

Overview of Resilience in the Transportation Planning Process

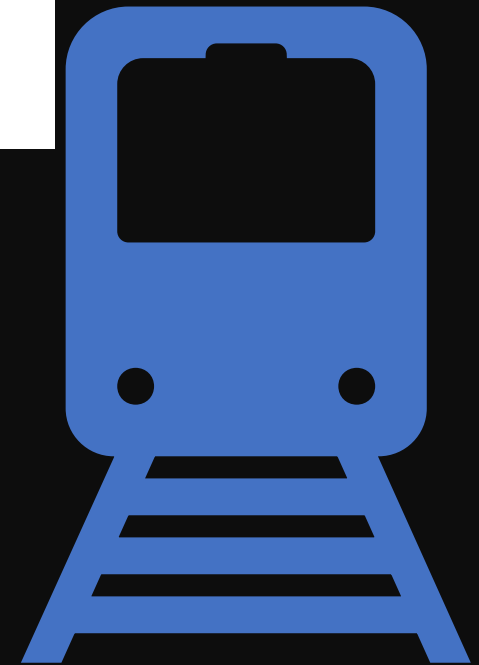
Kirk D. Fauver

Planning & Research Engineer

FHWA Texas Division

Austin, Texas

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The new DOT Strategic Plan supports the Department's mission to deliver the world's leading transportation system, serving the American people and economy through the safe, efficient, sustainable, and equitable movement of people and goods.

The FY 2022-26 DOT Strategic Plan reflects DOT employees' input and contributions throughout the strategic planning process.

U.S. DOT Strategic Plan (FY 22-26)

The U.S. DOT will continue to achieve its mission through:

- **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.

U.S. DOT Strategic Plan (FY 22-26)

- **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 challenges of the present and modernize a transportation system of the future that serves everyone today and in 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.

Please see the [FY2022-26 DOT Strategic Plan](#) to learn more about the Department's priorities.

High Points of BIL Highway Provisions

- Funds highway programs for five years (FY 22-26)
- \$350.8 B (FY 22-26) for highway programs
 - \$303.5 B in Contract Authority (CA) from the Highway Trust Fund (HTF)
 - +\$47.3 B in advance appropriations from the General Fund (GF)
- More than a dozen new highway programs, including–
 - **Formula:** resilience, carbon reduction, bridges and electric vehicle (EV) charging infrastructure
 - **Discretionary:** bridges, EV charging infrastructure, rural projects, resilience, wildlife crossings, and reconnecting communities
- Focus on safety, bridges, climate change, resilience, and project delivery
- More opportunities for local governments and other non-traditional entities to access new funding
- \$90 B transfer (GF->HTF) to keep the HTF Highway Account solvent for years

