for project review, interagency coordination, and IIA implementation support to include activities such as stormwater best practices, aquatic organism passage, and wildlife crossing safety.

In FY 2023, FHWA will focus on investments to address the climate crisis and strategies to reduce greenhouse gases to achieve net zero emissions by 2050. This includes adaptation and resiliency to climate change by developing and deploying tools and techniques to assess and improve the resiliency of transportation infrastructure to the effects of climate change and extreme weather. FHWA will work towards developing tools and resources to ensure environmental justice and equity considerations are carried out during the transportation planning and project development process, including development of a web-based community impact assessment course and research on improving bicycle and pedestrian access for persons with disabilities.

- **The Exploratory Advanced Research (EAR) Program** conducts longer-term, higher-risk research in all the research program areas. These research products have the potential for dramatic breakthroughs in transportation. For FY 2023, emerging research topics may include novel modeling frameworks and tools for design and management of advanced and resilient highway pavements and structures and low power, edge sensing and computing systems for improving the safety and mobility of vulnerable road users.
- **Strategic Innovation for Revenue Collection.** Section 6020 of the FAST Act (23 U.S.C. 503 note; Public Law 114–94) was repealed and replaced in the IIJA by the Strategic Innovation for Revenue Collection program (Section 13001). The FY 2023 provision provides grants to the following: a State or a group of States; a local government or a group of local governments; or a metropolitan planning organization to demonstrate user-based alternative revenue sources to maintain the long-term solvency of the Highway Trust Fund. The budget will provide \$15 million annually to award grants designed to test innovative ways to replace or supplement the Federal gas tax.
- **National Motor Vehicle Per Mile User Fee Pilot Program** was established to demonstrate a national motor vehicle per-mile user fee; establish a Federal System Funding Alternative Advisory Board; and carry out a public awareness campaign to increase public awareness regarding a national motor vehicle per-mile user fee (Section 13002 of the IIJA). The Secretary, in coordination with the Secretary of the Treasury, will test the design, acceptance, implementation, and financial sustainability of a national motor vehicle per mile user fee designed to restore and maintain the long-term solvency of the Highway Trust Fund. In FY 2023, \$10 million will be used to carry out the pilot program.

Detailed Justification Technology and Innovation Deployment Program

What is the request and what funds are currently spent on the program?

FY 2023 – Technology and Innovation Deployment Program (\$110 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Research, Technology & Education Program ^{1/}			
Highway Research and Development Program	125,000	147,000	147,000
Technology and Innovation Deployment Program	67,500	110,000	110,000
Intelligent Transportation Systems Program	100,000	110,000	110,000
Training and Education	24,000	25,000	25,250
University Transportation Centers ^{2/}	77,500	99,000	99,500
Bureau of Transportation Statistics ^{2/}	26,000	26,000	26,250
State Planning & Research (SP&R planning portion) [Non-Add]	[641,504]	[737,475]	[752,300]
State Planning & Research (SP&R research portion) [Non-Add]	[213,835]	[245,825]	[250,767]
Total	420,000	517,000	518,000

1/ This program is funded through the Highway Trust Fund, with the exception of \$19 million from the General Fund in advance supplemental appropriations in both FY 2022 and FY 2023 for University Transportation Centers.

2/ Administered by the Office of the Assistant Secretary for Research and Technology.

What is this program and what does this funding level support?

This request will enable the Department to accelerate the integration and adoption of proven innovative practices and technologies into standard usage to significantly improve safety, system efficiency, infrastructure, reliability and performance, and sustainable communities. The Technology Innovation and Deployment Program (TIDP) will fund efforts to advance research products into proven technologies and demonstrated practices; identify the market forces that will influence successful technology and innovation deployment; and plan and deliver effective technical assistance, training, communication and outreach to promote rapid adoption of proven, market-ready technologies and innovations.

The TIDP program reflects the Department's approach to modernize infrastructure with safety, resilience, and all users in mind. The program will continue to foster innovation and actively accelerate the deployment of innovative technologies and practices that improve system safety, enhance project delivery, improve core transportation assets, support resiliency, address climate change; and transform our Nation's infrastructure. The TIDP benefits all aspects of highway transportation and includes the following eligible activities:

- Deploying research results and products developed under the Highway Research and Development (HRD) program.
- Establishing and carrying out demonstration programs.
- Providing technical assistance and training to transportation agencies and stakeholders.
- Developing tools and methods to enhance and accelerate the adoption of proven innovative practices and technologies into standard usage.

This program will support the deployment of proven technologies and transportation-related innovations and processes through financial and technical assistance, training, peer exchanges, collaboration with industry groups, information, and knowledge exchange. Through its oversight role, FHWA will evaluate the deployment methods to determine effectiveness, assess needed improvements, and document outcomes.

In the early stages, as an innovation or technology moves from research to development, FHWA will seek out willing State, local, and tribal transportation agencies to pilot new technologies or be early adopters. These early adopters often receive financial and technical assistance to mitigate the increased risk of piloting new technologies or initiatives.

As an innovation or technology becomes more mature and is ready for more widespread use, training aids will be developed for delivery and early adopters often become “lead” States. Lead States share best practices, challenges, and successes and encourage others to adopt the innovation. Peer exchanges and pooled funds are used to encourage States or other transportation agencies to directly share knowledge and information and transfer technology.

The TIDP will promote proven, market-ready technologies and innovations. Specific programs will provide resources that enable States and local agencies to accelerate the speed with which innovative technologies and practices enter into standard usage. FHWA Resource Center technical specialists, program office subject matter specialists, and field office personnel will work with State and local agencies to encourage the use of these technologies and practices by their peers as they are best positioned to discuss how these innovations address their transportation issues and provide benefits and efficiencies.

The TIDP is administered in conjunction with the HRD Program and supports the Training and Education Program (T&E), the Intelligent Transportation System (ITS) Program, and the State Planning and Research (SP&R) Program.

What benefits will be provided to the American public through this request and why is this program necessary?

Key stakeholders and beneficiaries from this program include State transportation agencies, Federal Land Management agencies (FLMAs), local public agencies, tribal transportation agencies, and industry groups. FHWA’s technology deployment programs contained within TIDP seek to improve safety and performance, enhance infrastructure design and construction, and provide data and analyses to decision-makers throughout the transportation community. The primary programs to accomplish these goals are:

- Every Day Counts program (EDC): A State and local-based program that identifies and rapidly deploys proven, yet underutilized market-ready innovations that make our transportation system adaptable, sustainable, equitable and safer for all. Proven innovations promoted through EDC facilitate greater efficiency at the State, local and Tribal levels, saving time, money and resources that ensure our infrastructure is built better, faster, and smarter. The EDC program advances the Secretary’s priorities along with other stakeholder-selected innovations in a manner that best meets their needs through training, technical support, tools, and resources. Each State has used 20 or more

of the 52 innovations promoted through EDC since the program's inception, and some states have deployed more than 45.

- Accelerated Innovation Deployment (AID) Demonstration program: Provides funding to support the pilot/demonstration of innovations on projects by State DOTs, Federal Land Management Agencies, tribal governments, metropolitan planning organizations (MPOs), and local governments. Funds will be made available to cover the cost of implementation of an innovation on a project in areas such as planning, financing, operations, pavements, structures, materials, environment, and construction. FHWA established the AID Demonstration program to provide transportation agencies the resources to mitigate risks associated with first-time or early adoption of innovations on transportation projects.
- Accelerating Market Readiness (AMR) program: Supports the advancement of emerging and transformative innovations by matching these innovations to the transportation organizations interested in testing and evaluating them. The AMR program will provide resources for the rapid, national assessment of emerging innovations and for the development of objective, written documentation of these assessments. The AMR program is intended to help advance the innovations to a more complete market-ready status, which in turn should accelerate the adoption of the innovations by transportation agencies under the EDC program or by other initiatives.
- State Transportation Innovation Council (STIC) Incentive program: A STIC brings together public and private transportation stakeholders to evaluate innovations and spearhead their deployment in each State and across all communities. The STIC Incentive program provides technical assistance and resources to support the standardizing of innovative practices in a State transportation agency or by other public sector STIC stakeholders.
- Accelerated deployment of pavement technologies: Provides a coordinated and cohesive approach to advance research and development of technologies with deployment activities. Activities are focused on providing tools, technologies, and guidance, and supporting updated policies, to improve the safety, durability, sustainability and cost-effectiveness of highway pavements, and the materials from which highway infrastructure is constructed. Many of these technologies are advanced through demonstration projects, pooled fund projects in addition to EDC and AID programs.
- Innovation Implementation Deployment Management: FHWA programs and the FHWA Resource Center will use TIDP funding to conduct technology and innovation deployment on other program priorities, provide technical resources to support the implementation of innovations, and develop appropriate guidance to aid in deployment.
- Advanced Transportation Technologies and Innovative Mobility Deployment: Funded out of the HRD, TIDP, and ITS programs, this program (formerly known as the Advanced Transportation and Congestion Management Technologies Deployment Program) will award grants to States and other entities to improve the mobility of people and goods; improve the durability and extend the life of transportation infrastructure;

reduce costs and improve return on investments; protect the environment and deliver environmental benefits; measure and improve operational performance; reduce the number and severity of traffic crashes and increase driver, passenger, and pedestrian safety; collect, disseminate, and use real-time transportation-related information; facilitate account-based payments for transportation access and services and integrate payment systems across modes; monitor transportation assets; deliver economic benefits by reducing delays, improving system performance, and providing for the efficient and reliable movement of goods and services; accelerate the deployment of connected/autonomous vehicles technologies; or incentivize travelers to share or shift trips depending on travel demand and system capacity. This program will receive \$60 million in FY 2023 set-aside from the HRD, TIDP, and ITS programs.

Accelerated Implementation and Deployment of Advanced Digital Construction Management Systems: The IIA established a program for Accelerated Implementation and Deployment of Advanced Digital Construction Management Systems (ADCMS). ADCMS are market-ready digital technologies and processes for management of construction and engineering activities, including systems for infrastructure planning and coordination, construction, maintenance, modernization and management, asset management systems for machines, site equipment, and personnel. The purpose of the ADCMS Program is to promote, implement, deploy, demonstrate, showcase, support, and document the application of ADCMS, practices, performance, and benefits.

Detailed Justification Intelligent Transportation Systems Program (ITS)

What is the request and what funds are currently spent on the program?

FY 2023 – Intelligent Transportation Systems Program (\$110 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Research, Technology & Education Program ^{1/}			
Highway Research and Development Program	125,000	147,000	147,000
Technology and Innovation Deployment Program	67,500	110,000	110,000
Intelligent Transportation Systems Program	100,000	110,000	110,000
Training and Education	24,000	25,000	25,250
University Transportation Centers ^{2/}	77,500	99,000	99,500
Bureau of Transportation Statistics ^{2/}	26,000	26,000	26,250
State Planning & Research (SP&R planning portion) [Non-Add]	[641,504]	[737,475]	[752,300]
State Planning & Research (SP&R research portion) [Non-Add]	[213,835]	[245,825]	[250,767]
Total	420,000	517,000	518,000

1/ This program is funded through the Highway Trust Fund, with the exception of \$19 million from the General Fund in advance supplemental appropriations in both FY 2022 and FY 2023 for University Transportation Centers.

2/ Administered by the Office of the Assistant Secretary for Research and Technology.

What is this program and what does this funding level support?