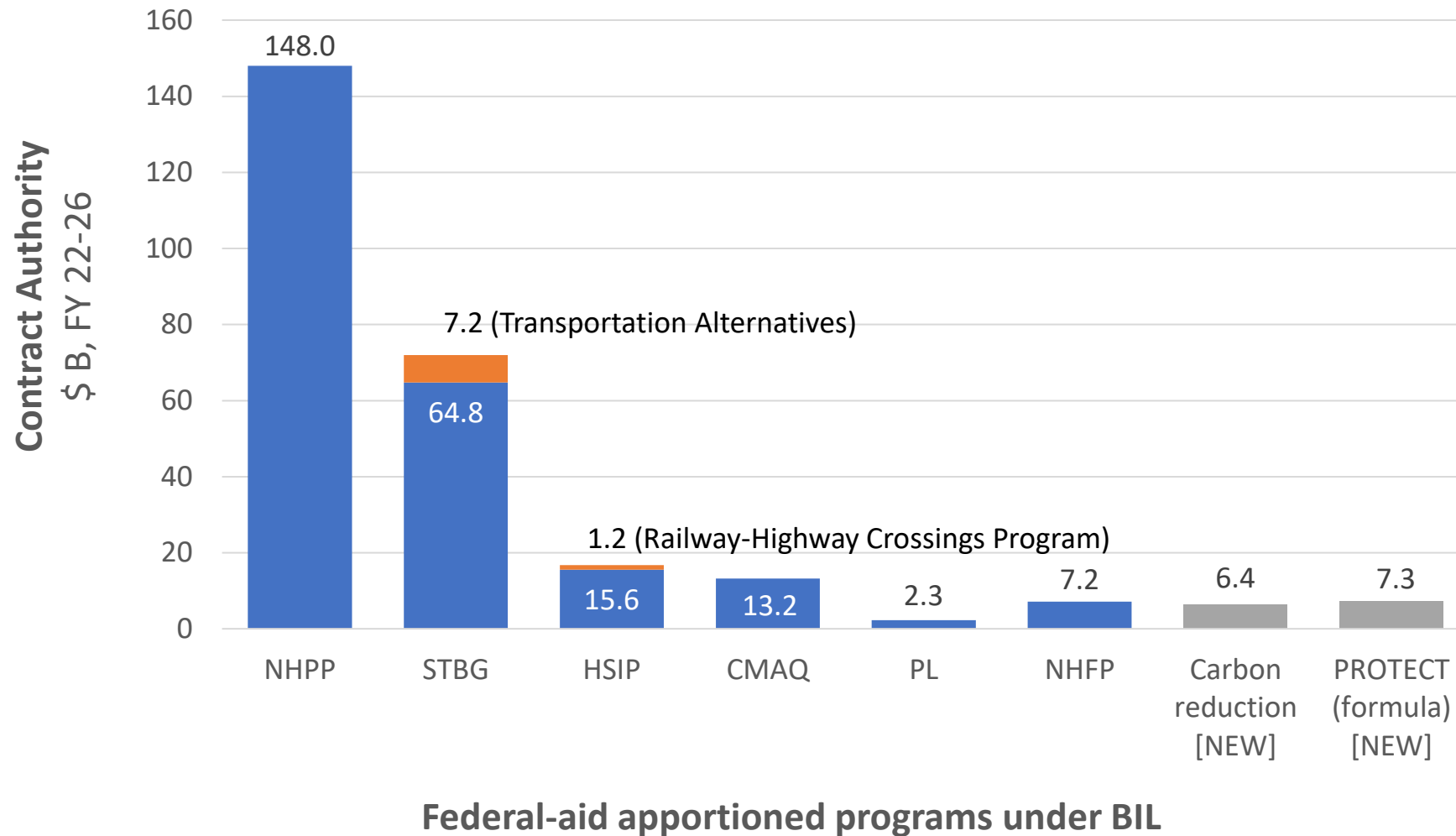
Funding Available to a Range of Recipients

- Note: This table does not include all BIL programs or eligible entities, and there are additional nuances not represented in this table. Additional programmatic information is provided in later slides. FHWA will administer most, but not all, programs listed.

- * "PA" means a special purpose district or public authority with a transportation function; FLMA means Federal Land Management Agency

Program Examples	State	MPO	Local	Tribe	PA*	Territory	FLMA*
Apportioned programs (formula)	✓						
Bridge Program (formula)	✓			✓			
National Electric Vehicle Formula Program	✓		✓				
Safe Streets and Roads for All program		✓	✓	✓			
PROTECT Grants (discretionary)	✓	✓	✓	✓	✓		✓
Charging and Fueling Infrastructure Program	✓	✓	✓	✓	✓	✓	
Congestion Relief Program	✓	✓	✓				
Bridge Investment Program (discretionary)	✓	✓	✓	✓	✓		✓
Reconnecting Communities Pilot Program	✓	✓	✓	✓			
Rural Surface Transportation Grants	✓		✓	✓			
INFRA	✓	✓	✓	✓	✓		✓
Nat'l Infra. Project Assistance	✓	✓	✓	✓	✓		
Local and Regional Project Assistance	✓	✓	✓	✓	✓	✓	

8 Apportioned CA Programs (Including 2 New)



New Planning Emphasis Areas (FY 22)

- Issued by FTA and FHWA on December 30, 2021, the joint HQ's memo indicates that the agencies work with MPOs, State DOTs, FLMA, public transit agencies to identify and develop tasks associated with the UPWP and the SPR work programs.
 1. Tackling the Climate Crisis – Transition to a Clean Energy, Resilient Future
 2. Equity and Justice40 in Transportation Planning
 3. Complete Streets
 4. Virtual Public Involvement
 5. Strategic Highway Network (STRAHNET)/U.S. Department of Defense (DOD) Coordination
 6. Federal Land Management Agency (FLMA) Coordination
 7. Planning and Environment Linkages (PEL)
 8. Data in Transportation Planning

CLIMATE AND RESILIENCE

Carbon Reduction Program

PROTECT Grants (formula and discretionary)

Charging and Fueling Infrastructure

National Electric Vehicle Formula Program

Congestion Relief Program

Other Climate and Resilience Provisions

[NEW] Carbon Reduction Program (formula)

Purpose	Provide funding for projects to reduce transportation emissions or the development of carbon reduction strategies.
Funding	\$6.4 B (FY 22-26) in Contract Authority from the HTF
Recipients	<ul style="list-style-type: none">• States (including DC)
Distribution formula	<ul style="list-style-type: none">• Apportioned to States by formula• 65% of funds are suballocated (reserved for use in certain areas of the State, based on population)
Other key provisions	<ul style="list-style-type: none">• Requires State, in consultation with MPOs, to develop (and update at least every 4 years) a carbon reduction strategy and submit it to DOT for approval.• DOT must certify that a State's strategy meets the statutory requirements.