The ITS Program supports the Secretary's priorities by fostering innovation in transportation through the deployment of technology to enhance safety and efficiency while reducing environmental impacts of surface transportation, resulting in improved access and convenience, saved lives and time, and increased productivity. The Program robustly supports all five key priorities of the Secretary's FY 2023 Budget: 1) Safety; 2) Creating Economic Strength and Improving Core Assets; 3) Ensuring Investments Meet Racial Equity and Economic Inclusion Goals; 4) Resilience and Addressing Climate Change; and 5) Transformation of our Nation's Transportation Infrastructure. The ITS JPO is responsible for coordinating the ITS Program and initiatives among all Department of Transportation (DOT) operating administrations. The research builds on and leverages the technology and applications developed across all modes delivering cross cutting research activities and technology transfer that support the entirety of the Department.

The ITS JPO serves as the Department's multi-modal technology research program, working toward improving transportation safety, mobility, and efficiency; while enhancing productivity, equity, and resiliency through the integration of innovative technologies within the Nation's transportation system. Through these efforts, the ITS JPO serves as a Departmental leader in addressing the Secretary's priority of Transformation of our Nation's Transportation Infrastructure by implementing intelligent technology to enhance the safety, efficiency, and convenience of our surface transportation systems. The Vision of the ITS JPO is to "Accelerate the use of ITS to transform the way society moves." That vision is executed through leading

collaborative and innovative research, development, and implementation of intelligent transportation systems technologies to improve the safety and mobility of people and goods. By undertaking the research and deployment of advanced and innovative technologies, the ITS JPO serves as the DOT's organizational resource for avoiding duplication and ensuring the Department is on the forefront of advancing technologies to make certain our transportation system is safe, efficient, and resilient. In addition to providing funding for deployment program support, the ITS Program supports research, evaluation, and technology transfer within the following program six categories:

Complete Trip - ITS4US Deployment Program: The Complete Trip - ITS4US Deployment Program enables communities to deploy innovative technologies, partnerships, and practices that promote independent mobility for all, regardless of location, income, race, ethnicity, or disability. The program is designed in three phases (planning, design and testing, and operation and evaluation) to bring publicly and privately sponsored research together to create large-scale, replicable, and integrated ITS and other emerging technology deployments to address the challenges of planning and executing all segments of a complete trip. The Program leverages innovative technologies that improve mobility options for all travelers, including travelers with disabilities, travelers from rural areas, lower income travelers, and those historically excluded from the transportation system. In FY 2021, DOT awarded 5 contracts for the planning phase (Phase 1) to 5 communities as a way of supporting the increase of multimodal mobility options for all travelers. This program relates directly to nearly all of the Secretary's key priorities. Safety, economic strength, rebalancing investments to meet racial equity and economic inclusion goals are all supported by ensuring complete trips for all travelers.

Automation: The ITS JPO's automation research is a component of the Department's vision of supporting the safe, reliable, equitable, efficient, resilient, and cost-effective integration of automation into the broader multimodal transportation system. As automated vehicles increasingly enter the transportation system, there is an opportunity to improve the efficiency of the system through Federal research and coordination in the areas of integrated cross-modal planning and infrastructure, increased knowledge of vehicle performance, automated system safety, impact on operations, including community services and mobility.

The ITS JPO, in collaboration with DOT Operating Administrations, State and local public agencies, academia, industry, and other surface transportation stakeholders, will conduct automation research that has the potential to transform safety, mobility, energy, and environmental efficiency; increase productivity and equity; and facilitate freight movement to enhance the transformation of our Nation's infrastructure. Many of the activities in this program will be executed by modal partners and some will be jointly funded with them. Safety outcomes will include results from driving simulator experiments to better understand the safety issues related to automated vehicle interactions with transportation systems management and operations (TSMO) functions, as well as infrastructure. Economic Strength and Improving Core Asset outcomes will demonstrate the benefits of automated driving technology combined with connectivity. Policy Analysis outcomes will address resilience and climate change and will include the necessary data to support development of modeling capabilities to assess the changes in traffic that will occur as automated vehicles enter the fleet.

Emerging / Enabling Technologies: The Emerging/Enabling Technologies Program focuses on cultivating the next generation of transportation systems. These technological advances, along with new functionality, applications, operational concepts, and disruptive innovations, need to be tracked and planned for by DOT. In areas of resiliency and climate change, the ITS JPO will leverage past and current ITS and environmental research into new, innovative research and analysis opportunities in partnership with modal administrations and stakeholders. Current examples of these Emerging/Enabling technologies include Artificial intelligence (AI), interoperable connectivity, and digital infrastructure; all of which have the potential to greatly impact transportation networks.

There is a need to determine technological, market, and demographic trends throughout the globe and across industries to seek, evaluate and sometimes incubate emerging capabilities that demonstrate the potential to transform transportation. As this happens, the Department will be positioned and engaged as a partner to guide research, development, and technology adoption in a systematic manner. Through multi-modal coordination, the ITS JPO works to avoid duplicative ITS work and to allow for the efficient allocation of ITS resources. In AI, the primary program outcome is to assess the state of real-world, existing and/or planned AI with focus on ITS. Together, these activities support safety; create economic strength and improve core assets; address climate change and transform of our Nation's transportation infrastructure by ensuring new ITS technologies are evaluated and deployed safely while enhancing productivity, equity, and resiliency.

Cybersecurity for Intelligent Transportation Systems: Security and resiliency are a necessary precondition to deploy and maintain interoperable, safe, effective and efficient nationwide ITS deployments. To support this, the Department's ITS cybersecurity research program supports research needed to facilitate adaption and implementation of information and communications technology (ICT) cybersecurity best practices across the diverse ITS system of systems, including infrastructure, connectivity and automation needs. Department leadership is uniquely positioned to support needed research and coordinated stakeholder-driven development and implementation of best practices.

These efforts can then support well-informed implementations by the diverse community of Infrastructure Owner Operators (IOO) including State, Tribal, territorial, and local agencies, private and public-private facility operators, along with vehicles and other mobile participants in the transportation system. Individual IOOs often have limited capabilities in this area; DOT-led collaboration, informed by IOCT best practices including those recommended by the National Institute of Standards and Technology (NIST) can support nationwide interoperability, as well as the development and implementation of best practices to promote secure and resilient nationwide ITS implementations. This is a very complex challenge. ITS system architectures are complex systems of systems that vary greatly across jurisdictions, with diverse current approaches to security and a broad range of equipment in service – some new, some decades old.

Accelerating Deployment: As new ITS technologies and systems evolve into market-ready products, the ITS Accelerating Deployment Program is addressing questions associated with adoption and deployment. The goal of the Accelerating Deployment Program is to speed up the transformation of ITS research and prototypes into interoperable market-ready technologies that

are commercially viable and adopted by the transportation community, a goal that is directly reflected in the Secretary's priority: Transformation of our Nation's Transportation Infrastructure. This Program provides communication and education support to facilitate awareness, understanding, acceptance, adoption, and deployment of ITS technologies across stakeholder groups; and builds effective partnerships at various levels – executive, program, and project.

The ITS JPO seeks to spur adoption of technology, and help stakeholders and localities deploy maturing ITS systems. The ITS Program provides knowledge transfer, while additionally supporting technical assistance, training, outreach, program evaluation, and other stakeholder engagement. The Program provides support to development, adaption and adoption of appropriate standards covering interoperability and needed performance levels, as well as evolving a reference system architecture and software tools to appropriately customized Regional and project architectures to meet State, Tribal and local needs. This includes information and guidance to appropriately incorporate mandatory system engineering processes and procedures that ensure consistency with local architecture, facilitate system interoperability, and enable functional expansion of the system over time.

Data Access and Exchanges: This research area focuses on enabling access to core transportation data across the ITS ecosystem, including data and source code generated through DOT's ITS research investments, to accelerate deployment of new ITS technologies, cut the time from research to insight and policy-making, and drive secondary research results. This, in turn, increases return on Federal investment in research and demonstration projects and accelerates multi-modal, data-driven, trusted evaluations of potential safety, mobility, equity, and other benefits to inform future policy and investment decisions. While enabling broader ITS research and deployment activities, these investments drive implementation of various Federal and DOT directives on increasing access to data, source code, and federally funded research results. Consistent with the ITS JPO strategic plan, this research area will also continue to help identify, prioritize, monitor, and – where necessary – address multi-modal data exchanges across traditional organizational boundaries.

What benefits will be provided to the American public through this request and why is this program necessary?

The ITS JPO includes a portfolio of research and technology deployment support programs focused on diverse systems and technologies geared towards producing the greatest public benefit from transportation's increasing technological transformation and using these to enhance safety and accessibility for the American people. The ITS Program is directly aligned with DOT's mission of ensuring the Nation has the safest, most efficient, and modern transportation system in the world. The Program leads the research and deployment of emerging ITS technologies and capabilities to leverage rapidly occurring public and private innovations. In FY 2023, the program will serve as an innovative hub for all aspects of American transportation, from automation and digital infrastructure/data to accessibility and cybersecurity.

Additionally, the ITS Program supports a variety of knowledge and technology transfer opportunities in collaboration with other stakeholders. The ITS Program provides training and educational opportunities through many outlets and methods to provide multidisciplinary and

multimodal stakeholders with the services needed to plan, design, procure, implement, operate, maintain, and manage innovative transportation technologies. The ITS Program supports advancing ITS research, from initial adoption on to wider scale deployment, and culminates in the evaluation of benefits and lessons learned to facilitate transfer of the knowledge to the American public.

Detailed Justification Training and Education Program

What is the request and what funds are currently spent on the program?

FY 2023 – Training and Education (\$25 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Research, Technology & Education Program ^{1/}			
Highway Research and Development Program	125,000	147,000	147,000
Technology and Innovation Deployment Program	67,500	110,000	110,000
Intelligent Transportation Systems Program	100,000	110,000	110,000
Training and Education	24,000	25,000	25,250
University Transportation Centers ^{2/}	77,500	99,000	99,500
Bureau of Transportation Statistics ^{2/}	26,000	26,000	26,250
State Planning & Research (SP&R planning portion) [Non-Add]	[641,504]	[737,475]	[752,300]
State Planning & Research (SP&R research portion) [Non-Add]	[213,835]	[245,825]	[250,767]
Total	420,000	517,000	518,000

1/ This program is funded through the Highway Trust Fund, with the exception of \$19 million from the General Fund in advance supplemental appropriations in both FY 2022 and FY 2023 for University Transportation Centers.

2/ Administered by the Office of the Assistant Secretary for Research and Technology.

What is this program and what does this funding level support?

The Training and Education (T&E) Program provides resources for the development and delivery of technical assistance, training, professional development, and education programs to improve the professional capacity of the workforce that manages, develops and maintains the Nation's highway system. It provides educational and professional capacity building opportunities and resources to the surface transportation community by routinely updating and delivering training and technical assistance on core competencies; identifying and developing training and technical assistance needs for emerging competencies and new skills; actively promoting technology transfer and innovative practices and technologies into the transportation workforce; and actively supporting the successive generations of transportation professionals in the acquisition of their advanced degrees.

This request enables the Department to directly support a key underpinning of a safe, efficient, and environmentally sound surface transportation system - improving the skills and increasing the knowledge of the current and future transportation workforce. By improving the current and future workforce, this program will advance the safety of the Nation's highways, ensure economic strength, improve core assets, ensure investments meet racial equity and economic inclusion goals, ensure resilience and address climate change, and ensure transformation of our Nation's transportation infrastructure to prepare for the transportation system of the future.