[NEW] PROTECT* Formula Program

Purpose	Planning, resilience improvements, community resilience and evacuation routes, and at-risk coastal infrastructure
Funding	\$7.3 B (FY 22-26) in Contract Authority from the HTF
Recipients	<ul style="list-style-type: none">• States (including DC)
Distribution formula	<ul style="list-style-type: none">• Apportioned to States by formula
Other key provisions	<ul style="list-style-type: none">• Highway, transit, and certain port projects are eligible• Higher Federal share if the State develops a resilience improvement plan and incorporates it into its long-range transportation plan• Of the amounts apportioned to a State for a fiscal year, the State may use:<ul style="list-style-type: none">○ not more than 40% for construction of new capacity○ not more than 10% for development phase activities

** The full name of the program is Promoting, Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) program.*

[NEW] PROTECT Grants (discretionary)

Purpose	Planning, resilience improvements, community resilience and evacuation routes, and at-risk coastal infrastructure
Funding	\$1.4 B (FY 22-26) in Contract Authority from the HTF
Eligible entities	<ul style="list-style-type: none">• State (or political subdivision of a State)• MPO• Local government• Special purpose district or public authority with a transportation function• Indian Tribe• Federal land management agency (applying jointly with State(s))• <i>Different eligibilities apply for at-risk coastal infrastructure grants</i>
Eligible projects	<ul style="list-style-type: none">• Highway, transit, intercity passenger rail, and port facilities• Resilience planning activities, including resilience improvement plans, evacuation planning and preparation, and capacity-building• Construction activities (oriented toward resilience)• Construction of (or improvement to) evacuation routes
Other key provisions	<ul style="list-style-type: none">• Higher Federal share if the eligible entity develops a resilience improvement plan (or is in a State or area served by MPO that does) and the State or MPO incorporates it into its long-range transportation plan• May only use up to 40% of the grant for construction of new capacity

[NEW] Charging and Fueling Infrastructure (discretionary)

Purpose	Deploy electric vehicle (EV) charging and hydrogen/propane/natural gas fueling infrastructure along designated alternative fuel corridors and in communities
Funding	\$2.5 B (FY 22-26) in Contract Authority from the HTF
Eligible entities	<ul style="list-style-type: none">• State or political subdivision of a State• MPO• Local government• Special purpose district or public authority with a transportation function• Indian Tribe• Territory
Eligible projects	<ul style="list-style-type: none">• Acquisition and installation of publicly accessible EV charging or alternative fueling infrastructure• Operating assistance (for the first 5 years after installation)• Acquisition and installation of traffic control devices
Other key provisions	<ul style="list-style-type: none">• Requirement to redesignate alternative fuel corridors and establish a process to regularly redesignate these corridors• Set-aside (50%) to install EV charging and alternative fueling infrastructure on public roads or in other publicly accessible locations, such as parking facilities at public buildings, schools, and parks

[NEW] National Electric Vehicle Formula Program (formula and discretionary*)

Purpose	Strategically deploy electric vehicle (EV) charging infrastructure and establish an interconnected network to facilitate data collection, access, and reliability
Funding	\$5 B (FY 22-26) in advance appropriations from the GF
Recipients	<ul style="list-style-type: none">• States (including DC and Puerto Rico)
Distribution formula	<ul style="list-style-type: none">• Same shares as Federal-aid highway apportionments
Other key provisions	<ul style="list-style-type: none">• Funded projects must be located along designated alt fuel corridors• Sets aside 10% of funding for discretionary grants to State and local governments that require additional assistance to strategically deploy EV charging infrastructure• State must submit plan to DOT describing planned use of funds• If State doesn't submit plan (or carry it out), DOT may withhold or withdraw funds and redistribute within the State, or to other States• Establishes DOT-DOE Joint Office of Energy and Transportation• Requires DOT to designate national EV charging corridors to support freight and goods movement

** Program sets aside funds for discretionary technical assistance grants; also if DOT withholds or withdraws funding from a State, DOT may award funds to local governments in the same State.*

[NEW] Congestion Relief Program (discretionary)

Purpose	Advance innovative, integrated, and multimodal solutions to reduce congestion and the related economic and environmental costs in the most congested metropolitan areas with an urbanized area population of 1M+.
Funding	\$250 M (FY 22-26) in Contract Authority from the HTF
Eligible entities	<ul style="list-style-type: none">• State• MPO• City or municipality
Eligible projects	<ul style="list-style-type: none">• Planning, design, implementation, and construction activities to achieve the program goals, including:<ul style="list-style-type: none">○ deployment and operation of integrated congestion management systems, systems that implement or enforce HOV toll lanes or pricing strategies, or mobility services; and○ incentive programs that encourage carpooling, nonhighway travel during peak periods, or travel during nonpeak periods.• Subject to certain requirements and approval by the Secretary, provides for tolling on the Interstate System as part of a project carried out with a grant under the program

Other Climate and Resilience Provisions

Program/topic	Provisions in the new law
Standards for EV charging stations (§11129)	<ul style="list-style-type: none">Requires electric vehicle charging infrastructure installed using title 23 funds to provide for non-proprietary charging connectors that meet industry safety standards and payment methods available to all members of the public
Report on emerging alternative fuel vehicles and infrastructure (§11511)	<ul style="list-style-type: none">Requires the Secretary to prepare a report on emerging alternative fuel vehicles and infrastructure which includes an evaluation of emerging alternative fuel vehicles, identification of areas where emerging alternative fuel infrastructure will be needed, estimates the future need for emerging alternative fueling infrastructure, and includes a tool for States to evaluate different adoption and use scenarios.
Conditions and performance (C&P) report (§13006)	<ul style="list-style-type: none">Requires the C&P report to address resilience needs

Resiliency Improvement Plans (Contents)- BIL Act



“(2) PLAN CONTENTS.—A resilience improvement plan referred to in paragraph (1)—

“(A) shall be for the immediate and long-range planning activities and investments of the State or metropolitan planning organization with respect to resilience of the surface transportation system within the boundaries of the State or metropolitan planning organization, as applicable;

“(B) shall demonstrate a systemic approach to surface transportation system resilience and be consistent with and complementary of the State and local mitigation plans required under section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5165);

“(C) shall include a risk-based assessment of vulnerabilities of transportation assets and systems to current and future weather events and natural disasters, such as severe storms, flooding, drought, levee and dam failures, wildfire, rockslides, mudslides, sea level rise, extreme weather, including extreme temperatures, and earthquakes;

“(D) may—

“(i) designate evacuation routes and strategies, including multimodal facilities, designated with consideration for individuals without access to personal vehicles;

“(ii) plan for response to anticipated emergencies, including plans for the mobility of—

“(I) emergency response personnel and equipment; and

“(II) access to emergency services, including for vulnerable or disadvantaged populations;

“(iii) describe the resilience improvement policies, including strategies, land-use and zoning changes, investments in natural infrastructure, or performance measures that will inform the transportation investment decisions of the State or metropolitan planning organization with the goal of increasing resilience;

“(iv) include an investment plan that—

“(I) includes a list of priority projects; and

“(II) describes how funds apportioned to the State under section 104(b)(8) or provided by a grant under the program would be invested and matched, which shall not be subject to fiscal constraint requirements; and

“(v) use science and data and indicate the source of data and methodologies; and

Resiliency Improvement Plans (Contents)- BIL Act



“(E) shall, as appropriate—

“(i) include a description of how the plan will improve the ability of the State or metropolitan planning organization—

“(I) to respond promptly to the impacts of weather events and natural disasters; and

“(II) to be prepared for changing conditions, such as sea level rise and increased flood risk;

“(ii) describe the codes, standards, and regulatory framework, if any, adopted and enforced to ensure resilience improvements within the impacted area of proposed projects included in the resilience improvement plan;

“(iii) consider the benefits of combining hard surface transportation assets, and natural infrastructure, through coordinated efforts by the Federal Government and the States;

“(iv) assess the resilience of other community assets, including buildings and housing, emergency management assets, and energy, water, and communication infrastructure;

“(v) use a long-term planning period; and

“(vi) include such other information as the State or metropolitan planning organization considers appropriate.