The professional capacity and abilities of the transportation workforce are essential elements in the effective, efficient, and equitable development, maintenance, operation and expansion of the

Nation's transportation system. The deployment of innovative methods, practices, and technologies that improve safety, system performance, sustainability, resilience, climate solutions, reliability and economic competitiveness relies on the ability of the transportation workforce to absorb knowledge quickly and on the continuous building of professional capacity and skills. The T&E program advances strategies to meet emerging workforce challenges through the delivery of technical assistance, training, professional capacity building, and education programs that develop appropriately skilled and prepared transportation workers and directly supports the strategic objective for workforce development. The T&E program endeavors to ensure its strategies address the Secretary's priorities of safety, transportation equity, climate solutions, and also include these priorities as evaluation factors for the development of training and education development and dissemination.

The T&E program is administered in conjunction with the Highway Research and Development (HRD) Program and supports the Technology and Innovation Deployment Program (TIDP), the Intelligent Transportation System (ITS) Program, and the State Planning and Research (SP&R) Program.

What benefits will be provided to the American public through this request and why is this program necessary?

T&E is responsible for the training and professional capacity building of the current and future transportation workforce, transferring knowledge quickly and effectively to and among transportation professionals, and providing education solutions throughout the full innovation lifecycle.

T&E provides a wide variety of services and products, including:

- *The National Highway Institute (NHI)* delivers quality training for transportation professionals through a broad range of continuously evolving courses and delivery options. NHI's course catalog includes over 350 training courses in more than 18 transportation industry-related program areas. The delivery options span the spectrum from web-based training, available any time of day, to in-person training. The delivery options integrate the latest digital tools, adult learning models, and industry models advancements, and are designed and developed in collaboration with professionals from FHWA, State and local agencies, and industry partners. The course content is routinely and continuously reviewed and updated to incorporate new innovative technologies and practices. As an accredited provider, individuals receiving training earn continuing education units (CEUs) toward their professional credentials. Through this effort, NHI's training solutions along with innovative curriculum and delivery methods will build new skills and improve the professional capacity of America's transportation workforce.
- *The Local and Tribal Technical Assistance Programs (LTAP/TTAP)* deliver training, technical assistance and technology transfer tailored to the needs and capacity of local public agencies and tribal governments. Deployed and administered in concert with State transportation agencies, the LTAP maintains and builds the local public agencies' professional capacity as their workforce is responsible for networks that are an integral and vital component of the Nation's transportation system. Serving a comparable function for the Native American Tribal Governments across the U.S., the TTAP is

deployed and administered by FHWA. Both programs consider and integrate innovative technologies and practices into the resources they provide.

- *Education/Academic Programs* provide opportunities for potential and new entrants into the transportation workforce to acquire the skills and professional capacity to improve system performance. From early education through post graduate work, these programs focus on attracting, retaining, and advancing the transportation workforce by building awareness and interest in transportation career options; promoting an understanding of the positive impact transportation has on mobility and economic opportunity; and encouraging professionals to take the next steps in their careers through skills acquisition and enhancement. Many programs place a particular emphasis on reaching women, minorities, and disadvantaged groups and addresses transportation equity.
 - The Dwight David Eisenhower Transportation Fellowship Program (DDETFP) advances the U.S. transportation workforce by attracting the Nation's brightest minds and encouraging students from the community college level through the doctorate level to pursue careers in a transportation-related field by awarding grants to qualified students. The DDETFP enhances racial equity by providing opportunities to students enrolled in minority serving institutions of higher learning.
 - The Garrett A. Morgan Technology and Transportation Education Program promotes science, technology, engineering, and mathematics (STEM) applications with a transportation focus at elementary and secondary school levels to engage young minds, particularly women and minorities, toward the pursuit of a career in transportation.
- *The Transportation Education and Training Development and Deployment Program* works collaboratively with the academic community and State departments of transportation to evaluate current and future skills and training needs at all levels of the transportation workforce and to develop, test, review, and implement new curricula and education programs to meet those needs with a focus on enhancing equity in transportation education development and deployment. The innovative technologies and practices advanced through the Technology and Innovation Deployment Program (TIDP) are integrated into this work.
- *The Transportation Centers for Excellence* provide technical assistance, information sharing of best practices, and training in the use of tools and decision-making processes that can assist States in effectively implementing surface transportation programs, projects, and policies. The three areas of focus are:
 - transportation safety;
 - project finance; and,
 - environmental stewardship, including innovative ways to streamline the transportation delivery process.

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Detailed Justification State Planning and Research

What is the request and what funds are currently spent on the program?

FY 2023 – State Planning and Research (Planning: \$752 million; Research: \$251 million)

(\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Research, Technology & Education Program ^{1/}			
Highway Research and Development Program	125,000	147,000	147,000
Technology and Innovation Deployment Program	67,500	110,000	110,000
Intelligent Transportation Systems Program	100,000	110,000	110,000
Training and Education	24,000	25,000	25,250
University Transportation Centers ^{2/}	77,500	99,000	99,500
Bureau of Transportation Statistics ^{2/}	26,000	26,000	26,250
State Planning & Research (SP&R planning portion) [Non-Add]	[641,504]	[737,475]	[752,300]
State Planning & Research (SP&R research portion) [Non-Add]	[213,835]	[245,825]	[250,767]
Total	420,000	517,000	518,000

1/ This program is funded through the Highway Trust Fund, with the exception of \$19 million from the General Fund in advance supplemental appropriations in both FY 2022 and FY 2023 for University Transportation Centers.

2/ Administered by the Office of the Assistant Secretary for Research and Technology.

What is this program and what does this funding level support?

The State Planning and Research, Subpart A (SPR-A) Program will provide funds to support the States' planning activities. The funds are used to establish a continuing, comprehensive, and cooperative statewide transportation planning process.

Funding for the SPR-A program is a maximum 75 percent of a 2-percent set-aside from each State's apportionments of 5 programs: the National Highway Performance Program (NHPP); the Surface Transportation Block Grant Program (STBG); the Highway Safety Improvement Program (HSIP); the Congestion Mitigation Air Quality Improvement Program (CMAQ); and the National Highway Freight Program (NHFP). Eligible activities per 23 USC 505 (a) under the SPR-A program include:

- Engineering and economic surveys and investigations.
- The planning of future highway programs and local public transportation systems and the planning of the financing of such programs and systems, including metropolitan and statewide planning under sections 134 and 135.
- Development and implementation of management systems, plans, and processes under sections 119, 148, 149, and 167.
- Studies of the economy, safety, and convenience of surface transportation systems and the desirable regulation and equitable taxation of such systems.

- Research, development, and technology transfer activities necessary in connection with the planning, design, construction, management, and maintenance of highway, public transportation, and intermodal transportation systems.
- Study, research, and training on the engineering standards and construction materials for transportation systems.
- The conduct of activities relating to the planning of real- time monitoring elements.

The SPR, Subpart B (SPR-B) Program will provide funds to support the States' research activities. The funds are used to establish a comprehensive management process to identify, prioritize, conduct, and evaluate transportation research at the State level.

Funding for the SPR-B program is a minimum 25 percent of a 2-percent set-aside from each State's apportionments of 5 programs: NHPP; STBG; HSIP; CMAQ; and NHFP. Eligible activities per 23 USC 505 (a) under the SPR-B Program include:

- Research, development, and technology transfer activities necessary in connection with the planning, design, construction, management, and maintenance of highway, public transportation, and intermodal transportation systems.
- Study, research and training on the engineering standards and construction materials for transportation systems described in the previous bullet, including the evaluation and accreditation of inspection and testing, and the regulation and taxation of their use.

The IIJA requires each State to use not less than 2.5 percent of its SPR funds on specified planning activities to increase safe and accessible options for multiple travel modes for people of all ages and abilities (similarly, an MPO must use not less than 2.5 percent of its Metropolitan Planning Program funds.) However, a State or MPO, with the approval of the Secretary, may opt out of the requirement if the State or MPO has Complete Streets standards and policies in place, and has developed an up-to-date Complete Streets prioritization plan that identifies a specific list of Complete Streets projects to improve the safety, mobility, or accessibility of a street.

What benefits will be provided to the American public through this request and why is this program necessary?

The FHWA SPR-A program provides funding for the States to meet State-identified transportation planning needs and enables the States to foster innovation, invest in their infrastructure, and address the needs of all communities. This request supports the Secretary's priorities by helping State DOTs make investments that improve the Nation's transportation system in a safe, equitable, transparent, and accountable manner while engaging the public, elected officials, and other stakeholders in the process. States will then use Federal transportation funds more efficiently and effectively to focus on the national performance goal areas and the goals of the IIJA. Examples of products that States produce using SPR-A program include the Long-Range Statewide Transportation Plan, Statewide Transportation Improvement Program (STIP), regional and corridor studies, data collection such as traffic counts, and forecasts of future transportation demand.

The FHWA SPR-B program supports the Secretary's priorities by providing funding for the States to meet State-identified research needs. Using the research management process, high

priority is given to applied research on: State or regional problems, transfer of technologies from researchers to users, and research for setting standards and specifications. This results in better informed policy decisions that balance safety, productivity, and infrastructure preservation (with renewed emphasis on planning for a resilient transportation network). The States may adapt findings to practical applications by developing and transferring new technologies. Additionally, the program promotes enhanced collaboration with transportation stakeholders.

FHWA works with State Departments of Transportation (DOTs) to administer the SPR-B program. The State DOTs can use their SPR-B funds to address specific needs within their State or pool their contributions through different mechanisms to further leverage their funds. In addition to providing stewardship and oversight of SPR-B program, FHWA works with State DOTs on the National Cooperative Highway Research Program (NCHRP), which is a State-driven program to address issues integral to State DOTs using SPR funds. The NCHRP program, which is funded by SPR-B contributions, funds projects that are selected by the States through the American Association of State Highway and Transportation Officials (AASHTO) Special Committee on Research and Innovation. The NCHRP program has a long history of developing valuable tools, innovations, and resources for the States. A recent example is NCHRP report 897: *Tools to Facilitate Implementation of Effective Metropolitan Freight Transportation Strategies*. This report provides transportation practitioners and decision makers with guidance for implementing effective metropolitan freight transportation strategies.

FHWA also administers the Transportation Pooled Fund (TPF) Program which has enabled public and private entities to combine resources to conduct high-priority research on a wide variety of shared transportation related topics including: safety, economic strength, resiliency and climate change, racial equity and transportation infrastructure. By pooling funds and expertise, States, FHWA and other transportation partners develop innovative solutions at lower cost while extending the reach and impact of their research. The TPF studies often result in institutionalized practices that provide wide reaching national benefits.

One example of this is a pooled fund study led by FHWA with over forty-one partner States that evaluates low-cost safety improvement countermeasures. One of the greatest successes of this study is the now proven safety countermeasures have become institutionalized practices with States across the country to help reduce fatalities and injuries. Minnesota Department of Transportation is also leading a TPF study to help agencies make equitable decisions in transportation planning. With contributions from eleven other State DOTs, the TPF study will provide an updated national data set to determine transportation equity and reveal how the costs and benefits of transportation investments are distributed. This dataset can be used by agencies throughout the country to make more equitable transportation decisions.

States also use their SPR-B funds to do internal research as well, such as a recently completed study conducted by the Utah DOT (UDOT), which developed a safety forecast model to prioritize long-range planning and construction based on the predicted safety performance of different build scenarios. The UDOT safety forecast model utilized the statistical methodologies outlined in the Highway Safety Manual, which is a product that resulted from numerous NCHRP research projects and reports.

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Executive Summary

Prioritization Process Pilot Program

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$10 million for the new Prioritization Process Pilot Program. The FY 2022 enacted level for this pilot is \$10 million. This program is funded through the Highway Trust Fund.