“(3) NO NEW PLANNING REQUIREMENTS.—Nothing in this section requires a metropolitan planning organization or a State to develop a resilience improvement plan or to include a resilience improvement plan under the metropolitan transportation plan under section 134 or the long-range statewide transportation plan under section 135, as applicable, of the metropolitan planning organization or State.

“(f) MONITORING.—

“(1) IN GENERAL.—Not later than 18 months after the date of enactment of this section, the Secretary shall—

“(A) establish, for the purpose of evaluating the effectiveness and impacts of projects carried out with a grant under subsection (d)—

“(i) subject to paragraph (2), transportation and any other metrics as the Secretary determines to be necessary; and

“(ii) procedures for monitoring and evaluating projects based on those metrics; and

“(B) select a representative sample of projects to evaluate based on the metrics and procedures established under subparagraph (A).

“(2) NOTICE.—Before adopting any metrics described in paragraph (1), the Secretary shall—

“(A) publish the proposed metrics in the Federal Register; and

“(B) provide to the public an opportunity for comment on the proposed metrics.

“(g) REPORTS.—

“(1) REPORTS FROM ELIGIBLE ENTITIES.—Not later than 1 year after the date on which a project carried out with a grant under subsection (d) is completed, the eligible entity that carried out the project shall submit to the Secretary a

New NHI Courses on Resilience

- **National Highway Institute (NHI) Resilience Training Courses:** The National Highway Institute (NHI) recently released four one-hour web-based courses focused on resilience to climate change and extreme weather events.
- The four courses provide an introduction to past and expected future environmental conditions, future sea levels, climate datasets and modeling tools for temperature and precipitation change, system level vulnerability assessment, and methods for conducting project-level resilience assessments.
- The target audience includes engineering, project planning and environmental staff; the series is also relevant to regional planners, asset managers, and others seeking to integrate climate change considerations into their practices.

New NHI Courses on Resilience

[FHWA-NHI-142081 Understanding Past, Current and Future Climate Conditions](#)

[FHWA-NHI-142082 Introduction to Temperature and Precipitation Projections](#)

[FHWA-NHI-142083 Systems Level Vulnerability Assessments](#)


[FHWA-NHI-142084 Adaptation Analysis for Project Decision Making](#)

These four web-based courses are prerequisites for a 2.5 day in-person course currently being finalized. This Instructor-led course -- **Addressing Resilience in Highway Project Development and Preliminary Design** -- goes into greater depth on topics covered in the web courses and also considers methods for addressing resilience to climate change in four areas of engineering: inland flooding, coastal hydraulics, pavement design, and geohazards.

For more
information

Please visit:

fhwa.dot.gov/bipartisan-infrastructure-law



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BIPARTISAN INFRASTRUCTURE LAW



On November 15, 2021, President Biden signed the [Infrastructure Investment and Jobs Act \(IIJA\)](#) (Public Law 117-58, also known as the “[Bipartisan Infrastructure Law](#)”) into law. The Bipartisan Infrastructure Law is the largest long-term investment in our infrastructure and economy in our Nation’s history. It provides \$550 billion over fiscal years 2022 through 2026 in new Federal investment in infrastructure, including in roads, bridges, and mass transit, water infrastructure, resilience, and broadband.

This website will serve as your one-stop shop for FHWA’s implementation of the Bipartisan Infrastructure Law, including everything from fact sheets and funding notices to guidance, regulations, and presentations.

The FHWA will continue to add new information to this page over the weeks and months to come.



Have a comment? Visit [Regulations.gov](#)

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Invests \$350 billion in highway programs over 5 years

\$350 Billion
over 5 years

The Bipartisan Infrastructure Law provides the basis for FHWA programs and activities through September 30, 2026. It makes a once-in-a-generation investment of \$350 billion in highway programs. This includes the largest dedicated bridge investment since the construction of the Interstate Highway System.

Creates more than a dozen new highway programs

New
Programs

New programs under the Bipartisan Infrastructure Law focus on key infrastructure priorities including rehabilitating bridges in critical need of repair, reducing carbon emissions, increasing system resilience, removing barriers to connecting communities, and improving mobility and access to economic opportunity.

Creates more opportunities for local governments and other entities

Recently Added

- 12/14/2021 - [Apportionment of Federal-aid Highway Funds](#)
- 12/14/2021 - [Sequestration of Highway Funds](#)
- 12/14/2021 - [Federal-aid Highway Program Obligation Authority](#)
- 12/16/2021 - [Policy on Using Bipartisan Infrastructure Law Resources to Build a Better America](#)