What is this program and what does this funding level support?

The Prioritization Process Pilot Program will award discretionary grants to selected States and MPOs serving a population of greater than 200,000 to fund the development and implementation of publicly accessible, transparent prioritization processes to assess and score projects according to locally determined priorities, and to use such evaluations to inform the selection of projects to include in transportation plans. The program will support data-driven approaches to planning that, on completion, can be evaluated for public benefit.

What benefits will be provided to the American public through this request and why is this program necessary?

FHWA recognizes that entrenched disparities in laws and public policies have denied equal opportunity to individuals and communities. FHWA is committed to advancing equity for all, embedding fairness in decision-making processes, and working to redress inequities in policies and programs that serve as barriers to equal opportunity. Through the development and implementation of an accessible, transparent, data-driven, and locally determined project evaluation and selection process, the Prioritization Process Pilot Program will support the Administration's goal of reducing inequities across our transportation systems and the communities they affect.

Detailed Justification Prioritization Process Pilot Program

What is the request and what funds are currently spent on the program?

FY 2023 – Prioritization Process Pilot Program (\$10 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Prioritization Process Pilot Program	-----	10,000	10,000
Total	-----	10,000	10,000

What is this program and what does this funding level support?

The Prioritization Process Pilot Program will award grants to selected States and MPOs to fund the development and implementation of publicly accessible, transparent prioritization processes to assess and score projects according to locally determined priorities, and to use such evaluations to inform the selection of projects to include in transportation plans and transportation improvement programs. The program will support data-driven approaches to planning that, on completion, can be evaluated for public benefit. The maximum amount of a grant under this program is \$2 million.

If a grant recipient has fully implemented a prioritization process, they may use any additional remaining grant funds for any transportation planning purpose. If the inclusion or exclusion of a project on a transportation improvement program or statewide transportation improvement program deviates from the long-term transportation plan, the eligible entity is required to provide a public explanation for the decision.

What benefits will be provided to the American public through this request and why is this program necessary?

The program will encourage States and MPOs to develop transparent and accountable processes to guide project selection in the development of the transportation plan and transportation improvement program and will lead to the development of data-driven approaches to planning that can be evaluated for public benefit. The process will assess and score projects on the basis of priority objectives that are developed by the State or MPO for their local area, and on the basis of their contribution and benefits toward meeting the priority objectives for the area, the costs of the project or strategy relative to the contribution and benefits, and public support. The process will lead to the development of a prioritized list of projects, include an opportunity for public input, and will support equitable transportation decision-making.

Executive Summary

Reconnecting Communities Pilot Program

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$198 million for the new Reconnecting Communities Pilot Program. Of this amount, \$100 million is advance supplemental appropriations from the General and \$98 million is funded through the Highway Trust Fund. In FY 2022, \$195 million is provided for this program, of which \$100 million is advance supplemental appropriations from the General and \$95 million is funded through the Highway Trust Fund.

What is this program and what does this funding level support?

The Reconnecting Communities Pilot Program will provide planning and capital construction grants to assess the feasibility and impacts of removing, or retrofitting existing transportation facilities that create barriers to mobility, or to carry out projects that remove, retrofit, or replace an eligible facility.

This program will award both planning and construction grants. The planning grants will study the feasibility and impacts of the reconnecting communities projects. The construction grants will carry out the project which may include removing, retrofitting, and replacing a facility.

What benefits will be provided to the American public through this request and why is this program necessary?

Our Nation's vast network of roads and bridges have connected communities from coast to coast and made it possible for people to access opportunities within their communities and beyond. However, past inequitable infrastructure decisions have at times divided and fragmented communities, which have often been home to historically disadvantaged peoples. Without access to safe and efficient transportation options, a community's ability to prosper, grow, and access opportunities is severely impacted. The Reconnecting Communities Pilot Program will support projects with the goal of redressing these historical inequities and providing equitable transportation.

Detailed Justification Reconnecting Communities Pilot Program

What is the request and what funds are currently spent on the program?

FY 2023 – Reconnecting Communities Pilot Program (\$198 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Reconnecting Communities Pilot Program	-----	195,000	198,000
Total	-----	195,000	198,000

What is this program and what does this funding level support?

The Reconnecting Communities Pilot Program will address ongoing inequities created when infrastructure divides communities, creating environmental and community impacts and limiting mobility, access and/or economic development. The Program will award both planning and construction grants to:

- Study the feasibility and impacts of removing, retrofitting, or mitigating existing transportation facilities that create barriers to mobility, access, or economic development.
- Conduct planning activities necessary to design a project to remove, retrofit, or mitigate an existing eligible facility.
- Conduct construction activities necessary to carry out a project to remove, retrofit, or mitigate an existing eligible facility.

Eligible facilities include limited access highways, viaducts, or any other principal arterial facilities that create a barrier to community connectivity, including barriers to mobility, access, or economic development, due to high speeds, grade separations, or other design factors.

The Federal share for a planning grant project may not exceed 80 percent, and a planning grant may not exceed \$2 million per recipient. The minimum award amount for a capital construction grant shall be \$5 million and the Federal share may not exceed 50 percent. The maximum Federal assistance provided for a project award may not exceed 80 percent.

What benefits will be provided to the American public through this request and why is this program necessary?

The development of the Interstate Highway System connected our country in ways it had not been previously, but, in some instances, it also fragmented neighborhoods and divided communities. Similar fragmentation has sometimes been created by other types of infrastructure including rail lines. In these communities, the nearby highway or transportation facility creates real barriers to community cohesion and limits transportation and economic opportunities for some communities and community residents.

Transportation can play an important role in supporting community revitalization. As multimodal transportation systems connect Americans to employment, education, healthcare and other essential services, these infrastructure investments create jobs and benefit businesses, particularly small and disadvantaged business enterprises. Providing transportation options that connect urban and rural communities can also offer public health, safety, and air and water quality benefits, among others.

Through this discretionary grant program, States, MPOs, nonprofit organizations, local governments, and Tribal Governments will be able to apply for both planning grants to lay the groundwork for restoring community connectivity by correcting historical barriers to mobility, access, and economic development and construction grants for projects that mitigate or eliminate existing fragmentation and create new community connections.

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Executive Summary

Wildlife Crossings Pilot Program

What is the request and what funds are currently spent on the program?

The FY 2023 budget includes \$65 million for the new Wildlife Crossings Pilot Program. The FY 2022 enacted level for this pilot is \$60 million. This program is funded through the Highway Trust Fund.

What is this program and what does this funding level support?

The Wildlife Crossings Pilot Program provides grants for the greater adoption of wildlife-vehicle collision (WVC) safety countermeasures that lessen the number of serious fatal crashes and support wildlife survival, including improved habitat connectivity. These projects will include the planning, design and construction of roadway infrastructure that reduces the number of WVC and ensures adequate and unimpeded passage of aquatic and terrestrial species.

What benefits will be provided to the American public through this request and why is this program necessary?

Safety is FHWA's top priority. An important aspect of roadway safety is the relationship between vehicles and the surrounding natural environment, including wildlife. The interaction of drivers and wildlife can often lead to serious injury and fatalities. Also, roads and bridges can at times impede wildlife movement, significantly impacting the neighboring wildlife and environment. However, proper planning and construction of WVC countermeasures can greatly reduce WVC, thereby reducing serious injuries and fatalities, while also providing for safe wildlife movement. Furthermore, 60 percent of the grant funds must be spent in rural areas. This will help to improve safety in rural areas where WVC are more likely to happen.

Detailed Justification Wildlife Crossings Pilot Program

What is the request and what funds are currently spent on the program?

FY 2023 – Wildlife Crossings Pilot Program (\$65 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Wildlife Crossings Pilot Program	-----	60,000	65,000
Total	-----	60,000	65,000

What is this program and what does this funding level support?

The Wildlife Crossings Pilot Program provides funding for projects that plan, design and construct roadway infrastructure that ensures adequate and unimpeded passage of aquatic and terrestrial species while reducing the number of wildlife-vehicle collisions. Federal-aid funds for the Wildlife Crossings Pilot Program are to be awarded on a competitive basis. The Program also supports innovative technologies to enhance effective means to reduce WVCs.

What benefits will be provided to the American public through this request and why is this program necessary?

Proven, installed safety countermeasures reduce serious injuries, fatalities, and property damage. The Wildlife Crossings Pilot Program supports fish and wildlife conservation and climate resiliency by improving habitat connectivity and survival for species whose access to migration routes or suitable habitats are impeded by transportation infrastructure. The grant funds will support improved safety while advancing conservation goals for Federal Lands Management Agencies, State and local governments, regional governments, and Tribes.

Rural areas experience higher collision rates compared to urbanized areas. These rural areas, where at least 60 percent of the funds must be spent, will benefit greatly from improved traveler safety and reduction in WVCs. Rural areas in this context include Tribal communities.

In addition to improving traveler safety, this program is necessary to understand, monitor and deploy (construct) proven safety countermeasures and infrastructure that reduce WVC while enhancing habitat connectivity, which supports conservation goals of the Administration.

The Wildlife Crossings Pilot Program will accelerate the transformation of our transportation system to one that is safer for travelers and more accommodating to the needs of fish and wildlife to move across the landscape. In the absence of this program, the historical data shows that transportation infrastructure will continue to facilitate WVCs and serve as an impediment to wildlife movement and migration routes.

Executive Summary

Administrative Expenses

What is the request and what funds are currently spent on the program?

The FY 2023 Budget includes \$476.8 million in contract authority for FHWA administrative expenses and an equal amount of Limitation on Administrative Expenses (LAE). In addition, the IIJA provided \$86.8 million in appropriated budget authority for FHWA administrative expenses as takedowns from Highway Infrastructure Programs funding. Therefore, the total administrative expenses funding level requested for FY 2023 is \$563.6 million.

The FY 2021 enacted level of contract authority was \$456.8 million. The Department of Transportation Appropriations Act, 2021, provided an LAE of \$478.9 million for FY 2021, with FHWA operating at the higher LAE level by using carryover administrative expenses contract authority. In FY 2022, the IIJA provided \$467.0 million in contract authority for administrative expenses and an equal amount of LAE. In addition, the IIJA provided \$86.8 million in FY 2022 in appropriated budget authority for FHWA administrative expenses as takedowns from Highway Infrastructure Programs funding.

The contract authority amount includes \$3.2 million for each fiscal year for administrative expenses of the Appalachian Regional Commission (ARC). The remainder is for FHWA General Operating Expenses (GOE).

What is this program and what does this funding level support?

This GOE funding level supports salaries and benefits for slightly under 2,150 employees, as well as rent, communications, utilities, contractual services, travel, supplies, and equipment to support the delivery of FHWA's programs. The funding level requested for administrative expenses is essential for FHWA to effectively deliver and manage the \$69.0 billion highway program provided by the IIJA in FY 2023 and comprises less than 1 percent of the overall FHWA Budget request.

What benefits will be provided to the American public through this request and why is this program necessary?

The IIJA substantially increases funding for FHWA's ongoing programs continued from prior authorization act while also authorizing a significant number of new programs. Without a properly staffed, trained, and equipped workforce FHWA's programs would not be able to make roadways safer for all people, rehabilitate and repair roads and bridges, plan and construct equitable transportation infrastructure, address the climate change challenge, and deploy transportation innovations.

Detailed Justification Limitation on Administrative Expenses

What is the request and what funds are currently spent on the program?

FY 2023 – Limitation on Administrative Expenses (\$563.6 million) (\$000)

Program	FY 2021 Enacted	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Limitation on Administrative Expenses ^{1/}	456,798	466,965	476,784
Highway Infrastructure Programs (administrative takedown) ^{2/}	----	86,816	86,816
Total	456,798	553,781	563,600

1/ All fiscal years include FHWA General Operating Expenses (GOE) and transfers to the Appalachian Regional Commission (ARC) for administrative activities associated with the Appalachian Development Highway System. Other non-administrative programs funded by set-asides from administrative expenses are included in the Federal Allocation Programs justification.

2/ The IIJA provides funding for administrative expenses as takedowns from the Highway Infrastructure Programs (HIP). The HIP administrative expenses funding will be used for information technology investments, contractual services, and other investments and services to support the implementation and administration of the IIJA on a to-be-determined basis.

What is this program and what does this funding level support?

FHWA administrative expenses provides the resources necessary to maintain oversight and administrative operations for the FHWA's programs. Funding will support activities to meet the FHWA strategic objectives and other Federal mandates. Additionally, funding will support administrative expenses for the ARC.

The majority of FHWA's employees are located at 52 Division offices – one in each State; Washington, DC; and Puerto Rico. In addition, three Federal Lands Highway Program Field offices and a Resource Center provide national support through technical assistance, training, and innovative technology deployment assistance for the Division offices, State departments of transportation (DOTs), Federal land management agencies, metropolitan planning organizations, and local agencies. The majority of FHWA staff are in field offices. Field staff work directly with State and local partners, other Federal agencies, and Tribes to oversee FHWA's programs and assist these partners in advancing projects.

FHWA's Headquarters program staff provide national leadership and work directly with Division offices, States, and other stakeholders to advance FHWA's programs. Some of the areas for which these offices provide national leadership include: making the Nation's roadways safer for all users; increasing transportation equity; addressing the climate change challenge; increasing infrastructure resilience; deploying innovations; institution of performance management standards and processes; oversight of bridge inspection; coordination among other Federal agencies; and providing critical technical assistance to Division offices, States, and other stakeholders.

In addition, FHWA's Headquarters offices provide agency-wide support for FHWA's programs, including: administration of information technology (IT) systems such as those used to manage highway funding, or to report highway data; technical assistance on reauthorization and other legislation; and establishment and implementation of employee programs and training opportunities to maintain a knowledgeable workforce. Furthermore, these offices provide all legal, IT, policy, human resources, training, finance, budget, and acquisitions support for the entire agency.

Funding Request

The FY 2023 budget requests \$476.8 million in LAE for FHWA GOE and an additional \$86.8 million in budget authority as takedowns from Highway Infrastructure Programs funding, totaling \$563.6 million for FHWA administrative expenses.

FHWA Staffing Needs

The IIJA significantly increases the funding levels for FHWA's ongoing programs while also authorizing a significant number of new programs. On average, including Highway Trust Fund funding and supplemental General Fund appropriations, the IIJA provides \$70.3 billion for FHWA programs from FY 2022 through FY 2026. This is an increase of over \$25 billion compared to the average yearly funding provided by the Fixing America's Surface Transportation Act. In addition to this historic increase in funding, the IIJA significantly increased the number of FHWA's programs. More than a dozen new programs will support the Administration's goals of improving safety, fixing America's bridges and roads, ensuring transportation equity, and combating climate change. The new programs are a combination of formula programs that distribute funding based on statute and discretionary programs that will competitively award grants.

The IIJA recognizes the need for a well-staffed and funded FHWA workforce by providing vital administrative funding through the Highway Trust Fund and as a takedown from several Highway Infrastructure Programs. FHWA will utilize this administrative funding to ensure that the Administration's vision for building a better transportation system is well executed and realized. To this end, FHWA anticipates the net hiring of 30 additional staff in FY 2022 and 100 additional staff in FY 2023. In order to achieve these hiring targets, FHWA plans to take a number of actions, including bringing onboard additional human resources staff/contractors, utilizing hiring flexibilities such as direct hire authority, and streamlining the hiring process through measures such as standardized vacancy announcements. This hiring will ensure that FHWA is appropriately staffed to implement FHWA's programs, which have increased in size and complexity under the IIJA.

ARC Administrative Funding

The administrative funding estimate for ARC is included within FHWA's overall administrative expenses request. ARC administrative funds provide for salaries, benefits, travel, and related expenses for both ARC and FHWA employees that are working on the ADHS. The budget requests \$3.2 million for ARC administrative expenses, which is included in the overall LAE request of \$476.8 million.

What benefits will be provided to the American public through this request and why is this program necessary?

FHWA administrative funding is integral to the effective delivery of FHWA's programs in accordance with Federal laws and regulations, and protected from fraud, waste, and abuse. Through adequately funded administrative expenses, FHWA staff will have the necessary resources to support the Secretary's strategic goals.

IIJA Implementation

Since the enactment of the IIJA, FHWA has reached several significant milestones. The additional funding for administrative expenses provided by the IIJA will allow FHWA staff to continue to successfully implement the IIJA.

- In December 2021, FHWA distributed to States \$52.5 billion in Federal-aid highway formula funding, the largest Federal Highway apportionment in decades. This accounted for 78 percent of all FY 2022 highway funding under the IIJA.
- In January 2022, FHWA launched the Bridge Formula Program, which will provide a historic level of bridge investment to communities across our Nation. FHWA distributed FY 2022 Bridge Formula Program funding to States and provided program guidance. Nationwide, the Bridge Formula Program is expected to help repair approximately 15,000 highway bridges. FHWA staff will be instrumental in carrying out this historic program.
- Also, in January 2022, FHWA continued our commitment to safe, accessible, and efficient transportation in rural areas through the release of dedicated funding provided by the IIJA for the ADHS. FHWA staff works closely with the ARC to promote innovation, partnership, and investment to build communities, strengthen the economy and improve socioeconomic conditions in Appalachia.
- In February 2022, FHWA launched the National Electric Vehicle Infrastructure (NEVI) Formula Program, a crucial step towards making electric vehicles accessible for all people and combating climate change. FHWA distributed FY 2022 NEVI funding to States along with program guidance. This program builds upon FHWA's successful implementation of Alternative Fuels Corridors that nearly every State has designated. FHWA staff will work close with the new Joint Office of Energy and Transportation to help deploy a network of electric and other alternative fuel infrastructure.
- Also, in February 2022, FHWA staff released FY 2022 funding for Puerto Rico and the four U.S. territories of American Samoa, the commonwealth of the Northern Mariana Islands, Guam, and the U.S. Virgin Islands, continuing our commitment to building safe, accessible, and equitable roads in these areas. The IIJA provides over a 14 percent increase in funding for Puerto Rico and the territories to make critical road and bridge investments compared to the funding provided in the Fixing America's Surface Transportation Act.

FHWA's commitment to these vital parts of our Nation is exemplified by the assistance provided by FHWA staff to Puerto Rico in the aftermath of hurricanes Irma and Maria. This includes helping assess the condition of infrastructure and providing other technical support and assistance throughout the recovery process. FHWA engineers continue to work alongside the staff of the Puerto Rico Department of Transportation and Public Works on emergency repair projects.

Focusing on Safety

FHWA believes that zero is the only acceptable number of deaths on our roads and that a Safe System is how we get there. FHWA staff will play an important role in implementing the Department of Transportation's National Roadway Safety Strategy, which has formally adopted zero deaths as the DOT-wide vision and emphasizes the Safe System Approach. Two of the areas where FHWA staff must and will take a leadership role are Safer Roads and Safer Speeds.

Safer roads incorporate design elements that both help prevent crashes from occurring and mitigate harm when they do. Safer roads encourage safer behavior and facilitate safe travel. To this end, FHWA staff will update its Manual on Uniform Traffic Control Devices and will also update roadway design guidance and regulations to reflect best practices for designing and operating safer roadways and work with States and other owners of highways, roads, and streets to achieve safer roadway design. Additionally, FHWA will be implementing the findings and actions in our 2022 report to Congress, "Moving to a Complete Streets Design Model," as we work to increase the proportion of Federal-aid funded projects that are routinely planned, designed, built, and operated as Complete Streets that are safe and accessible for all users.

Setting safer speed limits is another critical tool for reducing crashes and injury. FHWA will improve the information available for setting speed limits, provide a range of methodologies for setting speed limits depending on the context of the roadway, and provide technical assistance to communities on appropriate speed limit setting.

Restoring Economic Strength

The IIJA provides a historic investment in our Nation's roads and bridges. For example, the IIJA includes the single largest dedicated bridge investment since the construction of the Interstate System. FHWA staff will play an integral role in ensuring that new programs, such as the Bridge Formula Program and the Bridge Investment Program, are successfully implemented.

FHWA works closely with States, local governments, Federal agencies, and Tribes to help provide successful and streamlined project delivery. For example, FHWA staff have worked closely with the Virginia Department of Transportation on the Hampton Roads Bridge-Tunnel Expansion. This FHWA supported project, will widen the current four-lane segments along nearly ten miles of the I-64 corridor in Norfolk and Hampton, Virginia, with new twin tunnels across the Hampton Roads waterway. The I-64 Hampton Roads Bridge-Tunnel is one of the most congested corridors in the region. Scheduled for completion in November 2025, this is the largest highway construction project in Virginia's history. This project is expected to ease major

congestion, enhance travel time reliability, increase capacity, and increase safety and support emergency evacuation readiness.

The IIJA increases funding for the ADHS by 150 percent compared to FY 2021. FHWA is committed to strengthening transportation infrastructure in the Appalachian region. FHWA staff will work closely with the ARC to help complete the ADHS, thereby improving safety, road and bridge conditions, and the movement of people and freight in and through Appalachian States.

Ensuring Transportation Equity

FHWA will work towards creating a more equitable transportation system that provides affordable access to transportation for all communities and redresses prior inequities and barriers to opportunity created by the transportation system. FHWA staff will implement programs, newly authorized by the IIJA, that will provide dedicated funding to improve transportation equity:

- The new Reconnecting Communities Pilot Program will fund planning efforts and projects with the goal of removing or retrofitting existing transportation facilities that create barriers within communities.
- The new Rural Surface Transportation Grant Program will award competitive grants to eligible entities to improve and expand the surface transportation infrastructure in rural areas.
- The new Prioritization Process Pilot Program will focus on equity, transparency, and accessibility in transportation planning.

With funds made available by the IIJA for these and many other programs, FHWA's Federal, State, Tribal and local partners will be delivering more projects this year and in years to come. FHWA staff will work with these stakeholders to ensure that these investments create opportunities for advancing equity.

FHWA staff will work to expand and diversify the workforce that builds Federally funded highway projects. FHWA is encouraging recipients to consider implementing Local Hire programs, which can be used to ensure that the jobs created by investing in roads and bridges go to a diverse group of local residents.

Furthermore, FHWA staff champions innovative approaches to expanding workforce opportunities. For example, FHWA staff, working with the American Association of State Highway and Transportation Officials, the Associated General Contractors of America, the American Road & Transportation Builders Association, and the U.S. Department of Labor's Employment and Training Administration, created a highway construction workforce development playbook called "Identify, Train, Place." The playbook is aimed at helping State and local agencies identify, train, and place workers in the transportation construction workforce to meet resource needs to deliver highway construction jobs.

In addition to the playbook, FHWA developed a comprehensive outreach campaign called Roads to Your Future. The campaign includes free messaging and marketing materials to help recruit the next generation of highway construction workers. Many of the materials can be customized with local information to market open jobs and training to potential applicants.

FHWA staff will conduct a program evaluation on the agency's Americans with Disabilities Act (ADA) program to assess whether the program has been implemented as intended. As part of the assessment, FHWA staff will seek opportunities to improve effectiveness, efficiency, and compliance and opportunities to streamline and/or reduce effort.

Addressing Climate Change

FHWA staff directly supports the Administration's goal of installing 500,000 new electric vehicle (EV) chargers by 2030. FHWA's programs support States, Tribes, Territories, MPOs, and FLMAs in building out EV chargers. These EV chargers will support inter-city, regional, and national travel, build consumer confidence by addressing driver range anxiety, and accelerate awareness of and public interest in the use of EVs. Several FHWA programs, including the NEVI Formula Program, Charging and Fueling Infrastructure Grants Program, NHPP, STBG, CMAQ, and the Federal Lands and Tribal Transportation Programs, are available to plan for and build EV chargers; support workforce training for new technologies; and integrate EVs as part of strategies to address commuter, freight, and public transportation needs.

FHWA's research programs and staff are dedicated to combating climate change by reducing transportation-related emissions. FHWA's Exploratory Advanced Research Program has funded research on technology and strategies to allow two and three long-distance trucks to travel close together in platoons using cooperative adaptive cruise control (CACC). CACC allows trucks to travel together more smoothly, exchanging information between trucks and automatically adjusting engine and brakes in real time as conditions vary. Researchers are investigating the fuel savings in two-truck platoons and how CACC allows trucks to drive safely at shorter following distances. This research could lead to new levels of freight fleet efficiency and improved mobility for all highway travelers. In addition, it could substantially improve the trucking-based emissions picture, improve fuel efficiency, and enhance the vehicle-to-everything communications environment.

Pursuing Innovation

FHWA staff conducts research, advances technologies and practices, such as the use of connected vehicle (CV) technologies, delivers training, and provides technical assistance to States, local and Tribal governments. These new technologies and practices save lives, time, and money.

FHWA staff implements the Research, Technology, and Education Program which strives to generate new solutions, build more effective partnerships, and provide better information and tools for decision-making, which will enable our Nation to enhance and make the best investments in the transportation system. Through this program, FHWA staff execute the entire innovation life cycle, from research and development, to testing and evaluation, and to deployment and training.

One example of how FHWA champions innovation is the Every Day Counts (EDC) program. Since 2011, FHWA staff have identified and rapidly deployed proven, yet underutilized innovations that make our transportation system adaptable, sustainable, equitable, and safer for all. FHWA staff will focus the 2023-2024 EDC cycle on market-ready, but underutilized practices or technologies that enhance roadway safety for all users, support sustainable and resilient infrastructure, and/or address equity as part of project planning and delivery.

FHWA's commitment to innovation is also exemplified by the Accelerated Innovation Deployment (AID) Demonstration program which builds on FHWA's efforts to collaborate with State, local and Tribal governments, as well as Federal land management agencies, to accelerate the use of innovations and reduce project delivery times. The AID Program has recently awarded grants to seven States with the goal of making the most of limited resources by helping to bring projects to fruition in a more cost-effective way by using innovative practices. For example, the Alabama Department of Transportation (ALDOT) will deploy an innovation known as Advanced Geotechnical Methods in Exploration (A-GaME) to repair and reopen a section of U.S. Route 231 in Morgan County that closed after a mudslide in 2020. ALDOT expects A-GaME to help reduce construction delays and identify subsurface conditions that can mitigate risks.

By providing funding at the requested level, FHWA can continue to provide these valuable services, enhancing the transportation experience for all Americans.

Exhibit IV-1
Department of Transportation
FY 2023 Budget
Federal Highway Administration
Research, Technology, and Education Budget Narrative
(Budget Authority in Thousands)

Budget Account	FY 2021 Actual	FY 2022 CR (w/IIJA Oblim)	FY 2023 Request	Applied	Tech Transfer	Facilities	Experimental Development	Major Equipment, R&D Equipment
Research, Technology & Education (RT&E) Program								
Highway Research and Development	111,125	134,211	147,000	73,500	47,040	-----	26,460	-----
Technology and Innovation Deployment Program	60,008	100,430	110,000	-----	110,000	-----	-----	-----
Training and Education Program	21,336	22,825	25,250	-----	25,250	-----	-----	-----
Intelligent Transportation Systems	88,900	100,430	110,000	83,600	26,400	-----	-----	-----
University Transportation Centers (UTC) ^{1/}	68,898	73,040	80,500	80,500	-----	-----	-----	-----
State Planning and Research (SP&R) ^{2/}	213,835	245,825	250,767	150,460	62,692	-----	37,615	-----
Advanced Transportation Technologies & Innovative Mobility Deployment [Non-add] ^{3/}	[53,340]	[54,780]	[60,000]	-----	[60,000]	-----	-----	-----
Subtotal, RT&E Program	564,101	676,761	723,517	388,060	271,382	-----	64,075	-----
Administrative, RT&E	26,283	24,452	24,452	11,161	7,805	3,643	1,843	-----
Add: Bureau of Transportation Statistics ^{1/}	26,000	26,000	26,250	26,250	-----	-----	-----	-----
Less: Administrative	-26,283	-24,452	-24,452	-11,161	-7,805	-3,643	-1,843	-----
Less: State Planning and Research (SP&R)	-213,835	-245,825	-250,767	-150,460	-62,692	-----	-37,615	-----
Total RT&E Program ^{4/ 5/}	376,266	456,936	499,000	263,850	208,690	-----	26,460	-----
IIJA HIP Supplemental Appropriations (GF)								
University Transportation Centers (UTC) ^{1/}	-----	19,000	19,000	19,000	-----	-----	-----	-----
Subtotal, IIJA HIP Supplemental Appropriations (GF)	-----	19,000	19,000	19,000	-----	-----	-----	-----
Administrative, IIJA HIP Supplemental Appropriations (GF)	-----	-----	285	285	-----	-----	-----	-----
Less: Administrative	-----	-----	-285	-285	-----	-----	-----	-----
Total HIP Supplemental Appropriations (GF)	-----	19,000	19,000	19,000	-----	-----	-----	-----
Total Programs ^{4/ 5/}	376,266	475,936	518,000	282,850	208,690	-----	26,460	-----

1/ Details for this program are contained in the Office of the Assistant Secretary for Research and Technology FY 2023 budget.

2/ Title 23 U.S.C. 505(b) requires State DOT's to expend no less than 25 percent of their annual SP&R funds on RT&E activities. Total SP&R funding represents 2 percent of apportioned programs, exclusive of the Metropolitan Planning Program, Carbon Reduction Program, and Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Program.

3/ Advanced Transportation Technologies & Innovative Mobility Deployment (formerly Advanced Transportation and Congestion Management Technologies Deployment) will be funded by set-asides from Highway Research and Development, Technology and Innovation Deployment Program, and Intelligent Transportation Systems.

4/ Subtotals may not add due to rounding.

5/ FY 2021 actual amounts reflect the 11.1 percent "lop-off" resulting from the imposition of the obligation limitation. The FY 2022 annualized CR amounts reflect the 8.7% "lop-off" resulting from the imposition of the obligation limitation. The FY 2023 Request reflect authorized amounts per program before the "lop-off" percentage has been applied.

Exhibit IV-2
Department of Transportation
FY 2023 Budget
Federal Highway Administration
RT&E Program Funding by DOT Strategic Goal
(Budget Authority in Thousands)

ACCOUNT/PROGRAM	FY 2023 President's Budget	DOT STRATEGIC GOALS					
		Safety	Economic Strength	Equity	Climate & Sustainability	Transformation	Organizational Excellence
Research, Technology & Education (RT&E) Program							
Highway Research and Development	\$147,000	\$36,750	\$22,050	\$14,700	\$14,700	\$44,100	\$14,700
Technology and Innovation Deployment Program	\$110,000	\$27,500	\$16,500	\$11,000	\$11,000	\$33,000	\$11,000
Training and Education Program	\$25,250	\$6,313	\$3,788	\$2,525	\$2,525	\$7,574	\$2,525
Intelligent Transportation Systems	\$110,000	\$11,000	\$33,000	\$11,000	\$11,000	\$33,000	\$11,000
University Transportation Centers ^{1/}	\$80,500	See footnote.					
Bureau of Transportation Statistics ^{1/}	\$26,250						
Total, RT&E Program ^{2/}	\$499,000	\$81,563	\$75,338	\$39,225	\$39,225	\$117,674	\$39,225
IIJA HIP Supplemental Appropriations (GF)							
University Transportation Centers ^{1/}	\$19,000	See footnote.					
Total, IIJA HIP Supplemental Appropriations (GF)	\$19,000						
Total Programs ^{2/}	\$518,000	\$81,563	\$75,338	\$39,225	\$39,225	\$117,674	\$39,225

1/ Details for this program are contained in the Office of the Assistant Secretary for Research and Technology FY 2023 Budget.

2/ The amounts in this table reflect an illustrative distribution among the Strategic Goals. In most cases, activities funded through these programs will overlap with more than one of the Strategic Goals, as they are not mutually exclusive.

**FEDERAL HIGHWAY ADMINISTRATION
RESEARCH, TECHNOLOGY, AND EDUCATION (RT&E)**

RT&E PROGRAM NAME: HIGHWAY RESEARCH & DEVELOPMENT PROGRAM

Objectives: To research and develop transformational technologies that support and improve safety; improve the mobility of people and goods; stimulate growth, productivity, and competitiveness; reduce congestion; improve the durability and extend the life of transportation infrastructure; foster innovation in transportation and transportation technologies; accelerate project delivery; and support the transition to the future transportation system through innovative practices and technologies that provides an equitable approach to serve all road users, including those in social and demographic communities that are underserved in access to mobility options and disproportionately represented in preventable and fatal injury.

Fiscal Year 2021: \$111.1 million

In FY 2021, the Highway Research and Development Program conducted research and development activities that resulted in innovative technologies, tools and processes; implemented innovative data analysis methods; and engaged in longer-term, higher-risk research. These investments were focused on developing advanced technologies, practices and knowledge including innovative road safety solutions; models and design improvements to support the integration of emerging vehicle technologies; and updated guidance policies to improve the safety, structural integrity, and longevity of highway infrastructure. This will result in better highway safety design, enhanced quality and durability of infrastructure, accelerated project delivery, reduced costs through efficient construction, and help deliver and sustain advanced and emerging technologies to support the transformation of our Nation's transportation infrastructure. FY 2021 funding level reflects the 11.1 percent "lop-off" resulting from the imposition of the obligation limitation. For example, the Exploratory Advanced Research (EAR) Program actively supports research in materials science to address the health of highway structures and pavements and to provide a greater range of predictable materials for construction and repair of bridges and pavements. One awarded EAR Program research project went to researchers at Auburn University who are focusing on reducing the aging of asphalt binders so roadways last longer.

Fiscal Year 2022: \$134.2 million

In FY 2022, FHWA is building on prior research and continues to work toward solutions that address the Nation's most critical infrastructure-related needs. The FHWA R&T Program for FY 2022 includes both follow-on initiatives from prior work and new activities that address emerging needs. Specific activities include research on automated driving systems, multimodal mobility, and advanced infrastructure materials and infrastructure resilience. FY 2022 funding level reflects the 8.7 percent "lop-off" resulting from the imposition of the obligation limitation.

Fiscal Year 2023: \$147.0 million

In FY 2023, FHWA will continue to foster innovation in tools, research, and models to improve the safety of the Nation's infrastructure; improve mobility and accessibility; stimulate economic growth, productivity, and competitiveness; lead in the development and deployment of innovative practices and technologies; and serve the Nation with greater equity, efficiency, effectiveness and accountability. For example, FHWA will pursue roadway design, construction, and maintenance, and robust data analysis tools to reduce the number of fatalities and serious

injuries on the Nation's roads, including for social and demographic communities that suffer disproportionately from preventable death and fatal injury from crashes; conduct forward-looking, transformative research that ensures a durable, resilient, and environmentally-friendly infrastructure; and invest in research that creates system-wide operational improvements, plans for the integration of transformative technologies, and reduces the impact on the environment. The IIJA includes funding set-aside for the following programs:

- *Strategic Innovation for Revenue Collection:* This program modifies and renames the Surface Transportation System Funding Alternatives program. The purpose of this program is to test the feasibility of a road usage fee and other user-based alternative revenue mechanisms to help maintain the long-term solvency of the Highway Trust Fund, through pilot projects at the State, local, and regional. The IIJA expanded eligibility for this program to include metropolitan planning organizations and local governments, in addition to States.
- *National Motor Vehicle Per-Mile User Fee Pilot:* This pilot program will demonstrate a national motor vehicle per-mile user fee; establish a Federal System Funding Alternative Advisory Board; and carry out a public awareness campaign to increase public awareness regarding a national motor vehicle per-mile user fee. This program will test the design, acceptance, implementation, and financial sustainability of a national motor vehicle per mile user fee designed to restore and maintain the long-term solvency of the Highway Trust Fund.

RT&E PROGRAM NAME: TECHNOLOGY AND INNOVATION DEPLOYMENT PROGRAM

Objectives: Accelerate the adoption of proven innovative practices and technologies as standard practices to significantly improve: safety, system efficiency, infrastructure health, reliability and performance, and a balanced approach to provide livable/sustainable communities across the Nation.

Fiscal Year 2021: \$60.0 million

In FY 2021, the Technology Innovation and Deployment Program funded efforts to advance research products into proven technologies and demonstrated practices, identified the market forces that influence successful technology and innovation deployment, and delivered effective technical assistance, training, communication and outreach to promote rapid adoption of proven, market-ready technologies and innovations. These efforts successfully translated into innovation deployments that improve safety and performance, enhance infrastructure design and construction, and provide data and analyses to decision-makers throughout the transportation community. FY 2021 funding level reflects the 11.1 percent "lop-off" resulting from the imposition of the obligation limitation.

For example, through the Every Day Counts program, FHWA has championed virtual public involvement to help make public involvement more accessible, thereby providing a better understanding of the public's concerns regarding transportation system performance and needs. These new opportunities for information sharing and public involvement include, but are not

limited to, telephone town halls, online meetings, pop-up outreach, social meetings/meeting-in-a-box kits, story maps, quick videos, crowdsourcing, survey tools, real-time polling tools, social media following, visualization, and working with bloggers. By engaging communities through these accessible methods, their needs can be better incorporated into transportation projects.

Fiscal Year 2022: \$100.4 million

In FY 2022, this program will continue to support the deployment of innovative and proven transportation technologies and processes through financial and technical assistance, training, peer exchanges, collaboration with industry groups, information, and knowledge exchange. FY 2022 funding level reflects the 8.7 percent "lop-off" resulting from the imposition of the obligation limitation.

Fiscal Year 2023: \$110.0 million

In FY 2023, FHWA will continue to support a series of critical technology deployment programs that provide direct benefits to State and local transportation departments. These programs include:

- *Every Day Counts program*: Stakeholder-driven program which identifies underutilized market-ready technologies with high pay-offs and accelerates their deployment and widespread adoption throughout the Nation. This program has successfully highlighted several safety-based initiatives (e.g., Safe Transportation for Every Pedestrian, Focus on Rural Roadway Departures) and others which address improvement of core assets (e.g., Targeted Overlay Pavement Solutions). The anticipated seventh round of the program (2023-2024) provides an avenue to promote and advance Departmental priorities
- *Accelerated Innovation Deployment Demonstration program*: Provides funding for eligible entities to accelerate the implementation and adoption of innovative technologies or practices on highway transportation projects. Through the Notice of Funding Opportunity for this grant program, FHWA has the ability to encourage applications for projects which address the Departmental priorities and include these priorities as evaluation factors for consideration of award. Funding is set-aside for this program from the Highway Research and Development Program, the Technology and Innovation Deployment Program, and the Intelligent Transportation Systems Program.
- *State Transportation Innovation Council (STIC) Incentive program*: Each State DOT co-chairs a STIC that works collaboratively across public and private sectors to identify, evaluate, and actively promote the implementation and adoption of innovative technologies and practices in all communities across the Nation.
- *Accelerated Market Readiness program (AMR)*: Supports promising new innovations that have the potential to be considered for accelerated deployment. This program is seeking innovations of a transformational nature that, when in a more market ready status, can be adopted by transportation agencies. When issuing a solicitation for proposals, FHWA has the ability to encourage applications for projects which address the Departmental priorities and include these priorities as evaluation factors for consideration of award.

- *Innovation Implementation Deployment Management*: Provides tools, training, technology deployment, and technical assistance that support the transportation community's use of cutting-edge innovations and technologies to deliver critical infrastructure projects. FHWA's efforts in this area primarily consist of FHWA subject matter expert-led deployment activities including webinars, technical assistance, and just-in-time training.
- *Accelerated deployment of pavement technologies*: Within the Technology and Innovation Deployment Program, \$12 million is designated to promote, demonstrate, support, and document the application of innovative pavement technologies, practices, performance, and benefits.
- *Advanced Transportation Technologies and Innovative Mobility Deployment*: Provides grants to deploy, install, and operate advanced transportation technologies to improve safety, mobility, efficiency, system performance, intermodal connectivity, and infrastructure return on investment. This program is funded at \$60 million per year for each of fiscal years 2022 through 2026 for the IIJA.
- *Advanced Digital Construction Management Systems (ADCMS)*: The IIJA established a program for ADCMS, funded at \$20 million per year for each of fiscal years 2022 through 2026, to promote, implement, deploy, demonstrate, showcase, support, and document the application of ADCMS, practices, performance, and benefits.

RT&E PROGRAM NAME: TRAINING AND EDUCATION (T&E)

Objectives: To foster a safe, efficient, and sustainable surface transportation system by improving skills and increasing the knowledge of the transportation workforce and decision-makers through training and information exchanges. To attract qualified students to the field of transportation and advance transportation workforce development.

Fiscal Year 2021: \$21.3 million

In FY 2021, the Training and Education (T&E) Program continued to provide training resources to customers, partners, and learners in every State as well as support information exchange, professional development, and facilitated technology transfer to local governments, Tribes, and Federal Land Management Agencies. The T&E program also supported scholarships, fellowships, educational grants, and the National Network for the Transportation Workforce to support, grow, and maintain a skilled and career-ready transportation workforce. This contributed to improved workforce training, advancements in State, local, Tribal, and Federal Land Management Agencies capabilities, and the advancement of careers in transportation. FY 2021 funding level reflects the 11.1 percent "lop-off" resulting from the imposition of the obligation limitation.

Fiscal Year 2022: \$22.8 million

In FY 2022 this program will continue to provide leadership, training, educational materials and resources for the development and delivery of training, professional development and education programs to improve the quality of our highway system and its intermodal connections. It will

also continue to provide educational opportunities to the surface transportation community by developing core competencies and new skills, enabling technology transfer, and sharing best practices. FY 2022 funding level reflects the 8.7 percent "lop-off" resulting from the imposition of the obligation limitation.

Fiscal Year 2023: \$25.3 million

In FY 2023, FHWA will continue to support the delivery of training and other educational resources to the surface transportation community. Innovations that are produced through FHWA R&T activities as well as those produced through other means will be incorporated into training and education materials to support technology transfer and deployment. The T&E program will engage in workforce development and professional capacity building to provide innovative tools, processes, and concepts to State, local, Tribal, and Federal Land Management Agencies. FHWA will continue to support scholarships, fellowships, and workforce development centers to support the next generation of the surface transportation workforce.

RT&E PROGRAM NAME: INTELLIGENT TRANSPORTATION SYSTEMS PROGRAM (ITS)

Objectives: The Intelligent Transportation Systems (ITS) Program seeks to support safer vehicles and roadways by fostering innovation in better crash avoidance and protection measures; enhancing mobility by exploring methods and management strategies that increase system efficiency and improving individual mobility; improving accessibility by better managing traffic flow, speeds, congestion; promoting innovation by fostering technological advancement and innovation across the DOT's ITS Program; and supporting transportation system information sharing through the development of standards and systems architecture.

Fiscal Year 2021: \$88.9 million

In FY 2021 the ITS Program continued to support the DOT's mission of using a balanced approach that ensures that the entire Nation has the safest, most efficient and modern transportation system in the world. Through research that fosters innovation in connectivity, automated vehicles (AVs), and infrastructure technologies, the program continued to demonstrate advanced capabilities to provide Americans with enhanced levels of personal safety and mobility while improving the efficiency of freight movement. The Program continued to serve as an innovative hub for projects impacting all aspects of American transportation, from AV policy and institutional issues, to data collection, innovative deployments, and application testing. FY 2021 funding level reflects the 11.1 percent "lop-off" resulting from the imposition of the obligation limitation.

Fiscal Year 2022: \$100.4 million

In FY 2022, the ITS Program will conduct automation research in conjunction with other DOT modes, as well as State and local public agencies, academia, industry, and other surface transportation stakeholders. This includes research and coordination of the Complete Trip-ITS4US Deployment Program, automation research, cultivating the next generation of emerging/enabling Technologies, cybersecurity for ITS, accelerating deployment and adoption of ITS, and support data access and exchanges. This effort will result in increased multimodal mobility options for all travelers regardless of location, income, or disability; transform safety,

mobility, energy, and environmental efficiency; increase productivity; facilitate freight movement within our Nation's transportation system; and facilitate the adoption and implementation of information and communications technology. FY 2022 funding level reflects the 8.7 percent "lop-off" resulting from the imposition of the obligation limitation.

Fiscal Year 2023: \$110.0 million

In FY 2023, the ITS Program will continue to engage in system-wide interoperability allowing transportation systems users to access ITS services anywhere they may travel. Interoperability is essential to maximize safety and mobility benefits from rapidly advancing ITS technologies. The ITS Program will conduct research in coordination with other DOT modes as well as State and local public agencies, academia, industry, and other surface transportation stakeholders to advance automation, cybersecurity, mobility, environmental impacts as well as other critical research areas to enable efficient, safe and secure ITS deployments.

RT&E PROGRAM NAME: STATE PLANNING & RESEARCH (SPR)

Objectives: To solve transportation problems identified by the States. To encourage cooperation among States to leverage funds and conduct research of relevance to multi-State regions. This program is funded by a set-aside from each State's apportionments from five programs: the National Highway Performance Program, the Surface Transportation Block Grant Program; the Highway Safety Improvement Program, the Congestion Mitigation and Air Quality Improvement Program, and the National Highway Freight Program

Fiscal Year 2021: \$213.8 million

In FY 2021, the State Planning & Research (SPR) program continued to develop reports, data, and tools that meet State and local needs, engage in technology deployment activities essential to States and local transportation agencies across all communities, and contribute to cooperative research programs such as the National Cooperative Highway Research Program and Transportation Pooled Fund projects. This resulted in increased investment in solutions to highway problems identified by the States, the development of practical applications by developing and transferring new technologies, enhanced collaboration practices with transportation stakeholders, and better-informed policy decisions that balance safety, productivity, and infrastructure preservation.

Fiscal Year 2022: \$245.8 million

In FY 2022, the SPR program will continue to meet local needs through applied research on State or regional problems, foster innovation through transfer of technologies from researchers to users, and research for setting standards and specifications. States support cooperative research programs such as the National Cooperative Highway Research Program and transportation pooled fund studies.

Fiscal Year 2023: \$250.8 million

In FY 2023, the SPR program will continue to support identification and development of innovations that address State and local concerns related to highway transportation and engage in cooperative research programs and activities. These efforts will result in the deployment of proven technologies and transportation-related innovations and processes, financial and technical

assistance, training, peer exchanges, collaboration with industry groups, information, and knowledge exchange.

RT&E PROGRAM NAME: UNIVERSITY TRANSPORTATION CENTERS

Amount Requested for FY 2023: \$99.5 million

Project and activity summaries are provided in the Office of the Secretary of Transportation – Office of the Assistant Secretary for Research and Technology FY 2023 budget submission.

RT&E PROGRAM NAME: BUREAU OF TRANSPORTATION STATISTICS AMOUNT

Amount Requested for FY 2023: \$26.3 million

Project and activity summaries are provided in the Office of the Secretary of Transportation – Office of the Assistant Secretary for Research and Technology FY 2023 budget submission.

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FY 2023 Budget

Federal Highway Administration Information Technology Budget Narrative

(Budget Authority in Thousands)

Budget Account	FY 2021 Actual	FY 2022 CR (w/ IIJA Oblim)	FY 2023 Request
Federal-Aid Highways			
<i>Commodity</i>	\$40,286	\$42,534	\$44,615
<i>IT SS WCF</i>			
<i>FHWA IT</i>	\$72,559	\$73,826	\$68,990
Total	\$112,845	\$116,360	\$113,605

The Federal Highway Administration (FHWA) is requesting **\$113.6 million** in FY 2023 for information technologies (IT) that support the full spectrum of FHWA programs, as well as the Department's initiative to transform and consolidate the management of certain IT solutions centrally by the Office of the Chief Information Officer (OCIO).

Commodity IT Shared Services through the WCF

OCIO will continue to provide FHWA commodity IT shared services in FY 2023 to achieve economies of scale and increase consistency of cybersecurity protections across the Department. Commodity IT Shared Services include IT functions and activities dedicated to basic support services, including network operations, end-user computing, telecommunications services, and server operations.

- **Commodity IT Shared Services** - FHWA requests **\$44.6 million** for Commodity IT Shared Services. FHWA's share was based on actual commodity IT consumption in prior years as well as planned future consumption. OCIO, in collaboration with FHWA, assumed a one-to-one cost estimate to transition all commodity IT to OCIO. FHWA will only be charged for services rendered.

FHWA IT

The following major mission-critical IT systems will be maintained by FHWA in FY 2023. This list is only a subset of all IT systems that support FHWA and are reported in Office of Management and Budget's (OMB) Corporate Investment Management System (CIMS).

FHWA has instituted a workgroup that is considering how to use the additional administrative resources provided by the IIJA, including potential investments in IT. For example, FHWA's mission-critical Fiscal Management Information System 5.0 (FMIS) may need enhancements to support expanded reporting, recipients, and other requirements under the IIJA. This, and other IT

investments, may occur in FY 2022 and FY 2023, however, the specific investments and amounts are to be determined and not included below.

- **FMIS** – FHWA requests **\$3.0 million** for the agency’s most mission-critical system, through which States are reimbursed for Federal-aid program costs, authorize and modify projects, as well as track and report on critical financial and program information. FHWA staff use FMIS to apportion Federal-aid highway funding, set obligation limitations, transfer funds, approve projects, manage, and oversee financial management of the Federal-aid program, and report on FHWA funding. The requested funding is to support operations and maintenance, critical system enhancements necessary to meet Congressionally mandated requirements (e.g., DATA Act, audit requirements for Federal awards under 2 CFR 200, etc.), and new enhancements based on requirements from State and Federal users.
- **Highway and Bridge Data Collection** – FHWA requests \$6.5 million to manage several IT investments used to compile, manage, and make available vital highway and bridge data, some of which is statutorily required. These investments include:
 - The **Highway Performance Monitoring System (HPMS)**, which supports a data-driven decision process among FHWA, the Department, and Congress. HPMS data are used extensively in the analysis of highway system condition, performance, and investment needs that make up the biennial Condition and Performance Reports to Congress. Those reports are used in establishing both authorization and appropriation legislation activities that ultimately determine the scope and size of the Federal-aid highway program and the level of Federal highway taxation.
 - The **National Bridge Inventory (NBI)**, which is a collection of bridge inventory and condition information collected under the auspices of the National Bridge Inspection Standards (NBIS) as prescribed by law. The information is used for performance measure reporting, National Highway System penalty determination, and reporting to Congress.
 - The **Integrated Transportation Information Platform (ITIP)** provides a comprehensive source for infrastructure condition and performance and Federal-aid project data elements. The ITIP integrates and provides seamless access to a wide range of data elements, which are maintained within FMIS, HPMS, and the NBI. Through ITIP, users are provided with data analysis, visualization, and reporting capabilities.
- **Direct Program Support for the Office of Federal Lands and the Office of Research, Development, and Technology** – FHWA requests \$22.3 million to provide the necessary tools to effectively manage FHWA’s initiatives for Federal Lands, Tribes, and transportation research, including investments in innovative technologies that improve highway safety and infrastructure.

- For example, FHWA's Turner-Fairbank Highway Research Center (TFHRC) is a member of Internet2, which is a research and development consortium led by over 200 universities working in partnership with industry and government to develop and deploy advanced network applications and technologies. Internet2 operates the Nation's largest and fastest, coast-to-coast research and education network that was built to deliver advanced, customized services that are accessed and secured by the community-developed trust and identity framework. TFHRC utilizes this high-speed, highly secure network to run applications on super computers at national labs, obtain access to massive data servers at research universities, and to send large amounts of data to test facilities that provide critical operational testing environments and which are operated by other Federal agencies. Access to this network is critical to support FHWA's world-class research and to enable efficient data sharing and processing.
- **Interagency Agreements** – FHWA requests \$23.1 million for funding Interagency Agreements (IAAs). FHWA partners with the Enterprise Service Center (ESC) for support services provided for accounting, contracting, and time and attendance systems. Other IAAs support roadway safety, geo-economic system modeling, rural and statewide geographic information system, motor vehicle registration, highway needs and investment analysis, and environmental reviews.
- **Additional IT maintenance and support contributions staying within the mode:** FHWA requests \$14.1 million to support IT systems that are critical to the successful delivery of the Federal-aid highway program. FHWA invests expertise and resources into various oversight and governance programs to reduce risk, positively impact program performance and effectiveness, align with strategic goals, and continuously enhance the IT environment to enable robust and flexible IT solutions. Examples of several programs are Data Management, IT Business Cases and Alternative Analysis, Enterprise Architecture (EA), and the Capital Planning and Investment Control (CPIC) program.

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**EXHIBIT VI-1
FEDERAL HIGHWAY ADMINISTRATION
HISTORICAL FUNDING LEVELS (2013-2022)
(\$000)**

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022 CR (w/ IIJA Oblim)
Federal-Aid Highways										
Obligation Limitation	\$39,699,000 ^{1/}	\$40,256,000	\$40,256,000	\$42,361,000	\$43,266,100	\$44,234,212	\$45,268,596	\$46,365,092	\$46,365,092	\$57,473,430
Contract Authority Exempt from Obligation Limitation	\$739,000 ^{2/}	\$739,000 ^{3/}	\$739,000 ^{4/}	\$739,000 ^{5/}	\$739,000 ^{6/}	\$739,000 ^{7/}	\$739,000 ^{8/}	\$739,000 ^{9/}	\$739,000 ^{10/}	\$739,000 ^{11/}
Liquidation of Contract Authority	\$39,699,000	\$40,995,000	\$40,995,000	\$43,100,000	\$44,005,100	\$44,973,212	\$46,007,596	\$47,104,092	\$47,104,092	\$58,170,307
Limitation on Admin Expenses [non-add] ^{12/}	\$416,126	\$416,100	\$429,300 ^{13/}	\$429,000	\$435,795	\$442,692	\$449,692	\$456,798	\$478,897 ^{14/}	\$466,965 ^{15/}
Supplemental Emergency Relief Funds (GF)	\$2,022,000 ^{2/}				\$1,532,017	\$1,374,000	\$1,650,000			\$2,600,000 ^{16/}
Highway Infrastructure Programs (GF Supplemental Appropriation)										\$9,454,400 ^{15/}
Highway Infrastructure Programs (GF)						\$2,525,000	\$3,250,000	\$2,166,140	\$12,000,000 ^{17/}	\$2,000,000

1/ Does not reflect P.L. 113-6 rescission of 0.2 percent of contract authority subject to limitation and obligation limitation.

2/ Does not reflect sequestration of 5.1 percent of contract authority exempt from obligation limitation and payment to the Highway Trust Fund, and 5.0 percent of supplemental emergency relief funds per Sequestration Order dated March 1, 2013.

3/ Does not reflect sequestration of 7.2 percent of contract authority exempt from obligation limitation and \$10.4 billion portion of the payment to the Highway Trust Fund per Sequestration Order dated April 10, 2013.

4/ Does not reflect sequestration of 7.3 percent of contract authority exempt from obligation limitation per Sequestration Order dated March 10, 2014.

5/ Does not reflect sequestration of 6.8 percent of contract authority exempt from obligation limitation per Sequestration Order dated February 2, 2015.

6/ Does not reflect sequestration of 6.9 percent of contract authority exempt from obligation limitation per Sequestration Order dated February 9, 2016.

7/ Does not reflect sequestration of 6.6 percent of contract authority exempt from obligation limitation per Sequestration Order dated May 23, 2017.

8/ Does not reflect sequestration of 6.2 percent of contract authority exempt from obligation limitation per Sequestration Order dated February 12, 2018.

9/ Does not reflect sequestration of 5.9 percent of contract authority exempt from obligation limitation per Sequestration Order dated March 18, 2019.

10/ Does not reflect sequestration of 5.7 percent of contract authority exempt from obligation limitation per Sequestration Order dated February 10, 2020.

11/ Does not reflect sequestration of 5.7 percent of contract authority exempt from obligation limitation per Sequestration Order dated May 28, 2021.

12/ All fiscal years include FHWA General Operating Expenses and transfers to the Appalachian Regional Commission for administrative activities associated with the Appalachian development highway system. All fiscal years do not include amounts for other non-administrative programs authorized under Administrative Expenses.

13/ FY 2015 annual appropriations (PL 113-235) provided an obligation limitation of \$429.3 million for GOE and ARC. The Surface Transportation and Veterans Health Care Choice Improvement Act of 2015 (PL 114-41) provided contract authority of only \$415 million.

14/ For 2021, FHWA is used carryover administrative expenses contract authority to utilize the Limitation on Administrative Expenses provided in the Appropriations Act.

15/ The IIJA provides funding for administrative expenses as a takedown from the Highway Infrastructure Programs. The aggregate of these takedowns is \$86.8 million in FY 2022.

16/ The Disaster Relief Supplemental Appropriations Act, 2022 (Public Law 117-43) provided \$2.6 billion in additional emergency relief funding from the General Fund for FY 2022.

17/ The Department of Transportation Appropriations Act, 2021 (Public Law 116-260) provided \$2 billion in additional highway funding from the General Fund for FY 2021. The Coronavirus Response and Relief Supplemental Appropriations Act, 2021 (Public Law 116-260) provided \$10 billion in additional highway funding from the General Fund for FY 2021.

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